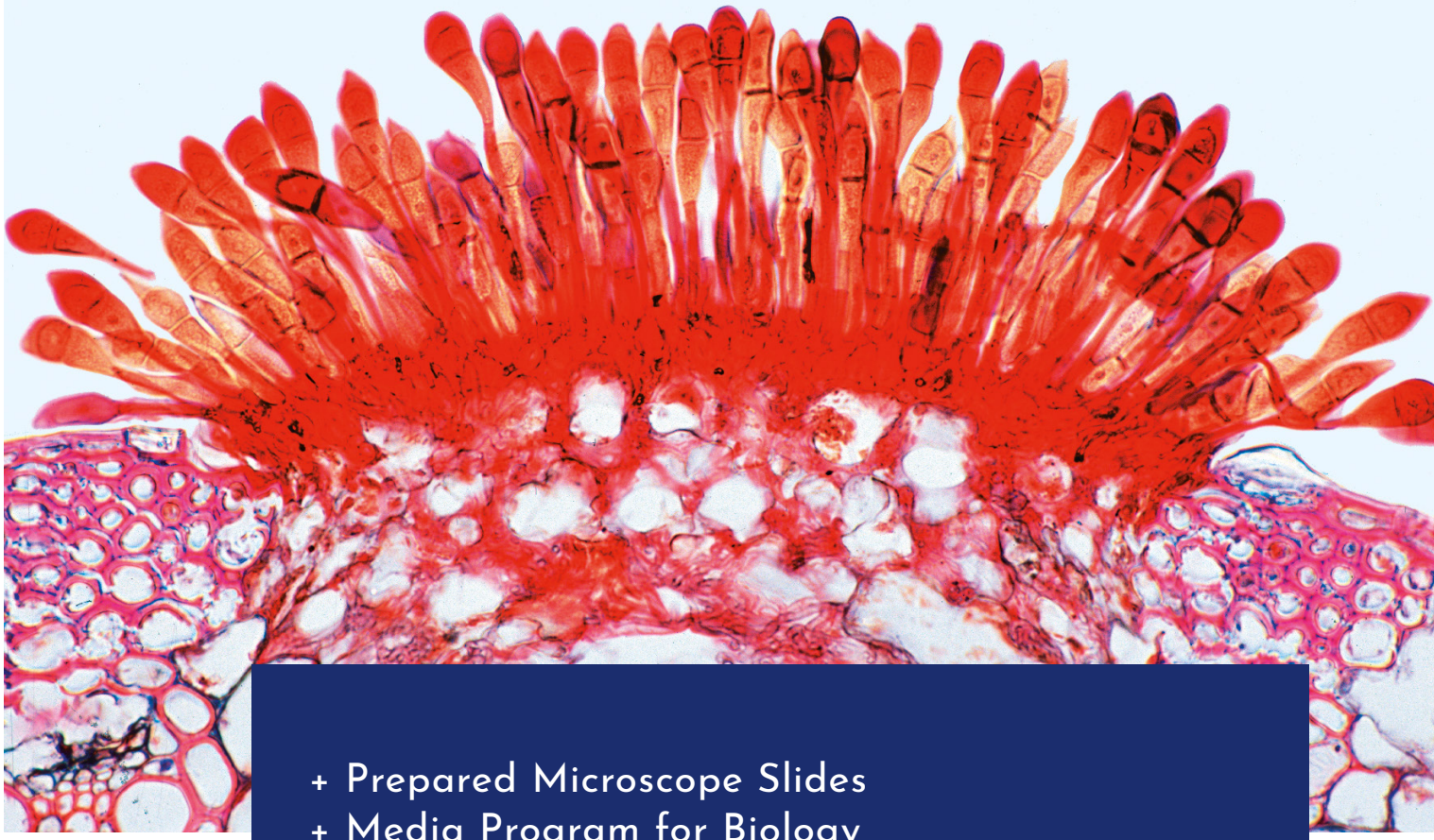
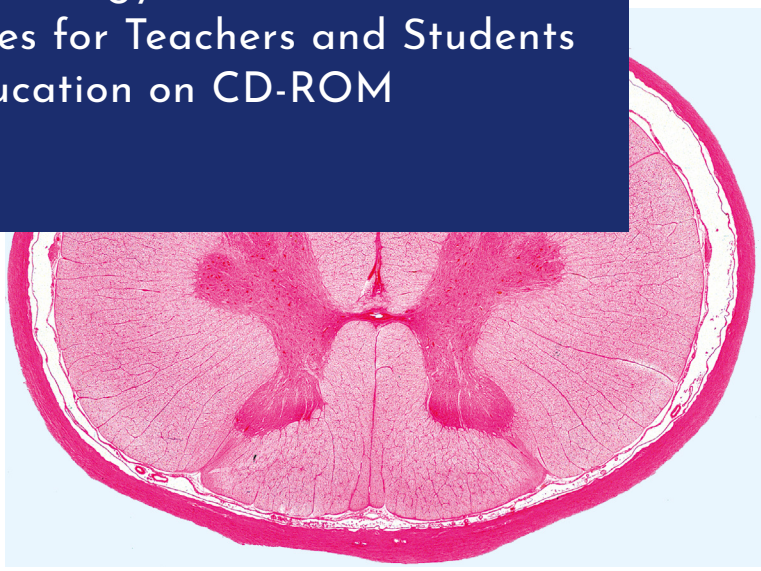
BIOLOGY

Catalogue No. 33E

Since 1955



+ Prepared Microscope Slides
+ Media Program for Biology
+ Multimedia-Packages for Teachers and Students
+ Knowledge and Education on CD-ROM



LIEDER

MADE IN GERMANY

General Catalogue Biology No. 33E

Discover our complete range of products in a new design.
We are pleased to present you with this comprehensive catalogue no. 33E our whole spectrum of Biology in new layout. Our complete product range, price lists and catalogue as e-book can also be found on our Website and Shop at **www.lieder.com**.

We are constantly expanding our portfolio and will soon present our e-learning platform.

In the new General Catalogue BIOLOGY you will find everything you need for effective and successful teaching on 132 pages.

- All Prepared Microscope Slides listed in our catalogues can be purchased either as complete Sets and or as individual slides. This allows you to create your own unique compilation tailored specifically for your requirements. We reserve the right to make changes within all offered Sets.
- By ordering, please give the complete catalogue numbers, the quantities and the abbreviated descriptions of the requested items. This will help to minimize the processing time of your orders, and to avoid errors.
- When ordering Prepared Microscope Slides, please also specify the desired storage boxes. These are not included in the price and must be ordered separately. Please see page 61 for more information.
- Please also state the desired shipping method and let us know whether you would like to have your orders delivered by courier in the case of urgent orders. Without special instructions, we will assume that you would prefer the standard shipment by DHL Premium Parcel.
- You will find the price lists for our articles in several languages always updated as a download on our website. Alternatively, you can request them by sending an email to **lieder@lieder.com**.
- A prepared order form, which should make it easier for you to place your order, can be found on page 129 of the catalogue.
- Our portfolio of microscope slides and transparencies are constantly being expanded and supplemented. Please also contact us if you are looking for items that are not yet listed in our catalogues and we will be prepared to make you an individual offer.
- We invite you to visit our new Website and Shop **www.lieder.de** and **www.lieder.com**
- On our website, you will find a detailed description of all our products and new releases (In five languages), which you can download and print out according to your requirements.

We are always available for technical support, individual inquiries and advice on the ordering process. Contact us directly or send us an e-mail to: **lieder@lieder.com**

Logos used in this Catalogue:

MEDIA SYSTEM — Media Program Biology ABCD

Prepared Microscope Slide Sets

Prepared Microscope Slides in Systematic Order

MULTIMEDIA PACKAGE — Multimedia-Packages for Teachers and Students

CD-ROM for Interactive Education

Color Slides and Photomicrographs Biology, Physics, Chemistry

Overhead Transparency-Atlases

Drawing Sheets

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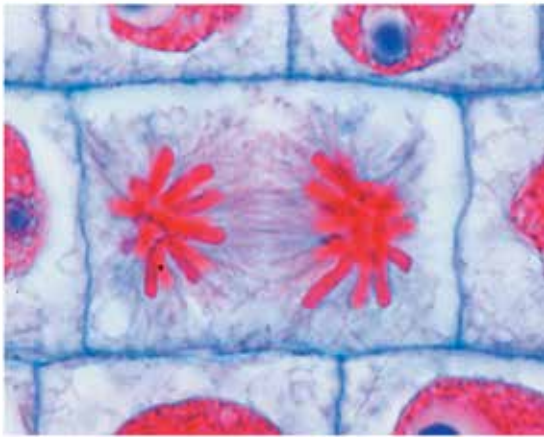


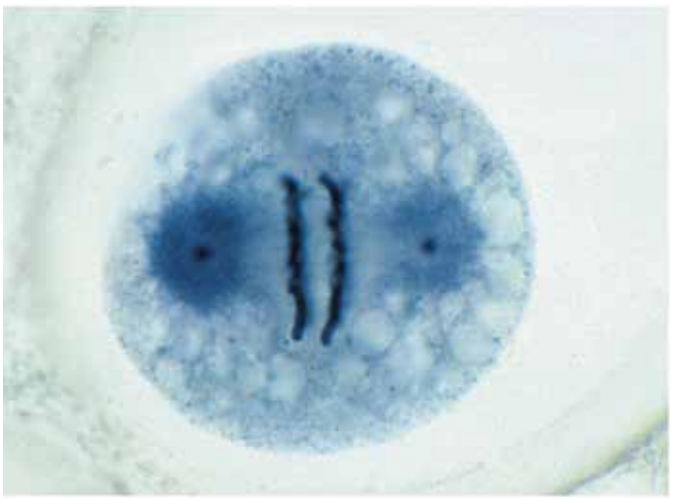
Since the company was founded in 1955, LIEDER has been a leading manufacturer of teaching materials for schools/universities and education, including prepared microscope slides, didactic material for science/biology teaching and multimedia packages.

Our products are used by schools, universities and scientific institutions around the world and therefore fulfill our customer's highest quality standards, guaranteed "MADE IN GERMANY".

Procedure

LIEDER MICROSCOPE SLIDES are produced in our laboratories under scientific supervision. They are the result of decades of experience in all areas of preparation technology. Production of the microtome sections is carried out by experienced specialists. Cutting technology and section thickness are selected according to the object's properties. From the large number of staining methods commonly used in microscopy, we choose those that combine a clear and high-contrast image of the structures of interest with the best durability. In most cases, these are complicated multicolor stainings.

LIEDER MICROSCOPE SLIDES are delivered on finely edged Microscope Slides in the format 26 x 76 mm (1" x 3"). The pictures in our catalogue are original photomicrographs taken from slides prepared in our own laboratories. They can give you an impression of the shape of organs, thickness and staining methods of the sections. But please note: Color and shape of ordered items may differ from the images due to natural variation of biological material. Every item is unique and intricately crafted by hand.



Quality

All LIEDER prepared microscope slides are expertly produced in our own laboratories by a staff of 30 well-trained scientists and technicians under rigorous scientific control. They are the product of many years of experience combined with modern techniques.

All LIEDER slides are 'MADE IN GERMANY'.
LIEDER microscope slides meet the highest scientific requirements.

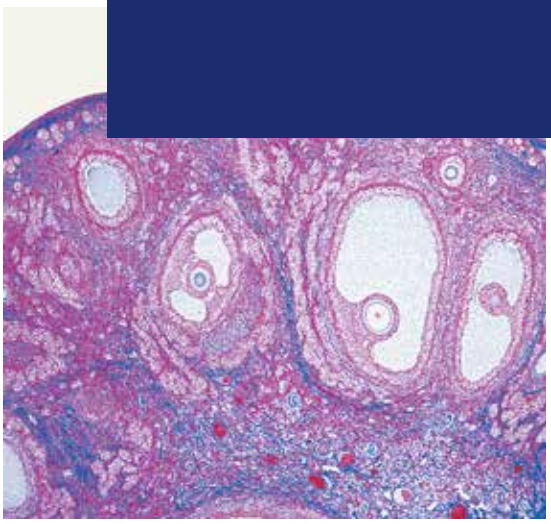
Durability

The lifespan of a microscopic preparation depends on the technical and preparatory effort involved in its production. The production of prepared slides is a lengthy, difficult, laborious and costly process. There are companies that try to shorten and simplify the production process, with the result that the colours fade, bubbles appear and the mounting media become cloudy after a short time.

However, a carefully and professionally prepared microscope slide should last much longer than the mandatory two years. Due to the special and elaborate preparation methods used in our laboratories, we can guarantee a shelf life of our preparations of 20 (twenty) years. The prerequisite for this long guarantee is that the preparations are stored horizontally in a cool and dark place.

Multimedia Program Microscopic Biology ABCD

for Interactive Learning and Teaching



The aim of the MULTIMEDIA PROGRAM FOR MICROSCOPIC BIOLOGY is to provide an overview of all areas of biological study under the microscope, aligned with today's science school curricula and practical courses at universities. With our media system, the learner himself becomes an explorer and researcher in microscopic biology.

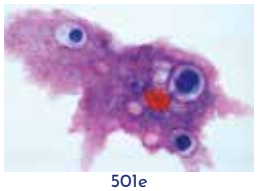
An important component of the system is a comprehensive accompanying textbook, in which the 175 prepared microscope slides and micro-slides of the school series A, B, C, D are described in detail and information is given on their use in the classroom. Each section of the text is accompanied by a large-format drawing in which the details of the lessons are marked with numbers which are repeated in the explanatory text. A precisely coordinated media package with transparencies, drawing and worksheets and texts as well as a CD-ROM completes the offer and serves to work on the subject in the classroom.The Sets are systematically arranged and compiled in relevance with the corresponding animal or plant groups.

The following media are offered with the Multimedia Program:

1. Prepared Microscope Slides
2. Manual with Texts and Drawings
3. Transparent Atlas with Colour Photographs of the Microscope Slides
4. CD-ROM for Interactive Learning
5. Media Package with Transparencies, Texts, Sketch- and Work Sheets
6. Color Photomicrographs 35 mm (Original Recordings)
7. Additional Microscope Slides

Please note: The Multimedia-Program ABCD with all its parts is also available in the following languages: **German, English, French, Spanish, Portuguese** and **Italian**. Please name the requested language when ordering

Minor changes within all offered series and ranges are reserved. We reserve the right to cancel items that are not available at the time of delivery due to lack of materials.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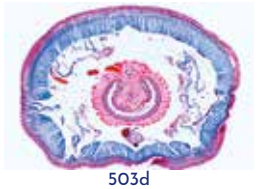
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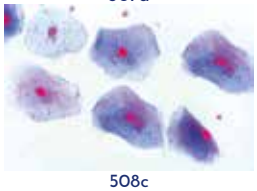
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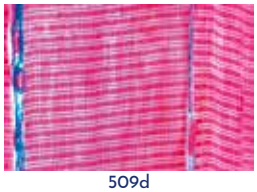
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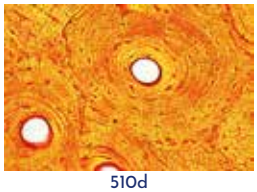
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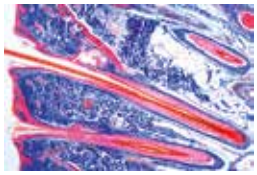
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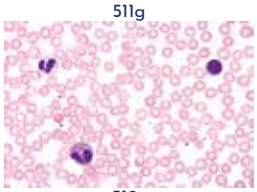
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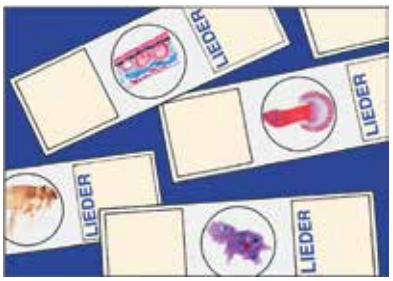
1. Prepared Microscope Slides

The basic components of the programme are the four series A, B, C and D, which consist of 175 slides. The four series are arranged systematically and constructed in such a way that each series expands on the theme of the previous one. They contain slides of typical microorganisms, cell division and embryonic development as well as tissues and organs of plants, animals and humans. Each preparation has been carefully selected for its didactic value.



LIEDER prepared microscope slides are made in our laboratories under scientific control. They are the product of long experience in all spheres of preparation techniques. Microtome sections are cut by highly skilled staff, cutting technique and thickness of the sections are adjusted to the objects. From the large number of staining techniques commonly used in microscopy, we select those that combine a clear und high-contrast image of the structures of interest with the best durability. Generally, these are complicated multicolor stainings. LIEDER prepared microscope slides are delivered on best glasses with ground edges of the size 26 x 76 mm (1 x 3"). Every prepared microscope slide is unique and individually crafted by our well-trained technicians under rigorous scientific control. We therefore wish to point out that delivered microscope slides may differ from the pictures in this catalog due to natural variation of the basic raw materials and applied preparation and staining methods.

The number of series in hand should correspond approximately to the number of microscopes to allow several students to examine the same prepared microscope slides at the same time. For this reason all slides out of the series can be ordered individually also. So, important microscope slides can be supplied for all students.

No. 500 | School Set A for General Biology, Elementary Set. 25 microscope slides

Zoology

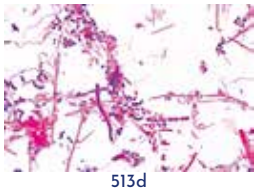
501e **Amoeba proteus**, w.m. showing nucleus and pseudopodia
502e **Hydra**, w.m. extended specimen to show foot, body, mouth, and tentacles
503c **Lumbricus**, earthworm, typical t.s. back of clitellum showing muscular wall, intestine, typhlosole, nephridia etc.
504c **Daphnia and Cyclops**, small crustaceans from fresh water
505d **Musca domestica**, house fly, head and mouth parts (proboscis) w.m.
506b **Musca domestica**, leg with clinging pads (pulvilli)
507c **Apis mellifica**, honey bee, anterior and posterior wing

Histology of Man and Mammals

508c **Squamous epithelium**, isolated cells from human mouth
509d **Striated muscle**, l.s. showing nuclei and striations
510d **Compact bone**, t.s. special stained for cells, lamellae, and canaliculi
511d **Human scalp**, vertical section showing l.s. of hair follicles, sebaceous glands, epidermis
512c **Human blood smear**, stained for red and white corpuscles

Botany, Bacteria and Cryptogams

513d **Bacteria from mouth**, smear Gram stained showing bacilli, cocci, spirilli, spirochaetes
514c **Diatoms**, strewn slide of mixed species
515c **Spirogyra**, vegetative filaments with spiral chloroplasts
516c **Mucor or Rhizopus**, mold, w.m. of mycelium and sporangia
517c **Moss stem** with leaves w.m.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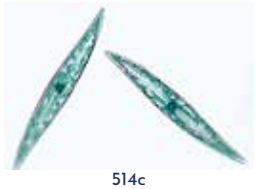
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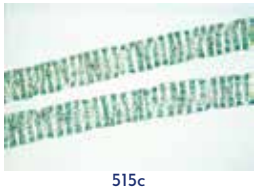
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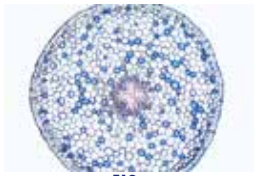
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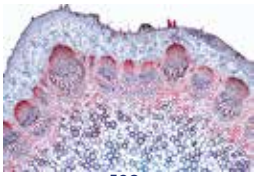
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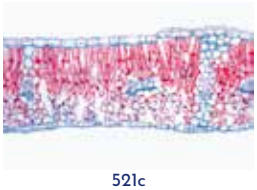
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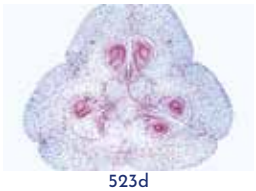
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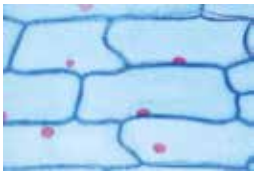
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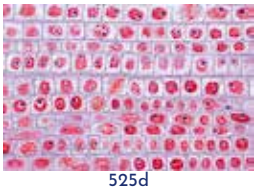
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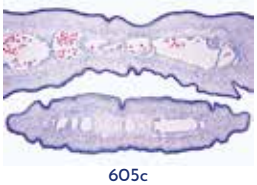
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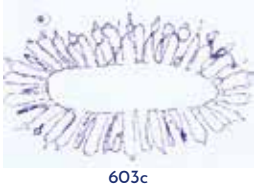
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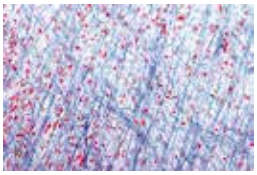
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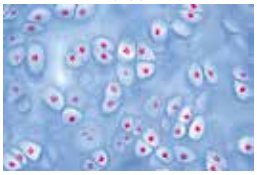
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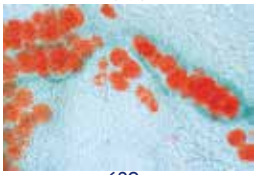
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Botany, Phanerogams

518c **Ranunculus**, buttercup, typical dicot root t.s., central stele
519c **Zea mays**, corn, monocot stem with scattered bundles t.s.
520c **Helianthus, sunflower**, typical herbaceous dicot stem t.s.
521c **Syringa**, lilac, leaf t.s. showing epidermis, palisade parenchyma, spongy parenchyma, vascular bundles
522d **Lilium**, lily, anthers with pollen grains and pollen sacs t.s.
523d **Lilium**, ovary t.s. showing arrangement of ovules
524c **Allium cepa**, onion, w.m. of epidermis shows simple plant cells with cell walls, nuclei, and cytoplasm
525d **Allium cepa**, l.s. of root tips showing cell divisions (mitosis) in all stages, carefully stained

» No. CD050 Interactive CD-ROM with Teaching Material to School Set A

No. 600 | School Set B for General Biology, Supplementary Set. 50 microscope slides

Zoology and Parasitology

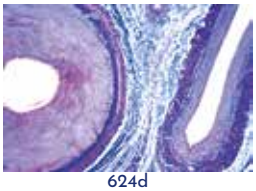
601d **Paramecium**, nuclei stained
602c **Euglena**, a common flagellate with eyespot
603c **Sycon**, a marine sponge, t.s. of body
604e **Dicrocoelium lanceolatum**, sheep liver fluke, w.m.
605c **Taenia saginata**, tapeworm, proglottids of various ages t.s.
606d **Trichinella spiralis**, l.s. of skeletal muscle showing encysted larvae
607d **Ascaris**, roundworm, t.s. of female in region of gonads
608b **Araneus**, spider, leg with comb w.m.
609d **Araneus**, spider, spinneret w.m.
610d **Apis mellifica**, honey bee, mouth parts of worker w.m.
611b **Apis mellifica**, hind leg of worker with pollen basket w.m.
612e **Periplaneta**, cockroach, chewing mouth parts w.m.
613b **Trachea** from insect w.m.
614b **Spiracle** from insect w.m.
615d **Apis mellifica**, sting and poison sac w.m.
616b **Pieris**, butterfly, portion of wing with scales w.m.
617d **Asterias rubens**, starfish, arm (ray) t.s. showing tube feet, digestive gland, ampullae

Histology of Man and Mammals

618e **Fibrous connective tissue** of mammal
619c **Hyaline cartilage** of mammal, t.s.
620e **Adipose tissue**, stained for fat
621d **Smooth (involuntary) muscle** l.s. and t.s.
622e **Medullated nerve fibres**, teased preparation of osmic acid fixed material showing Ranvier's nodes
623c **Frog blood smear**, showing nucleated red corpuscles
624d **Artery and vein** of mammal, t.s.
625d **Liver** of pig, t.s. showing well developed connective tissue
626c **Small intestine** of cat, t.s. showing mucous membrane
627c **Lung** of cat, t.s. showing alveoli, bronchial tubes

Botany, Cryptogams

628c **Oscillatoria**, a common blue green filamentous alga
629e **Spirogyra** in scalariform conjugation, formation of zygotes
630c **Psalliota**, mushroom, t.s. of pileus with basidia and spores
631c **Morchella**, morel, t.s. of fruiting body with asci and spores
632d **Marchantia**, liverwort, antheridial branch with antheridia l.s.
633d **Marchantia**, archegonial branch with archegonia l.s.
634d **Pteridium**, braken fern, rhizome with vascular bundles t.s.
635d **Aspidium**, t.s. of leaf with sori showing sporangia and spores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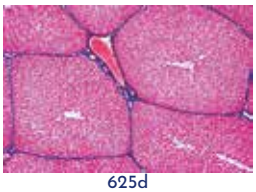
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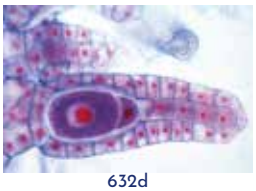
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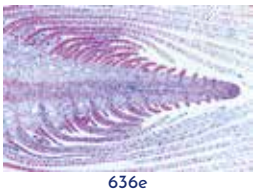
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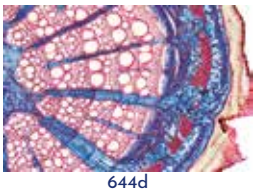
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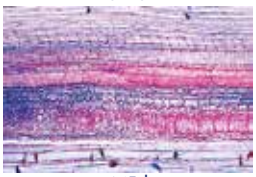
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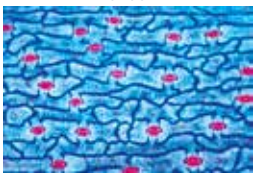
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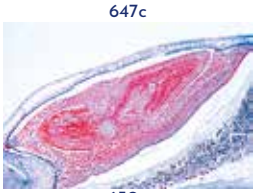
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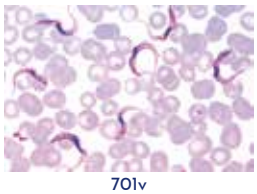
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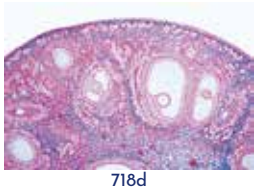
706d


708e


710e


714d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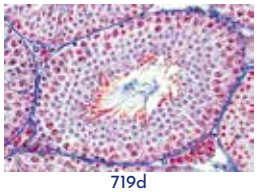
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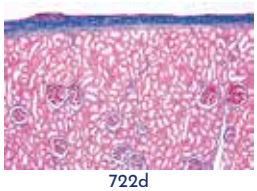
720d


721c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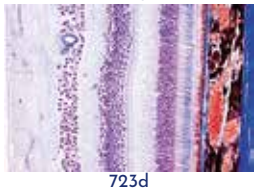

723d

Botany, Phanerogams

636e **Elodea**, waterweed, stem apex l.s. showing meristematic tissue and leaf origin
637d **Dahlia**, t.s. of tuber with inuline crystals
638b **Allium cepa**, onion, w.m. of dry scale showing calcium oxalate crystals
639d **Pyrus**, pear, t.s. of fruit showing stone cells
640c **Zea mays**, corn, typical monocot root t.s.
641c **Tilia**, lime, woody dicot root t.s.
642c **Solanum tuberosum**, potato, t.s. of tuber with starch and cork cells
643c **Aristolochia**, birthwort, one year stem t.s.
644c **Aristolochia**, older stem t.s. shows secondary growth
645d **Cucurbita**, pumpkin, l.s. of stem with sieve tubes, annular and reticulate vessels, sclerenchyme fibres
646d **Root tip** and root hairs
647c **Tulipa**, tulip, epidermis of leaf with stomata and guard cells w.m., surface view
648c **Iris**, typical monocot isobilateral leaf, t.s.
649c **Sambucus**, elderberry, stem showing lenticells and cork cambium, t.s.
650e **Triticum**, wheat, grain (seed) sagittal l.s. with embryo and endosperm

» No. CD060 Interactive CD-ROM with Teaching Material to School Set B

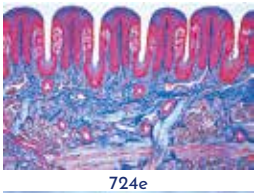
No. 700 | School Set C for General Biology, Supplementary Set. 50 microscope slides

Zoology and Parasitology

701f **Trypanosoma gambiense**, causing sleeping disease, blood smear
702f **Plasmodium berghe**i, malaria parasite, blood smear
703d **Radiolaria**, strewn slide of mixed species
704d **Foraminifera**, strewn slide of mixed species
705d **Obelia hydroid**, w.m. of colony with hydrants and gonothecae
706d **Hydra**, t.s. of body in different levels. Ectoderm, entoderm
707c **Planaria**, typical t.s. through the body
708e **Apis mellifica**, honey bee, head with compound eyes and brain t.s.
709d **Apis mellifica**, abdomen of worker t.s., with intestine and nephridia
710e **Ctenocephalus canis**, dog flea, adult w.m.
711d **Dermanyssus gallinae**, chicken mite, adult w.m.
712d **Helix pomatia**, snail, hermaphrodite gland (ovotestis), t.s. with developing ova and spermatozoa
713d **Mya arenaria**, clam, gills t.s. and l.s. showing ciliated epithelium
714d **Branchiostoma lanceolatum (Amphioxus)**, typical t.s. of body with gills, liver, and gonads
715d **Bird feathers**, w.m. of two types: wing or vane and down feathers
716e **Salamandra larva**, sections from selected material showing mitotic stages in skin and other organs
717f **Chicken embryo**, 48 hour, t.s. with neural tube and chorda

Histology of Man and Mammals

718d **Ovary of cat**, t.s. with primary, secondary, and Graafian follicles
719d **Testis of mouse**, t.s. showing spermatogenesis in all stages
720d **Cerebellum of cat**, t.s. shows Purkinje cells
721c **Spinal cord of cat**, t.s. showing white and grey matter, nerve cells
722d **Kidney of cat**, t.s. through cortex and medulla
723d **Retina of cat**, t.s. for detail of rods and cones
724e **Tongue of rabbit**, t.s. of papilla foliata with abundant taste buds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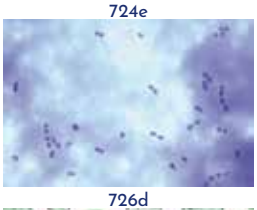
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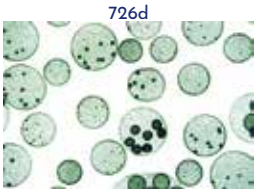
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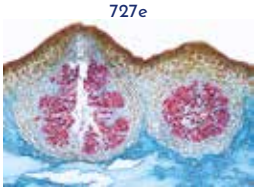
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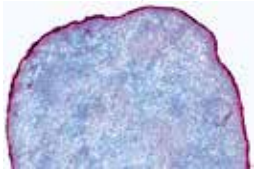
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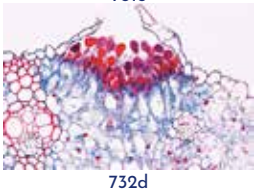
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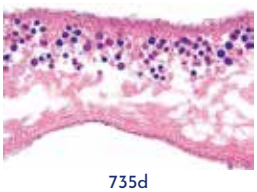
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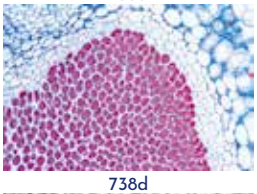
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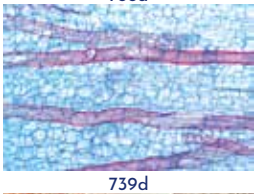
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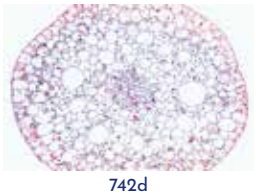
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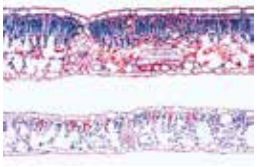
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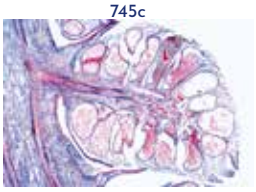
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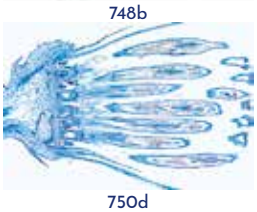
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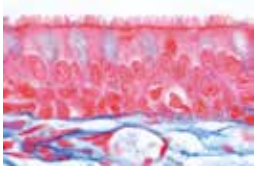
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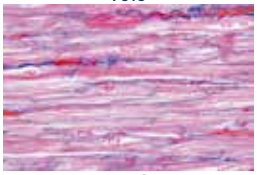
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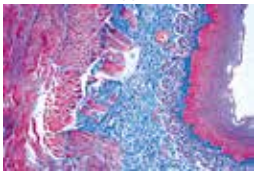
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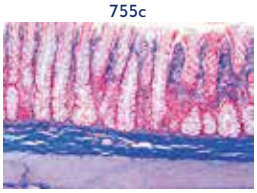

757d

Botany, Bacteria and Cryptogams

725d **Bacillus subtilis**, hay bacillus, smear with bacilli and spores
726d **Streptococcus lactis**, milk souring organisms, smear showing chains
727e **Volvox**, with daughter colonies and sexual stages, w.m.
728d **Fucus vesiculosus**, brown alga, female conceptacle with oogonia t.s.
729d **Fucus vesiculosus**, male conceptacle with antheridia t.s.
730c **Cladophora**, green alga, branched filaments with multinucleate cells
731c **Claviceps purpurea**, ergot, sclerotium t.s.
732d **Puccinia graminis,** wheat rust, uredinia on wheat leaf t.s.
733d **Puccinia graminis**, aecidia and pycnidia on barberry leaf t.s.
734b **Saccharomyces**, yeast, budding cells w.m.
735d **Physcia**, foliose lichen, thallus with symbiotic algae t.s.
736e **Fern prothallium**, w.m. showing sex organs
737d **Equisetum**, horse tail, strobilus with spores l.s.

Botany, Phanerogams

738d **Lupinus**, lupin, root nodules with symbiotic bacteria t.s.
739c **Euphorbia**, spurge, stem with lactiferous ducts l.s.
740d **Pinus**, pine, three sections of wood: transverse, radial, tangential
741d **Tilia**, lime, three sections of wood: transverse, radial, tangential
742d **Elodea**, waterweed, aquatic stem with primitive bundle t.s.
743d **Cucurbita**, pumpkin, stem t.s. showing bicollateral bundles and sieve plates
744d **Fagus**, beech, sun and shade leaves, two t.s. for comparison
745c **Nerium**, oleander, xerophytic leaf with sunken stomata, t.s.
746d **Pinus**, pine, male cone with pollen l.s.
747d **Pinus**, female cone with ovules l.s.
748b **Pinus**, mature pollen grains with wings w.m.
749f **Lilium**, lily, t.s. of very young anthers showing meiotic stages of the pollen mother cells
750d **Taraxacum**, dandelion, composite flower l.s.

» No. CD070 Interactive CD-ROM with Teaching Material to School Set C

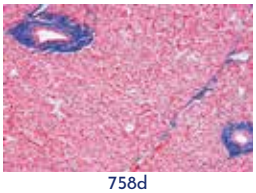
No. 750 | School Set D for General Biology, Supplementary Set. 50 microscope slides

Histology of Man and Mammals

751c **Ciliated epithelium**, in t.s. of fallopian tube of pig
752d **Tendon of cow**, l.s. showing white fibrous tissue, stained for fibres and cells
753f **Heart muscle**, human, t.s. and l.s., branched fibres with nuclei and intercalated discs
754c **Lymph gland of pig**, t.s. showing lymphoid tissue
755c **Esophagus of cat**, t.s. with stratified squamous epithelium, muscular layers
756d **Stomach of cat**, t.s. through fundic region showing gastric glands
757d **Large intestine (colon)**, t.s. special stained for the mucous cells
758d **Pancreas of pig**, sec. showing islets of Langerhans
759d **Thyroid gland of pig**, sec. showing glandular epithelium and colloid
760d **Adrenal gland of cat**, t.s. through cortex and medulla
761d **Sperm of bull (spermatozoa)**, smear
762e **Motor nerve cells**, smear from spinal cord of cow showing w.m. of motor nerve cells and their processes
763f **Cerebrum**, human, t.s. of cortex showing pyramidal cells and fibrous region
764d **Human skin from palm**, v.s. showing cornified epidermis, germinative zone, sweat glands

Zoology

765f **Distomum hepaticum (Fasciola)**, beef liver fluke, w.m. and stained for general study
766f **Taenia spec.**, tapeworm, w.m. of mature proglottids
767e **Culex pipiens**, mosquito, head and piercing-sucking mouth parts of female, w.m.
768e **Culex pipiens**, mosquito, head and reduced mouth parts of male, w.m.
769f **Cimex lectularius**, bed bug, w.m. of adult specimen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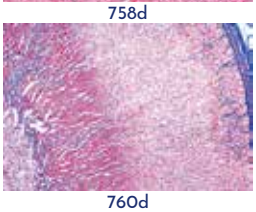
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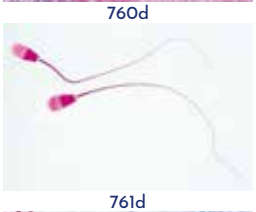
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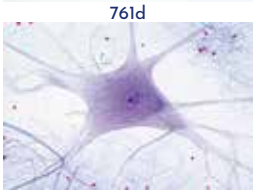
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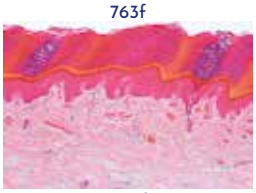
763f

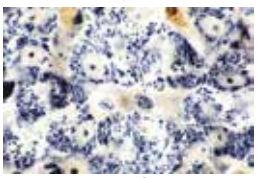

764d


765m


766f


767e


769f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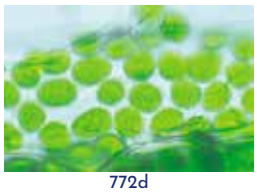
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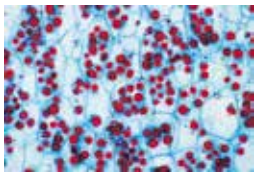
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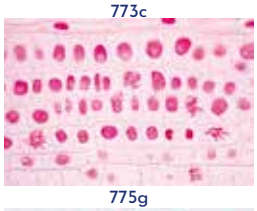
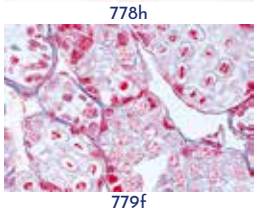

775g


777h


778h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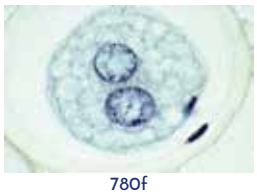
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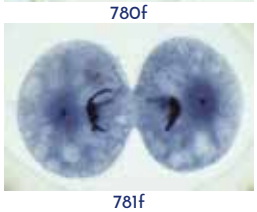
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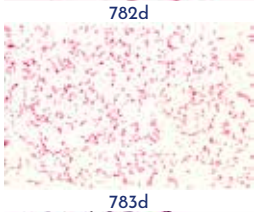
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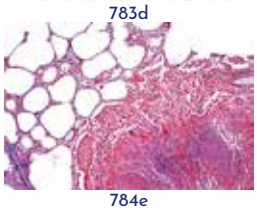

784e

Cytology and Genetics

770f Mitochondria, in thin sec. through liver or kidney, special staining technique
771g **Golgi apparatus**, t.s. through spinal ganglion, special staining technique
772d **Chloroplasts**, in leaf of Elodea or Mnium, special stained
773c **Aleurone grains**, in sec. of Ricinus endosperm
774f **Storage**, section of liver or kidney, vital stained with trypan-blue to demonstrate storage in epithelial cells
775g **DNA in cell nuclei**, demonstrated by Feulgen staining technique
776g **DNA and RNA**, fixed and stained with methyl green and pyronine to show DNA and RNA in different colors
777f **Giant chromosomes** from the salivary gland of Chironomus. Individual genes and puffs can be observed
778h **Human chromosomes**, spread in the stage of metaphase, for counting chromosomes
779f **Meiotic and mitotic stages** in sec. of crayfish testis. Nuclear spindles are present
780f **Maturation divisions** in ova of Ascaris megalocephala, iron-hematoxylin stained
781f **Cleavage stages** in ova of Ascaris megalocephala, iron-hematoxylin stained

Bacteria and Diseased Organs of Man

782d **Escherichia coli**, bacteria from colon, probably pathogenic, smear Gram stained
783d **Eberthella typhi**, causing typhoid fever, smear from culture, Gram stained
784e **Tuberculous lung**, t.s. of diseased human lung showing miliary tubercles in tissue
785e **Coal dust lung** (Anthracosis pulmonum), t.s. of human smoker's lung
786e **Liver cirrhosis** of man caused by alcohol abuse, t.s. showing degeneration of cells
787e **Arteriosclerosis**, t.s. of diseased human coronary with sclerotic changes in the wall
788e **Metastatic carcinoma** (cancer) of human liver, t.s.

Embryology

789e **Sea-urchin development** (Psammechinus miliaris), composite slide with two cell, four cell and eight cell stages
790e **Sea-urchin development** (Psammechinus miliaris), composite slide with morula, blastula and gastrula stages
791f **Frog embryology** (Rana spec.), sec. trough the blastula stage showing the blasto-coel
792f **Frog embryology** (Rana spec.), sag. sec. through young larva in the tail bud stage, with primordia of organs

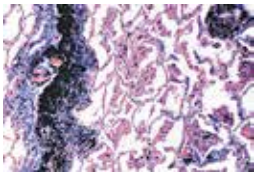
Ecology and Environment

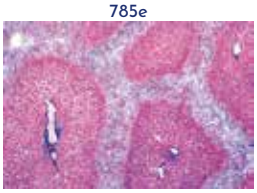
793e **Leaf (needle) of fir (Abies)**, two t.s. of leaves, healthy and damaged by environmental influences (acid rain)
794e **Leaf of beech (Fagus)**, two t.s. of leaves, healthy and damaged by environmental influences (acid rain)
795d **Bacteria from waste-water**, smear with many typical forms

Botany

796c **Nostoc**, blue green alga, filamentous colonies within gelatinous sheaths
797e **Desmids** (Desmidiaceae), strewn slide of various species
798c **Sphagnum**, peat moss, w.m. of leaf showing chlorophyll-bearing and hyaline cells.
799c **Triticum**, wheat, t.s. of stem of a gramineous plant with central pith and circular arrangement of bundles
800c **Salvia**, sage, t.s. of a square stem with angular collenchyma

» No. CD075 Interactive CD-ROM with Teaching Material to School Set D

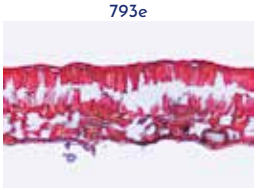

785e

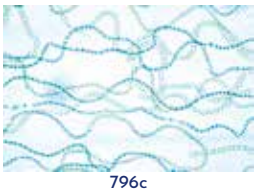

786t


789e


791g

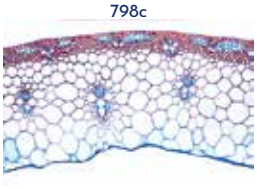

793e

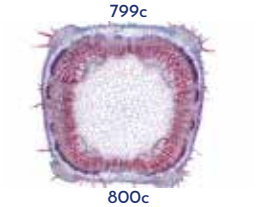

794e


796c


797e


798c

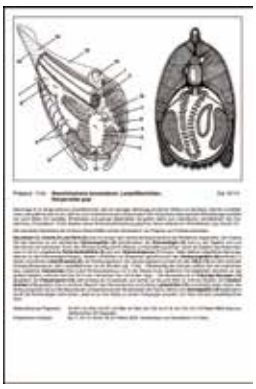

799c


800c

No. 500 Microscope Slides, School Set A for General Biology, 25 slides
No. 600 Microscope Slides, School Set B for General Biology, 50 slides
No. 700 Microscope Slides, School Set C for General Biology, 50 slides
No. 750 Microscope Slides, School Set D for General Biology, 50 slides
No. 850 Microscope Slides, School Set A, B, C and D together. 175 slides

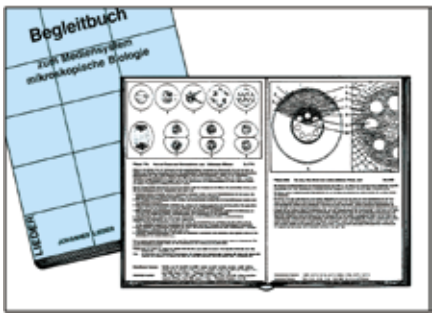
- **Prices of individual microscope slides:** Each slide in our catalogues is identified by a list number which ends with a small letter. This end-letter designates the price of the slide according to the code specified in in our price-list available for download on our website www.lieder.com.

- **Storage Boxes for prepared microscope slides:** Microscope slides can be shipped in special slide boxes only for technical reasons. These boxes are available in various types and price categories and should be ordered together with the slides. Unless specified by the customer we supply standard type boxes of suitable size for our microscope slide sets and individual slides (e.g. K12, K25, K50, K100). Please see price-list. – For a description of the boxes, see page 61.



2. Manual with Texts and Drawings

Text: Dr. Karl-Heinrich Meyer. **Drawings:** Christa Lieder



With this manual the intent is to facilitate the study of microscope slides and photomicrographs and their interpretation.

The Multimedia Program consisting of 175 microscope slides, color photomicrographs 35mm, overhead transparencies, sketch- and work sheets, and wall charts constituted the basis for the conception of the manual. However, anyone who works with microscopic slides and photomicrographs will find the manual helpful in the discovery of new details, their interpretation and understanding.

The Drawings

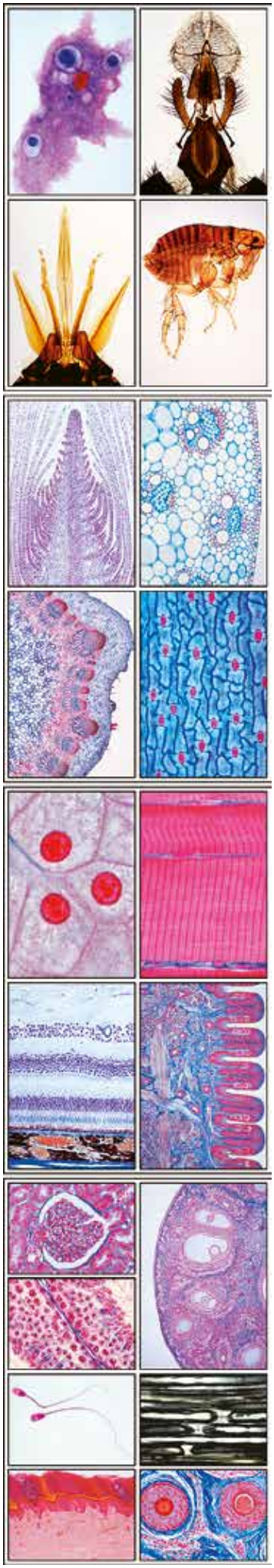
Microscope slides, the basic medium, are studied under the microscope using different magnifications to discover details. The projection of the color photomicrographs 35mm immediately demonstrates in optimum magnification the desired detail of the slide, thus enabling the pupil to easily and quickly find this detail in his mount. The semidiagrammic drawings, the third medium, separate the important from the unimportant, interpreting and introducing connections.

The Descriptions

The text pertaining to each of the 175 drawings gives a detailed description of the microscopic slide, the photomicrograph 35mm and the drawing. It also makes suggestions for the best use of the Multimedia Program in class.

- The morphological structures are described and the code of numbers in the drawings is explained.
- Information is given about systematic and physiological connections as well as biological principles: the evolution from primitive to highly developed organisms, division of labour, specialization and how organisms solve certain problems. Life cycles of parasitic plants and animals are discussed.
- Information is further given about methods of collecting and studying living material to make lessons interesting. Microtechnical methods of fixing, staining and mounting are explained where possible.
- Each text refers to supplementary microscope slides and projection slides which enable the teacher to intensify and increase the knowledge of the subject. Due to the limited space only catalogue numbers of these supplementary media materials are given. Their exact labels and detailed descriptions are listed on the respective pages of this catalogue.

Best.-Nr. T8500E **Manual to the Multimedia Program Microscopic Biology,**
190 pages with 175 drawings and texts



3. Color Atlas of Overhead Projector Transparencies

The advantage of transparencies for the overhead projector in the classroom is that they allow you to work perfectly in daylight. Just like slides, the transparencies show the desired section of the slide on the projection screen at optimum magnification. They therefore simplify working with microscope specimens and their interpretation in the classroom. As an alternative to the 175 microscope slides (see page 6) of the media system, we therefore supply an atlas of 45 overhead transparencies in 22 x 28 cm format, with over 252 colour images of microscope slides from our school series A, B, C and D, with some of the individual objects shown at different magnification levels and using different preparation and staining techniques. Outstanding and extensive image material together with the latest repro and colour printing technology guarantee optimum visual information transfer.

A description of all individual images can be found on pages 114-115 in the 'Transparency atlases' section.

Atlas No. **8236E** Transparency-Atlas with the Pictures of Sets A, B, C, D

Contents: 45 overhead transparencies in 22 x 28 cm format, now with 252 images of microscopic specimens, matching the micropreparation school series A, B, C and D in the 'Media System'. With detailed, 80-page accompanying text and 175 semi-schematic drawings. In sturdy plastic folder with ring mechanism. Text: OStD Dr Karl-Heinrich Meyer. In addition, a series of large-format drawing and worksheets on strong paper for use as copy templates and for class work.

Zoology - Amoeba proteus - Radiolaria, mixed - Foraminifera, mixed - Euglena, flagellate - Trypanosoma gambiense, blood smear - Plasmodium, malaria, blood smear - Paramaecium, nuclei stained - Sycon, marine sponge t.s. - Hydra, w.m. - Hydra, t.s. - Obelia hydroid - Planaria, t.s. - Dicrocoelium lanceolatum, sheep liver fluke - Distomum hepaticum (Fasciola), beef liver fluke - Taenia saginata, tapeworm, proglottids t.s. - Taenia, tapeworm, w.m. proglottid - Trichinella spiralis, encysted larvae - Ascaris, roundworm, t.s. female - Lumbricus, earthworm, typical t.s. back of clitellum - Daphnia and Cyclops - Araneus, spider, leg with comb - Araneus, spinneret - Dermanyssus gallinae, chicken mite - Musca domestica, house fly, head and mouth parts - Musca, leg - Apis mellifica, honey bee, mouth parts - Apis, wings - Apis, hind leg of worker - Apis, sting and poison sac - Apis, head with compound eyes t.s. - Apis , abdomen of worker t.s. - Periplaneta, cockroach, chewing mouth parts - Culex pipiens, mosquito, mouth parts of female - Culex, mouth parts of male - Trachea from insect - Spiracle from insect - Pieris, butterfly, wing with scales - Ctenocephalus canis, dog flea - Cimex lectularius, bed bug - Helix pomatia, snail, hermaphrodite gland t.s. - Mya, clam, gill sec. - Bird feathers - Asterias rubens, starfish, arm t.s. - Branchiostoma (Amphioxus), typical t.s.

Histology of Human and Mammals - Squamous epithelium - Ciliated epithelium, t.s. - Fibrous connective tissue - Tendon , l.s. white fibrous tissue - Adipose tissue, fat - Hyaline cartilage t.s. - Compact bone, t.s. - Striated muscle, l.s. - Heart muscle, human, l.s. intercalated discs - Smooth muscle l.s. and t.s. - Lung of cat, t.s. - Human blood smear - Frog blood smear - Artery and vein of mammal, t.s. - Lymph gland of pig, t.s. - Thyroid gland of pig, sec. colloid - Adrenal gland of cat, t.s. - Esophagus of cat, t.s. - Stomach of cat, t.s. fundic - Small intestine of cat, t.s. - Large intestine, t.s. mucous cells - Liver of pig, t.s. - Pancreas of pig, sec. with islets of Langerhans - Kidney of cat, t.s. - Ovary of cat, t.s. with follicles - Testis of mouse, t.s. spermatogenesis - Sperm of bull, smear - Medullated nerve fibres, Ranvier's nodes - Motor nerve cells, smear from spinal cord - Spinal cord of cat, t.s. - Cerebrum, human, t.s. pyramidal cells - Cerebellum of cat, t.s. Purkinje cells - Retina of cat, t.s. - Tongue of rabbit, t.s. with taste buds - Human skin from palm, v.s. sweat glands - Human scalp, l.s. of hair follicles

Botany, Bacteria and Cryptogams – phora, green alga, multinucleate cells - Volvox, daughter colonies and sexual stages - Spirogyra, vegetative - Spirogyra in conjugation - Desmids, various species - Fucus, brown alga, female conceptacle t.s. - Fucus , male conceptacle t.s. - Mucor, mold - Morchella, morel, t.s. of asci and spores - Claviceps, ergot, sclerotium t.s. - Saccharomyces, yeast, budding - Psalliota, mushroom, t.s. of pileus - Puccinia, wheat rust, uredinia t.s. - Puccinia, aecidia and pycnidia t.s. - Physcia, lichen, thallus with symbiotic algae t.s. - Marchantia, liverwort, antheridia l.s. - Marchantia, archegonia l.s. - Moss stem with leaves w.m. - Sphagnum, peat moss, w.m. of leaf - Fern prothallium, sex organs - Pteridium, fern, rhizome t.s. - Aspidium, t.s. leaf with sori - Equisetum, horse tail, strobilus l.s.

Botany, Phanerogams – Küchenzwiebel, Epidermis. Einfache Pflanzenzellen – Wurzelspitze mit Wurzelhaaren – Mais, Wurzel, quer – Hahnenfuß, Wurzel , quer – Linde, verholzte Wurzel, quer – Dahlie, Knolle mit Inulinkristallen, quer – Lupine, Wurzelknöllchen mit Bakterien, quer – Elodea, Wasserpest Vegetationskegel, längs – Mais, Stamm , quer – Sonnenblume, Stamm , quer – Birne, Steinzellen, quer – Kartoffel, Knolle quer – Wasserpest, Stamm , quer – Weizen, Graspflanze, quer – Aristolochia, ein und mehrjähriger Stamm, quer – Holunder, Stamm quer. Lentizellen – Linde, Holz: quer, radial, tangential – Kürbis, Stamm längs. Siebröhren – Kürbis, Stamm quer. Siebplatten – Euphorbia, Milchröhren, längs – Salbei, vierkantiger Stamm – Tulpe, Blattepidermis – Iris, Blatt , quer – Syringa, Flieder, Blatt quer – Buche, Sonnen– und Schattenblatt, quer – Oleander, Blatt mit versenkten Spaltöffnungen – Lilium, Staubbeutel quer – Lilium, Fruchtknoten quer – Löwenzahn, Kompositenblüte längs – Weizen, Samenkorn, längs – Kiefer, Holz: quer, radial, tangential – Kiefer, männl. und weibl. Blüte, längs – Pinus, Pollenkörner

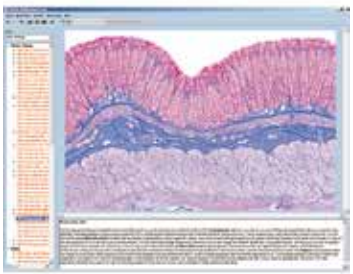
Cytology and Genetics – Allium cepa, l.s. of root tips showing mitosis - Lilium, t.s. of young anthers, meiotic stages - Salamandra, sections with mitotic stages - Mitochondria - Golgi apparatus, t.s. spinal ganglion - Chloroplasts, in leaf of Mnium - Aleurone grains - Allium , onion, showing calcium oxalate crystals - Storage, section of liver, vital stained - DNA in cell nuclei, Feulgen - DNA and RNA in different colors - Giant chromosomes from

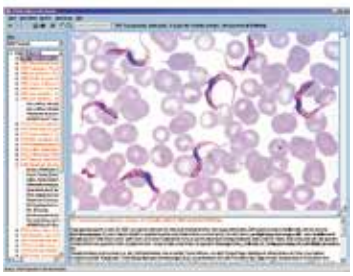
salivary gland of Chironomus - Human chromosomes, stage of metaphase - Crayfish testis, with nuclear spindles - Maturation divisions in ova of Ascaris megalocephala - Cleavage stages in ova of Ascaris

Embryology – Chicken embryo, 48 hour, t.s. with neural tube and chorda - Sea-urchin development, two cell, four cell and eight cell stages - Sea-urchin, morula, blastula and gastrula - Frog embryology (Rana), sec. blastula - do. sag. sec. young larva in tail bud stage

Bacteria and Diseased Organs of Man – Escherichia coli - Eberthella typhi, typhoid fever - Tuberculous lung of man, t.s. - Coal dust lung of man, t.s. (smoker's lung) - Liver cirrhosis of man caused by alcohol abuse, t.s. - Arteriosclerosis, t.s. of coronary artery - Metastatic carcinoma (cancer) of human liver, t.s.

Ecology and Environment – Leaf (needle) of fir (Abies), two t.s. of leaves, healthy and damaged by environmental influences (acid rain) - Leaf of beech (Fagus), two t.s. of leaves, healthy and damaged by environmental influences (acid rain) - Bacteria from waste-water





4. CD-ROM for the Series A, B, C and D

Multimedia 'Biology at school and in the classroom' Interactive teaching and learning media on CD-ROM

The LIEDER CD programme for interactive teaching provides comprehensive teaching and learning material for use in science lessons and for self-study. Each CD covers one topic comprehensively.

- Each CD contains a large number of high-quality anatomical **colour plates, micro and macro images, colour photos of animals and plants, schematic images, diagrams and drawings, life pictures, cycles, X-ray photos, photos of people, landscape photos.**
- Images are accompanied by detailed explanatory texts in **various languages**.
- Drawings required to explain the micro images are provided with detailed notes in the **images and explanatory texts**.
- All images can be displayed in **full screen size** at any time from the running program by simply pressing a button. A **user-defined slide show** is also possible.
- Our CDs contain a test programme that can be used to **test the knowledge acquired at various levels of difficulty**. A predetermined number of pictures are selected at random.
- An important component of our multimedia programmes on CD is the **special accompanying material**, which enables the evaluation of what has been seen and creative learning beyond viewing on the screen. A large number of the images are **accompanied by drawing and worksheets**, which can also be used as supplementary material for class tests.
- All images and texts can be printed out.

CD-ROM for our school series A, B, C, and D

As part of our 'Microscopic Biology' multimedia programme, we supply four interactive CDs that are coordinated with our school series A, B, C and C. The basic material consists of excellent microphotographs of all the microscope slides contained in the school series in multiple magnification levels and image sections. In addition, a large number of additional specimens matching the topics are shown, which serve to expand the existing series of specimens. Anatomical colour plates and schematic drawings as well as detailed texts on all individual sets of microscope slides serve to explain the preparations and can be printed out.

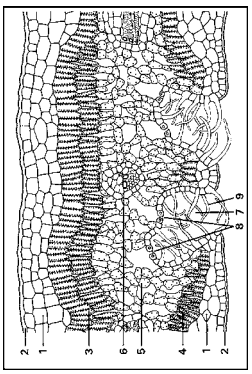
CD050 **CD with micrographs, drawings, accompanying material and copy templates for school series A in the 'Biology media system'**

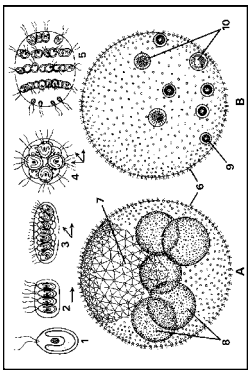
CD060 **CD with micro-recordings, drawings, accompanying material and copy templates for school series B in the 'Biology media system'**

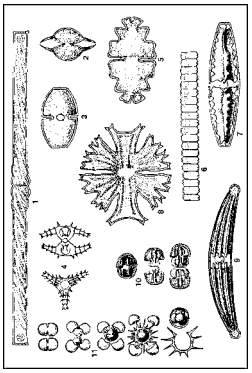
CD070 **CD with micro-recordings, drawings, accompanying material and copy templates for school series C in the 'Biology media system'**

CD075 **CD with micro-recordings, drawings, accompanying material and copy templates for school series D in the 'Biology media system'**

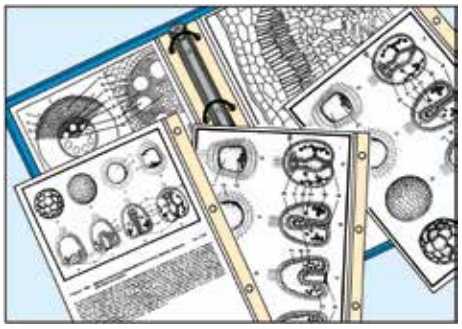
CD085 **All 4 CDs for the school series A, B, C and D in the "Biology media system'. After installation Simultaneous access to over 2,200 images and 8,100 texts.**







5. Media Package, Sketch- and Work Sheets for Copying



Strictly adapted and corresponding with manual, microscope slides and transparencies, all media packages comprise the following parts, assorted in proof plastic files with ring mechanism:

- **Overhead Transparencies of the Drawings.** The complete set of 175 pictures, printed on best, hard-wearing support foil, size 21 x 29 cm.

Suitable for daylight-projection in classroom. Details of the drawing can be colored by the teacher while projecting. He may explain the structures marked with numbers or write on the transparencies using a felt-tipped pen.

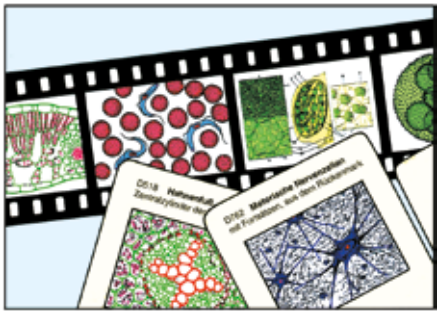
- **Sketch- and Work Sheets of the Drawings.** The complete set of 175 pictures, printed on strong paper, size 21 x 29 cm. Suitable for taking photocopies for all students. They serve to facilitate seeing his/her way through the prepared microscope slides and finding the detail important in the lesson. They start processes of learning and understanding by comparing microscope slides with the diagrammatic drawings, thus to identify and label the details relevant in the lesson. They allow completing or coloring the drawings according to own observations, and finally the sheets can be used for tests.

- **Descriptions and Pictures** of the manual pages, each page with text and picture on a separate sheet.

- **Transparencies, Sketch- and Work Sheets, and Manual Pages** are kept in 175 separate clear-view envelops, therefore the single titles can be taken out of the files separately.

No. M500 **Media Package, Sketch- and Work Sheets, Part A,** 25 items, in file
No. M600 **Media Package, Sketch- and Work Sheets, Part B,** 50 items, in file
No. M700 **Media Package, Sketch- and Work Sheets, Part C,** 50 items, in file
No. M750 **Media Package, Sketch- and Work Sheets, Part D,** 50 items, in file
No. M850 **Media Package, Sketch- and Work Sheets, Parts A, B, C, D together,** 175 items

6. Color Photomicrographs 35 mm (original exposure)

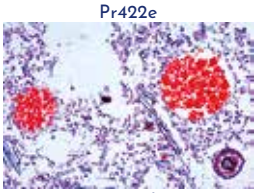


The projection of the micro-slide matching the specimen makes it easier for the student to find and recognise important structures of the specimens under the microscope.

The microslides are colour micrographs of the highest image quality, produced from specimens and correspond exactly to the compositions and individual titles of the four microslide series A, B, C and D of the micropreparation series A, B, C and D.

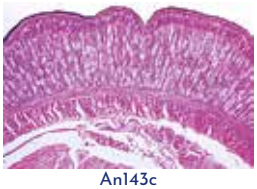
No. D50 **Micro slide school series A,** 25 colour slides (no. D501-D525),
for list of contents see preparation series A no. 500 page 4
No. D60 **Micro slide school series B,** 50 colour slides (no. D601-D650),
for list of contents see preparation series B no. 600 page 5
No. D70 **Micro slide school series C,** 50 colour slides (no. D701-D750),
for list of contents see preparation series C no. 700 page 6
No. D75 **Micro slide school series D,** 50 colour slides (No. D75-D800),
for list of contents see preparation series No. 750 page 7
No. D85 **Micro slide school series A, B, C and D together,** 175 colour slides,
for list of contents see series ABCD page 4-7

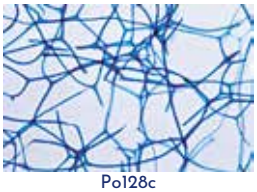

Pr422e


Po121d

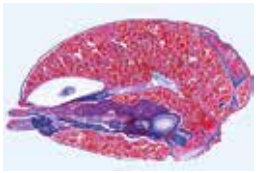

Co112f


An124d


An143c

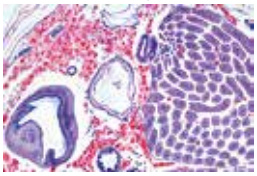

Po128c


Ar111e


Ar127e


In119d


In211b


In255e

7. Additional Microscope Slides to the School Series A, B, C, and D

Selected supplementary prepared microscope slides matching the school series A, B, C, and D. All the slides can be purchased either in complete sets or series or individually. The procurement and processing of the original material for some preparations presents special problems. For this reason, these preparations can often only be manufactured in small quantities entailing a longer delivery period. This applies particularly to the preparations marked with an asterisk * in the catalogue, for which we can not guarantee delivery.

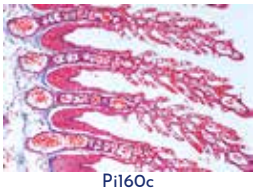
850E01 Zoology

Pr422e	**Vorticella,** a common stalked ciliate w.m.
Pr440f	**Mixed protozoa,** many different forms are found on this slide
Po121d	**Spongilla,** fresh water sponge, t.s. showing choanocytes, incurrent and excurrent channels
Po128c	**Euspongia,** a commercial sponge, macerated skeleton shows horny fibres, w.m.
Co112f	**Hydra** with bud, fresh water polyp, w.m. *
Co2193e	**Actinia, (Metridium),** sea anemone, t.s. and l.s. through entire young specimen on one slide
An124d	**Hirudo medicinalis,** medicinal leech, t.s. through the body for demonstrating general structures of a leech
An144e	**Lumbricus,** earthworm, anterior end including gonads, l.s.
An143c	**Lumbricus,** earthworm, clitellum t.s.
Ro211e	**Plumatella,** moss animals, w.m. or section
Cr120c	**Small crustaceans,** mixed species of fresh water plankton
Ar111e	**Spider,** entire young specimen, w.m.
Ar127e	**Spider,** sagittal l.s. of abdomen showing the book or trachea lung
Mo1515e	**Snail,** typical l.s. of small specimen for general study
In119d	**Formica sp.,** ant, head and mouth parts w.m.
In211b	**Melolontha,** cockchafer, laminate antenna with sensory organs w.m.
In215b	**Apis mellifica,** honey bee, anterior leg with eye brush w.m.
In255e	**Testis**, in t.s. of abdomen of drone of Apis mellifica, honey bee
In311d	**Drosophila,** fruit fly, adult male or female w.m.
Pi160c	**Cyprinus,** carp, gills t.s.
Pi162c	**Cyprinus,** carp, blood smear showing nucleate red corpuscles
Pi175f	**Fish scales** composite slide, shows cycloid, ctenoid and placoid scales on one slide, w.m.
Am234c	**Rana,** frog, skin with skin glands, vertical l.s.
Am212c	**Rana,** frog, lung t.s., simple bag-like lung with large central cavity
Re213c	**Lacerta,** lizard, lung t.s. Enlargement of respiratory surface
Av111c	**Gallus domesticus,** chicken, blood smear

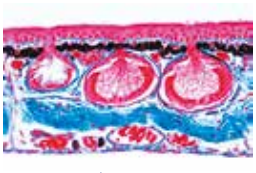
850E02 Bacteria and Cryptogams

Ba161e	**Spirillum volutans,** a very large spirillum, smear *
Ag117c	**Chroococcus,** large single celled blue-green algae w.m.
Ag174d	**Eudorina,** biflagellate cells within gelatinous sheaths forming spherical colonies of thirty-two cells w.m.
Fu131d	**Rhizopus or Mucor,** mold, conjugation stages and formation of zygospores w.m.
Fu161c	**Penicillium,** blue mold, mycelium and conidiophores, w.m.
Fu227c	**Boletus edulis,** pore fungus, horizontal sec. of pileus showing c.s. of pores
Li104d	**Physcia,** lichen, t.s. through apothecium showing asci and spores
Br112d	**Marchantia,** liverwort, cupule with gemmae, l.s. showing vegetative reproduction of liverworts


In311d


Pi160c


Mo1515e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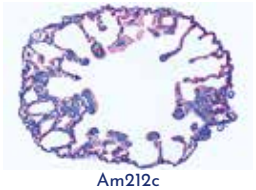
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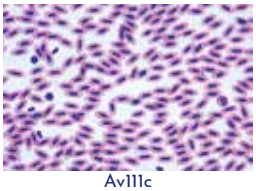
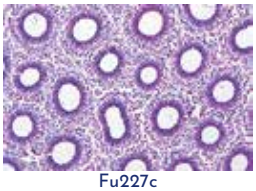
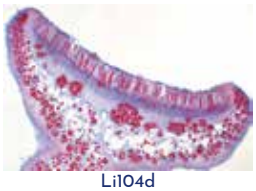

Av111c


Ba161e


Fu131d


Fu227c


Li104d

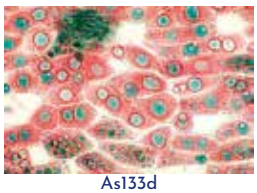

Br112d

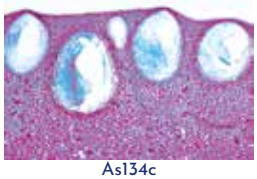

Br123d

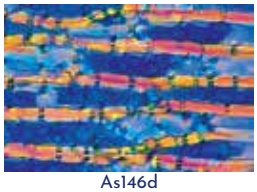

Br125e

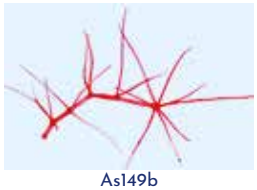

Br126e

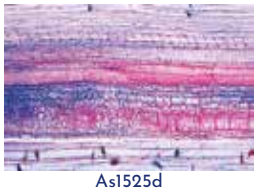

Pt113e

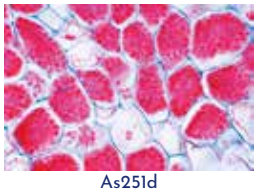

As133d

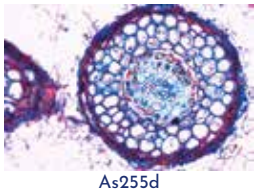

As134c


As146d


As149b


As1525d

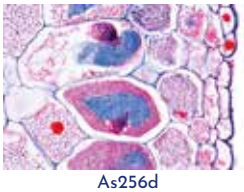

As251d

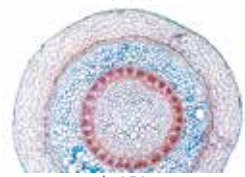

As255d

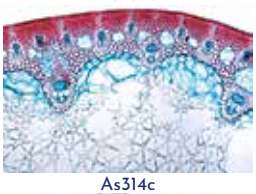
Br123d **Polytrichum,** moss, l.s. of sporophyte with spores
Br125e **Mnium,** moss, l.s. of antheridia
Br126e **Mnium,** moss, l.s. of archegonia
Pt113e **Lycopodium,** club moss, l.s. of young sporophyll showing developing spores

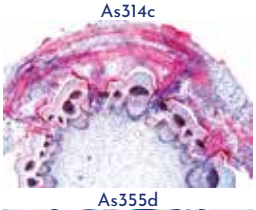
850E03 Phanerogams

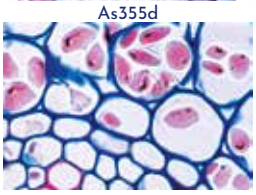
As133d **Fat,** t.s. of endosperm of Corylus (hazel) stained for fat
As134c **Lysigenous oil glands,** t.s. rind of Citrus fruit
As136d **Acid tannic,** t.s. bark of Rosa
As146d **Reserve cellulose,** t.s. seed of Phoenix (date)
As1491b **Scale-like stellate hairs,** isolated and w.m. from Elaeagnus (olive tree)
As149b **Branched leaf hairs,** isolated and w.m. from Verbascum (mullein)
As1525d **Annular and spiral vessels,** isolated and w.m.
As202e **Herbaceous and woody roots,** two t.s. on one slide for comparison
As251d **Alnus,** alder, root nodules with symbiotic actinomycetes (Streptomyces alni) t.s.
As255d **Fagus,** beech, root with ectotrophic mycorrhiza, t.s.
As256d **Neottia nidus avis,** orchid, root with endotrophic mycorrhiza, l.s.
As259c **Dendrobium,** orchid, aerial root with velamen t.s.
As307e **Herbaceous and woody stems,** two t.s. on one slide for comparison
As314c **Juncus,** bulrush, stem with internal stellate cells t.s.
As355d **Cuscuta,** dodder, t.s. through stem of host showing the haustoria of the parasite
As285e **Viscum album,** mistletoe, sec. showing parasitic root in wood of apple tree
As3772e **Fagus,** beech, three sections of wood: t.s., r.l.s., t.l.s.
As320c **Acorus calamus,** sweet flag, rhizome t.s. showing storage of starch
As4112c **Iris,** leaf epidermis w.m. showing stomata in rows
As412c **Zea mays,** corn, monocot gramineous leaf t.s.
As4567c **Ammophila,** marram grass, xerophytic leaf t.s.
As459c **Ficus elastica,** India rubber plant, leaf with cystoliths t.s.
As465d **Utricularia,** bladderwort, w.m. of bladder
As470d **Nepenthes,** pitcher plant, t.s. of pitcher with digestive glands
As473d **Helleborus,** t.s. of a typical mesophytic dicot leaf for general study, showing large cellular structures
As451c **Fagus,** beech, t.s. of leaf bud showing developing leaves, meristematic tissue and midrib
As501e **Monocot and dicot flower buds** t.s. on same slide for comparison of the floral diagrams
As605d **Taraxacum,** dandelion, t.s. of composite flower showing tubular florets and ligulate florets
As606d **Papaver,** poppy, t.s. of flower shows parietal placentation
As613d **Solanum tuberosum,** potato, t.s. flower bud for floral diagram
As631d **Lycopersicum,** tomato, young berry type fruit t.s.
As638d **Phaseolus,** bean, t.s. of pod showing pericarp and seed
As619d **Capsella bursa pastoris,** shepherd's purse, l.s. of ovule with embryos in situ for general study
As630c **Mixed pollen types,** showing various forms of many different species
Gy125c **Pinus,** pine, older stem with annual rings, resin ducts t.s.
Gy135f **Pinus,** ovule l.s. showing archegonia,
Gy140e **Pinus,** mature embryo with endosperm t.s.

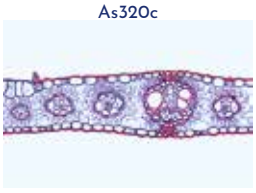

As256d

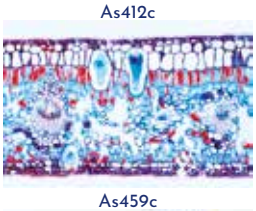

As259c


As314c

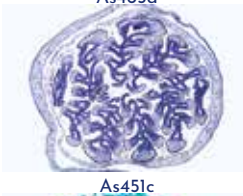

As355d


As320c


As412c


As459c


As465d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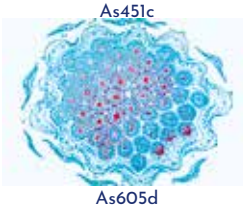
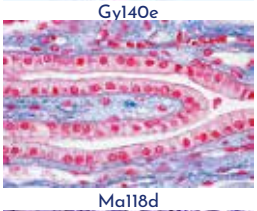
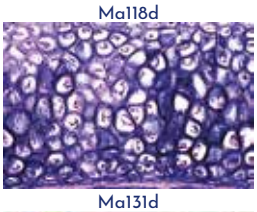

As605d


As619d


Gy135f

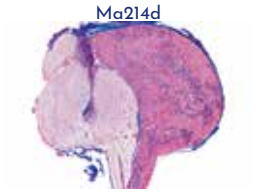

Gy140e

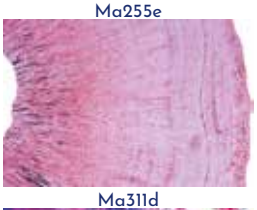

Ma118d


Ma131d

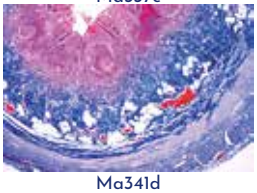

Ma138e


Ma214d


Ma255e


Ma311d


Ma337c


Ma341d


Ho4368

850E04 Histology and Human Science

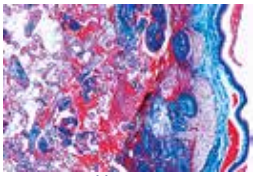
Ma118d **Cuboidal epithelium,** in sec. of kidney papilla
Ma127d **Mucous tissue,** t.s. of navel string (umbilical cord)
Ma131d **Yellow elastic cartilage,** section specially stained for elastic fibres
Ma138e **Bone development,** intracartilaginous ossification in foetal finger or toe, l.s.
Ma214d **Trachea** of cat or rabbit, t.s. with ciliated epithelium, cartilage etc.
Ma255e **Pituitary gland (hypophysis),** sag. l.s. of complete organ from cow or pig showing adeno- and neurohypophysis
Ma311d **Tooth** human, t.s. of crown
Ma316e **Tooth development,** medium stage l.s.
Ma337c **Duodenum** of cat or dog, t.s. showing Brunner's glands
Ma341d **Vermiform appendix**, human t.s.
Ho4368e **Uterus,** human, t.s. for general structure
Ho440e **Placenta,** human t.s. with chorion and blood vessels
Ma434d **Ovary**, sec. selected to show Corpus luteum
Ma636d **Human scalp**, horizontal sec. shows t.s. of hair follicles

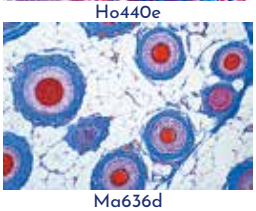
850E05 Cytology and Genetics, Embryology

Ma101d **Simple animal cells** in sec. of salamander liver showing nuclei, cell membranes and cytoplasm. For general study of the animal cell
As1155g **Mitosis,** squash preparation from Allium root tip, shows intact mitotic stages, Feulgen stain *
As115d **Mitosis,** t.s. from Allium root tips showing all stages of plant mitosis in polar view
As119g **Mitochondria,** thin l.s. of Allium root tips specially fixed and stained to show the mitochondria clearly
Ma1045f **Barr bodies** (human sex chromatin) in smear from female squamous epithelium *
Ma512f **Cerebral cortex**, t.s. stained to show the pyramidal cells
Ma515f **Cerebellum**, t.s. stained to show the Purkinje cells
Ma528f **Spinal cord** of cat, t.s. silvered for nerve cells and fibres
Ma552h **Motor nerve endings,** muscle stained with gold chloride showing the motor end plates *
As526f **Lilium, anther** t.s., microspore mother cells in tetrad stage
As530e **Lilium,** l.s. through pistil and stigma with pollen and pollen tubes
Em718f **Chicken,** 72 hour, t.s. in region of heart and eyes
Ma445f **Embryo of mouse**, sagittal l.s. of entire specimen showing all organs in situ

850E06 Parasites and Pests

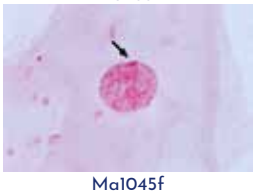
Ba112d **Staphylococcus aureus,** pus organism, smear from culture
Ba131d **Mycobacterium tuberculosis,** smear from culture
Ba136d **Corynebacterium diphtheriae,** smear from culture
Ba145d **Salmonella paratyphi,** paratyphoid fever, smear
Ba149d **Shigella dysenteriae,** causes bacillary dysentery, smear
Pr311f **Plasmodium falciparum,** malignant tertian malaria of man, blood smear with typical ring stages
Pr330e **Nosema apis,** honey bee dysentery, sec. of diseased intestine
Ar1515e **Varroa,** parasitic mite of bees w.m.
Ne131d **Ascaris lumbricoides,** roundworm, ova in faeces w.m.
Ne135f **Enterobius vermicularis (Oxyuris),** pin worm, w.m. of an adult specimen
Ne170g **Mixed ova** in faecal material. Slide containing eggs of parasitic worms of different species i.e. Ascaris, Ancylostoma, Trichuris, Taenia, Enterobius, Schistosoma *
Py324i **Taenia pisiformis,** tapeworm, w.m. of scolex with four suckers and hooklets *
Py3272t **Dipylidium caninum,** tapeworm, w.m. of scolex with suckers and rostellum, and immature proglottids *

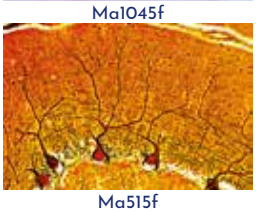

Ho440e


Ma636d

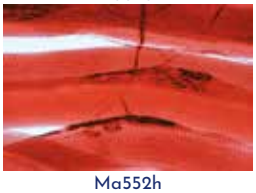

Ma101d

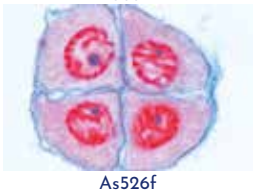

As115d


Ma1045f


Ma515f


Ma528f

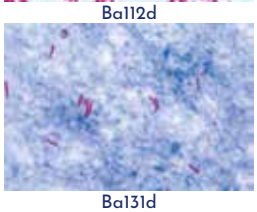

Ma552h

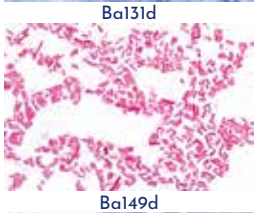

As526f

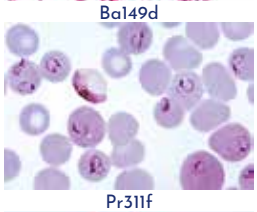

Em718f


Ma445f


Ba112d

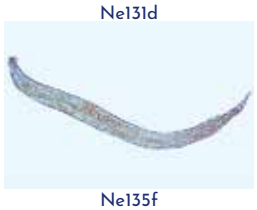

Ba131d


Ba149d

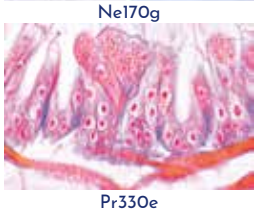

Pr311f


Ar1515e

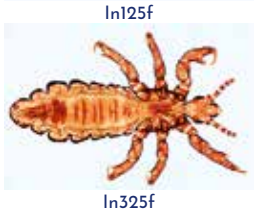

Ne131d


Ne135f


Ne170g


Pr330e


In125f

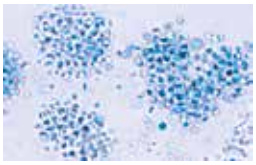

In325f

Py337f **Echinococcus granulosus,** dog tapeworm (also harmful to human), cyst wall and scolices t.s.
In125f **Anopheles,** head and mouth parts of female w.m.
In124f **Anopheles,** malaria mosquito, head and mouth parts of male w.m.
In325f **Pediculus humanus,** louse, adult male or female w.m.

850E07 Ecology and Environment, Pests in Agriculture

4542e **Putrefactive bacteria** (Spirillum) from sludge poor in oxygen, smear
Ag1176c **Microcystis,** blue-green algae, irregular colonies growing in eutrophicated water, w.m.
4555d **Rotifers**, Rotatoria, small animals from putrid water
4559d **Skin of fish**, injured by water highly polluted with chemicals, t.s.
4560d **Skin ulcer** of an amphibian, t.s. caused by environmental influences
4586c **Constituents of humus soil**, strewn slide
4598b **Asbestos powder** (cancerogenous), strewn slide
In132e **Gipsy,** Lymantria, mouth parts of larva w.m.
In339c **Plant lice,** Aphidae sp., w.m. of several specimens
7502d **Potato black scab,** Synchytrium endobioticum, infected tissue
7503d **Downy mildew of grapes,** Plasmopara viticola, infected leaf, t.s.
7509d **Grape mildew,** Uncinula necator (Oidium Tuckeri), t.s.
7508d **Rose mildew,** Erysiphe pannosa, infected leaf with conidia t.s.
7510d **Gooseberry mildew,** Sphaerotheca mors uvae, perithecia on diseased fruit, t.s.
7512c **Monilia,** Sclerotinia fructigena, diseased fruit with conidia t.s.
Fu211d **Cornsmut,** Ustilago zeae, t.s. of pustule with spores

Please order additional storage boxes for the school series A, B, C, D and supplementary series.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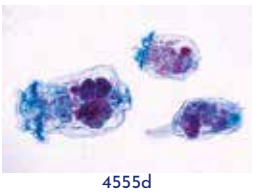
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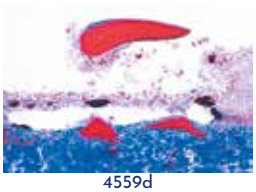
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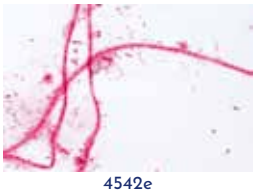
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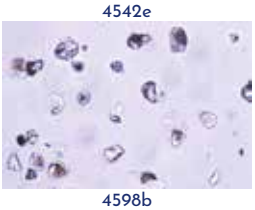
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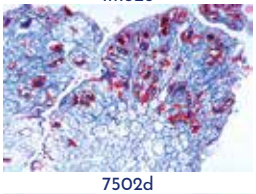
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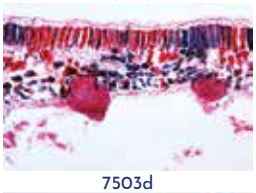
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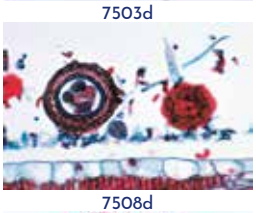
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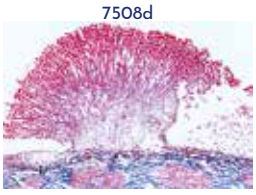
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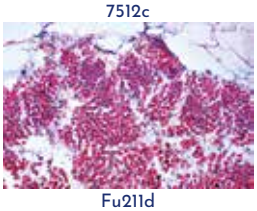
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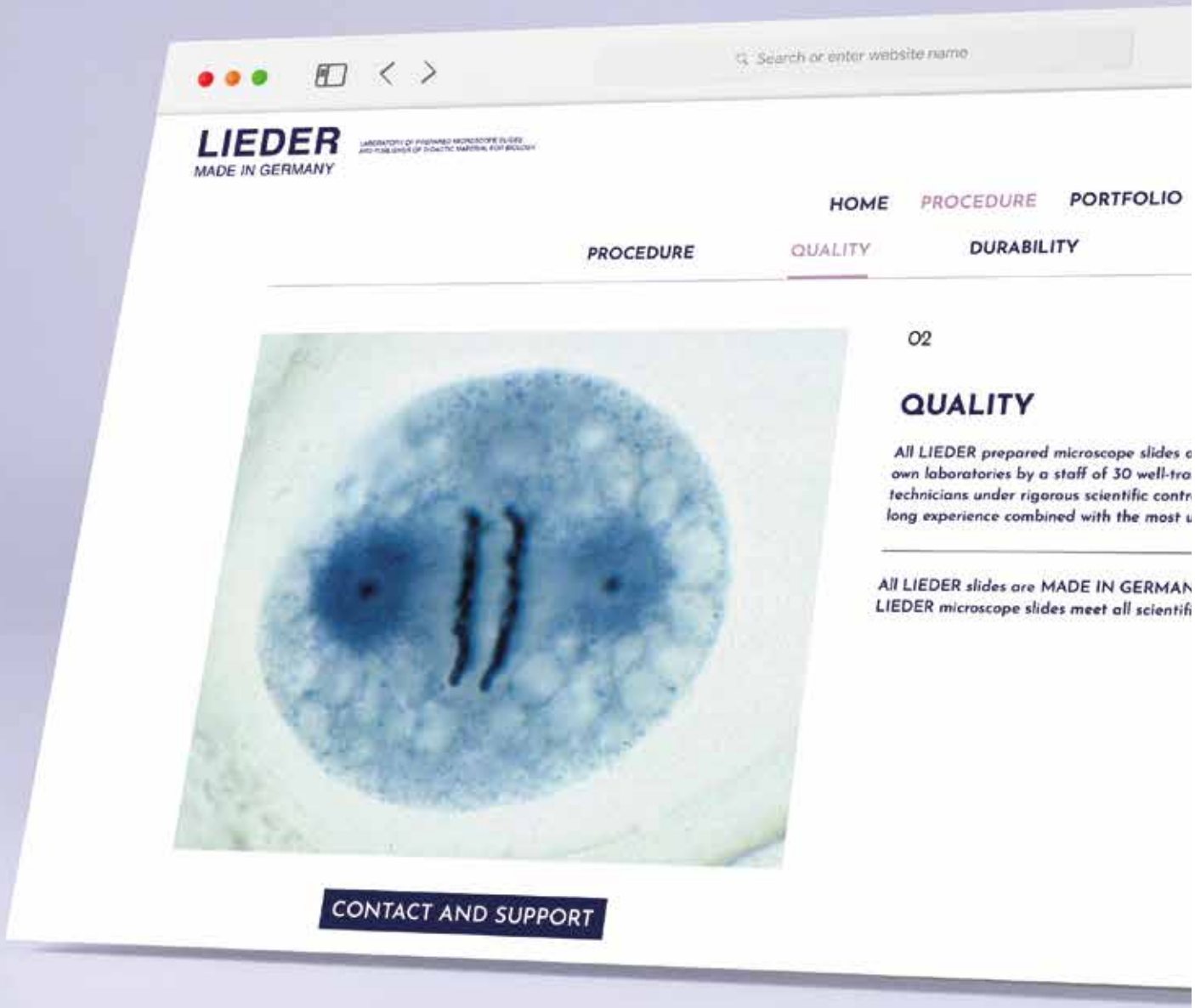

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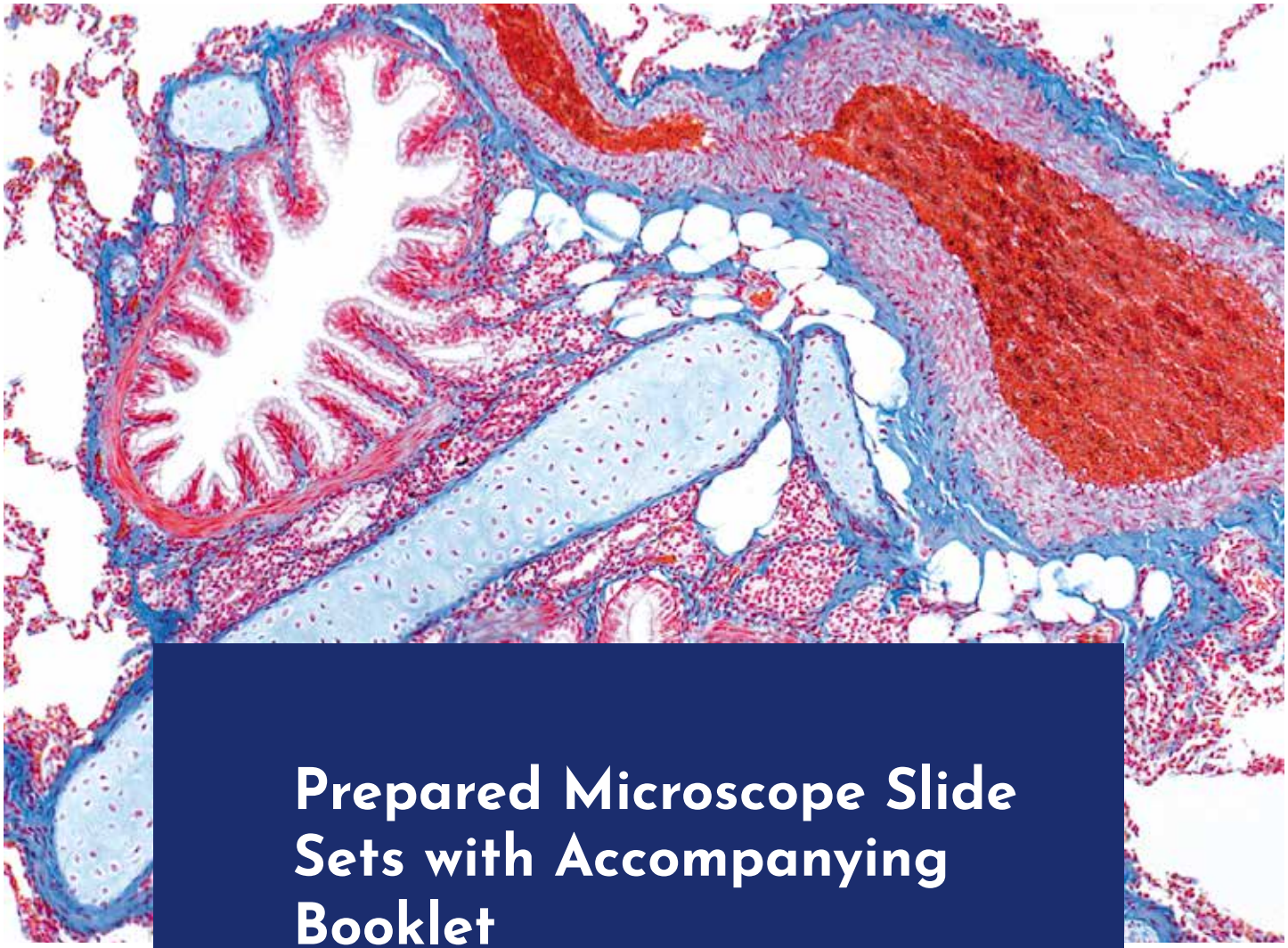
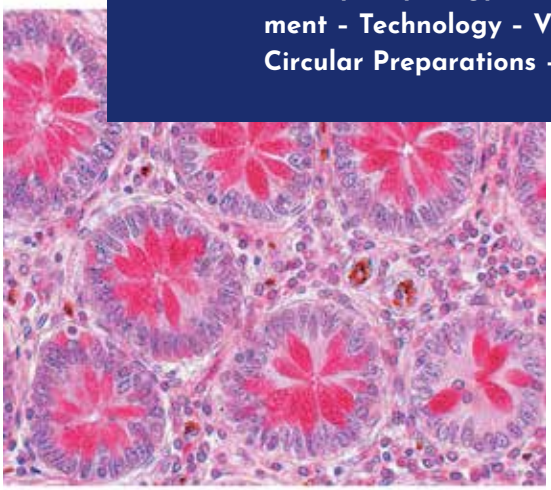


Prepared Microscope Slide Sets with Accompanying Booklet

School Sets for General Biology – Series for Secondary Schools – Histology and Human Science – Zoology – Parasites and Pathogenic Bacteria – Comparative Microscopic Anatomy of Animals – Botany – Cytology – Embryology – Genetics – Ecology and Environment – Technology – Vocational Training – Test Slides, Type Plates, Circular Preparations – Rocks and Minerals, Ground Thins



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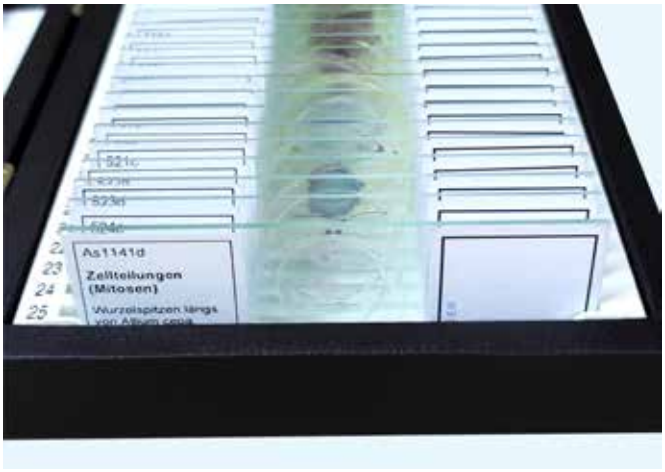


Modern biology lessons in our schools and university studies increasingly require work with the microscope. One of the most important means of illustration and demonstration is the microscopic slides, whose importance for teachers and students cannot be replaced by anything else; it is in the nature of the microscopic slide that it can be examined and analysed at different magnifications to reveal ever new details.

Since the company was founded in 1955, LIEDER has been producing PREMIUM quality microscope slides in our Ludwigsburg laboratories under scientific supervision. They are the result of decades of experience in all areas of preparation technology and are guaranteed 'MADE IN GERMANY'.

Properly fixed and preserved starting material is the prerequisite for flawless preparations. We therefore pay particular attention to these processes. The microtome sections are produced by experienced specialists and the cutting technique and section thickness are adapted to the objects.

From the large number of staining methods commonly used in microscopy, we select those that combine a clear and high-contrast representation of the desired structures with the best durability. This usually involves complex multiple staining.

LIEDER micropreparations are supplied on fine-edged microscope slides in 26 x 76 mm format. The microscope slides are shipped in storage boxes, which are available in various sizes and price ranges.

Further details can be found in our price-list for download on our website www.lieder.com. All micropreparations can be ordered. and all micropreparations can be ordered in closed series as well as individually. We reserve the right to make minor changes within the series and compositions. Some preparations present particular difficulties in terms of the procurement and processing of the starting material and can therefore often only be produced in small quantities or with longer delivery times. This applies in particular to preparations which are marked with an * in the catalogue and for which we must reserve the right to deliver.

New series and collections on geology (best quality thin sections) can be found on page 58. Please ask for special offers for preparations and series not listed in this catalogue.

Minor changes within all offered series and ranges are reserved. We reserve the right to cancel items that are not available at the time of delivery due to material shortages.

Please order additional our storage boxes for your microscope slide sets.

We supply detailed accompanying booklets for all series. The text booklets provide a description of the morphological structures, which makes it much easier to search for and locate relevant parts of the specimen. They also provide information on systematic and physiological relationships and general biological principles and offer suggestions for the interpretation and didactic evaluation of what is seen in the classroom.

Microscopic Slides on CD-ROM. The LIEDER CD programme for interactive lessons provides comprehensive teaching and learning material for use in lessons and for self-study. Each CD deals with a self-contained topic (see description in the 'CD-ROM' section). A new e-learning platform is currently under development.

Index: Prepared Microscope Slide Sets

Prepared Microscope Slide Sets

Our range of micropreparation series has been significantly expanded and reorganized. It is intended to make it easier for interested parties to make a choice when purchasing microscope slides. We offer the following:

School Sets as basic series, they provide an overview of all areas of biology as far as they are of interest to school lessons. They are also part of our "Microscopic Biology Media System".

Comprehensive Sets are bigger and sum up larger fields. Basic and supplementary sets add to each other and treat the same topic.

Detail Sets are usually smaller and treat special subjects in detail, e.g. systems of organs, representative and typical members of important groups of animals and plants, physiological and ecological subjects.

Every prepared microscope slide is unique and individually crafted by our well-trained technicians under rigorous scientific control. We therefore wish to point out that delivered products may differ from the pictures in this catalog due to natural variation of the basic raw materials and applied preparation and staining methods.

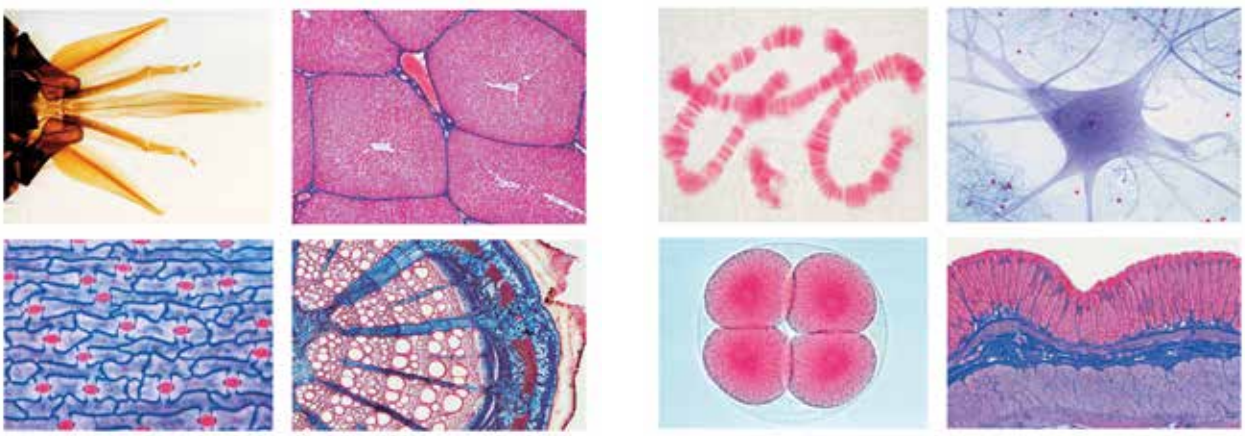
School Sets ABCD (General Biology)

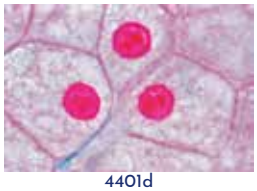
Our school sets A, B, C, and D are arranged to cover in detail all fields of biology. Each microscope slide is carefully selected and checked for its usefulness and value in instruction. Those slides were preferred which are typical of the corresponding group of plants or animals.
All of the four series are arranged in taxonomic order and composed in such a way that one adds to the other and helps to broaden the knowledge attained by teaching the previous one.

The series are also part of our comprehensive Multimedia Program for General Biology. For list of contents and detailed description of the series A, B, C, D please see page 8 – 13 in this catalogue.

No. 500 **School Set A** Elementary Set. 25 microscope slides No. 501e - 525d
No. 600 **School Set B** Supplementary Set to A. 50 microscope slides No. 601D - 650e
No. 700 **School Set C** Supplementary Set to A and B. microscope slides Präparate No. 701f - 750d
No. 750 **School Set D** Supplementary Set to A, B and C. 50 microscope slides No. - 800c
No. 850 **School Set A, B, C und D** All 4 School Sets together - 175 microscope slides (Special price according to price list)

For content and compilation of all school series, see 'Media system microscopic biology' (pages 8–13).

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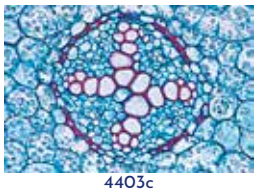
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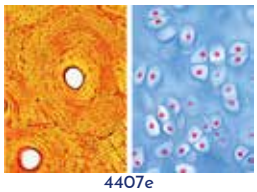
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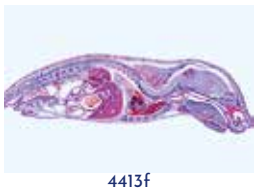
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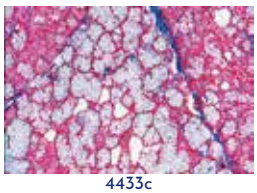
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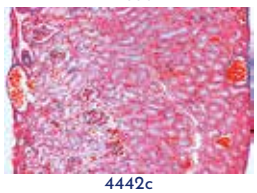
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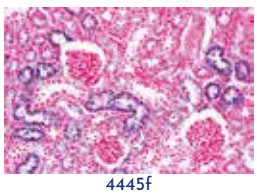
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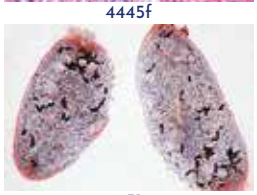
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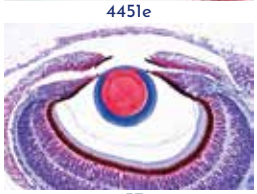
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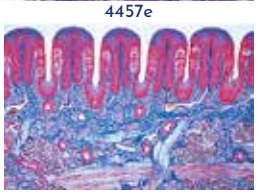
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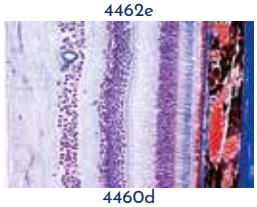

4460d

Series for Secondary Schools

No. 4410 **Set No. I. Cells, Tissues and Organs**
13 Microscope Slides.
With depictured accompanying brochure

4401d Simple animal cells in sec. of salamander liver
4402d Mitosis, l.s. from Allium root tips showing all stages of mitosis
4403c Ranunculus, buttercup, t.s. of a typical dicot root
4404e Monocot and dicot stems, two t.s. for comparison
4405c Syringa, lilac, t.s. of a typical mesophytic dicot leaf
4406c Columnar epithelium, t.s of blind gut from rabbit
4407e Bone and hyaline cartilage, t.s.
4408d Striated muscles of mammal, l.s.
4409d Smooth muscles of mammal, l.s. and t.s.
4410c Lung of cat, t.s.
4411c Human blood smear
4412d Human body skin, l.s.
4413f Young mouse, sag. s. of entire specimen for all structures

No. 4430 **Set No. II. Metabolism**
15 Microscope Slides.
With depictured accompanying brochure

4431e Hydra, fresh water polyp, t.s. with ectoderm and entoderm
4432d Carabus, ground beetle, gizzard
4433c Salivary gland of cat, t.s.
4434c Esophagus of cat, t.s.
4435d Fundic stomach of cat, t.s.
4436c Small intestine of cat, t.s. routine stained
4437f Small intestine of cat, t.s. blood vessels injected
4438d Appendix of human, t.s.
4439c Large intestine of cat, t.s.
4440c Liver of pig, t.s.
4441d Malpighian tubules of insect, t.s.
4442c Primordial kidney (mesonephros) of frog, t.s.
4443c Hind-kidney (metanephros) of rabbit, t.s.
4444d Kidney of mouse with pelvis, l.s.
4445f Kidney of mouse, t.s. injected with trypane blue to demonstrate the storage

No. 4450 **Set No. III. Organs of Sense**
16 Microscope Slides
With depictured accompanying brochure

4451e Paramecium, silvered to show the neuroformative system
4452d Lumbricus, earthworm, t.s. with ventral nerve cord
4453e Insect brain, frontal l.s.
4454e Planaria, sec. through ocelli
4455f Haliotis, marine snail, pinhole camera eye l.s.
4456e Helix, snail, eye l.s. lens, cornea, pigmented and visual cells
4457e Alloteuthis, cuttlefish, camera eye l.s.
4458e Compound eye of insect, l.s.
4459e Young rat, head with eyes t.s. for general study
4460d Retina of cat, t.s. for finer detail of rods and cones
4461h Internal ear (cochlea) from guinea pig, l.s.
4462e Taste buds from tongue of rabbit, t.s.
4463g Peripheral nerve fibres of osmic acid fixed material showing Ranvier's nodes and medullary sheaths
4464c Spinal cord of cat t.s. showing large motor nerve cells
4465c Cerebellum of cat, t.s. routine stained
4466f Cerebrum of cat, t.s. silvered to show the pyramid cells

No. 4470 **Set No. IV. Hormone Organs and Hormonal Functions**
7 Microscope Slides.
With depictured accompanying brochure

4471d Ovary of cat, with follicles and corpus luteum t.s.
4472d Testis of mouse, t.s. showing Leydig's cells
4473d Adrenal (suprarenal) gland of cat, t.s. cortex and medulla
4474d Pancreas of cat, t.s. showing islets of Langerhans,
4475f Thyroid gland showing normal function t.s.
4476f Thyroid gland showing over-activity of the gland t.s.
4477h Hypophysis (pituitary body) sagittal l.s. with adeno- and neurohypophysis

No. 4480 **Set No. V. Genetics, Reproduction and Embryology**
19 Microscope Slides.
With depictured accompanying brochure

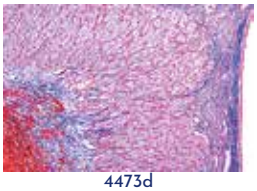
4481g DNA and RNA stained in different colours, l.s. onion root tips
4482e Lilium, young anthers, meiosis, early prophase stage, t.s.
4483e Lilium, young anthers, meiosis, diplotene stage, t.s.
4484d Lilium, ovary with embryosac t.s.
4485d Capsella bursa pastoris, l.s. of embryos
4486h Human chromosomes, spread in the metaphase stage, w.m.
4487g Lamp brush chromosomes
4488e Hydra with testis t.s., sexual reproduction
4489e Hydra with ovaries t.s., sexual reproduction
4490f Tapeworm (Taenia), mature proglottid w.m.
4491f Ascaris embryology, sec. of uteri showing maturation of ova
4492e Cockchafer (Melolontha), ovaries t.s.
4493d Frog (Rana), testis t.s. showing spermatogenesis
4494f Frog (Rana) embryology: four cell stage t.s.
4495g Frog (Rana) embryology: morula stage l.s.
4496g Frog (Rana) embryology: neurula stage t.s.
4497f Chicken (Gallus) embryology: 24 hour t.s.
4498f Chicken (Gallus) embryology: 72 hour t.s.
4499d Mouse, uterus containing embryo t.s.

Histology and Human Science

Comprehensive Sets

No. 2300 **Histology of Vertebrata excluding Mammalia**
Fishes, Amphibians, Reptiles, Birds
25 Microscope Slides.
With depictured accompanying brochure

2301c Cyprinus, carp, liver t.s.
2302c Cyprinus, carp, testis t.s. showing spermatozoa
2303c Cyprinus, carp, small intestine t.s.
2304c Cyprinus, carp, kidney t.s.
2305c Cyprinus, carp, gills t.s.
2306c Cyprinus, carp, skin t.s.
2307f Fish scales, cycloid, ctenoid, and placoid scales w.m.
2308c Salamandra, skin with poison glands t.s.
2309d Salamandra, t.s. through thorax and forelegs of larva
2310c Rana, frog, lung t.s., a simple bag-like lung
2311c Rana, frog, blood smear, with nucleated corpuscles
2312c Rana, frog, stomach t.s.
2313c Rana, frog, large intestine t.s., with goblet cells
2314c Rana, frog, liver t.s. showing bile ducts
2315c Rana, frog, kidney t.s.
2316c Rana, frog, testis t.s. to show spermatogenesis
2317c Rana, frog, skin t.s. showing glands
2318d Lacerta, lizard, skin with scales, sagittal l.s.
2319c Gallus, chicken, blood smear, with nucleate red corpuscles
2320c Gallus, chicken, lung t.s.
2321c Gallus, chicken, glandular stomach t.s.
2322d Gallus, chicken, ovary with developing eggs t.s.
2323d Gallus, chicken, skin with developing feathers t.s. or l.s.
2324c Gallus, chicken, unfeathered skin of foot t.s.
2325c Gallus, chicken, wing and down feathers w.m.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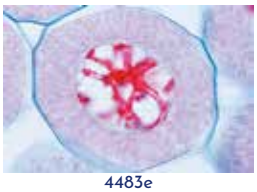
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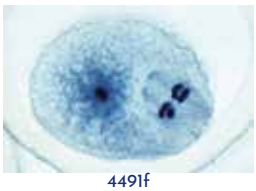
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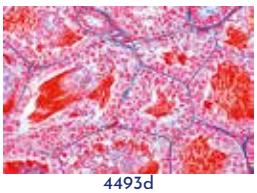
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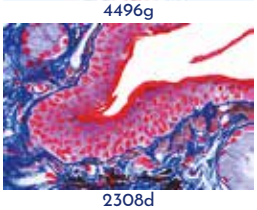
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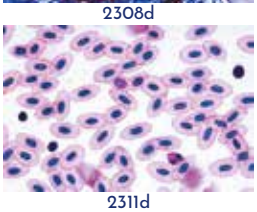
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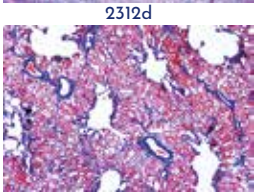
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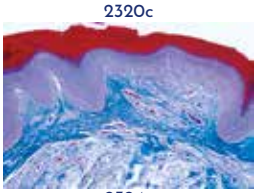
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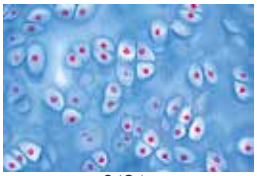
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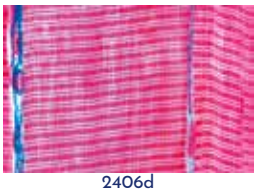
No. 2400 Histology of Mammalia Elementary Set

Tissues, circulatory system, respiratory system, digestive system, urogentinal system, nervous system, organs of sense, skin. – 25 Microscope Slides
With depictured accompanying brochure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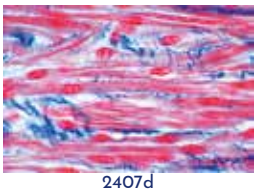
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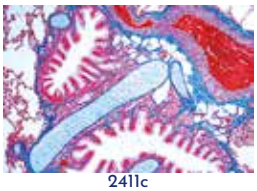
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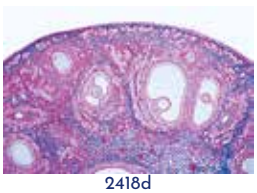
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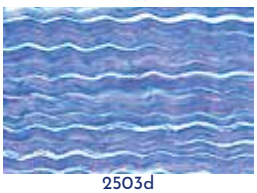
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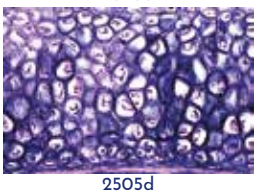
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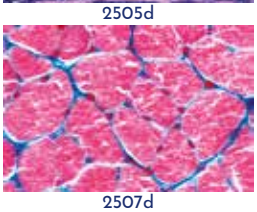
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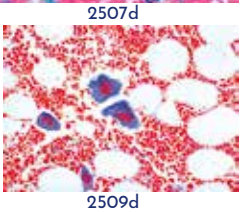

2509d


2510f


2526c

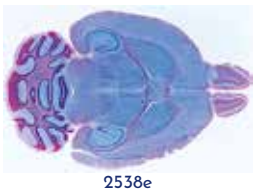
2401c Squamous epithelium from human cheek, isolated cells
2402e Fibrous connective tissue, w.m. from pig mesentery
2403e Adipose tissue of mammal, fat stained
2404c Hyaline cartilage of calf, t.s.
2405e Compact bone of cow, t.s. special stained to show cells and canaliculi
2406d Striated (skeletal) muscles of cat, l.s. stained for striations
2407d Smooth (involuntary) muscles of cat, t.s. and l.s. on one slide
2408c Blood smear, human. Giemsa or Wright stain
2409d Artery of cat or rabbit, t.s.
2410d Vein of cat or rabbit, t.s.
2411c Lung of cat, t.s.
2412c Pancreas of pig with islets of Langerhans t.s.
2413c Tongue of cat, t.s. with cornified papillae
2414d Stomach of cat, fundic region t.s.
2415c Small intestine of cat or rabbit, t.s.
2416d Liver of pig, t.s.
2417d Kidney of cat, t.s. of cortex and medulla showing Malpighian corpuscles
2418d Ovary of rabbit, t.s., showing developing follicles in all stages
2419d Testis of mouse, t.s., showing spermatogenesis, carefully stained
2420d Cerebrum of cat, t.s.
2421d Cerebellum of cat, t.s.
2422c Spinal cord of cat, t.s.
2423g Nerve fibres isolated, special stained to show Ranvier's nodes
2424e Motor nerve cells, smear from spinal cord
2425g Scalp, human, l.s. of hair follicles

No. 2500 Histology of Mammalia, Supplementary Set

Complementary to Set No. 2400
50 Microscope Slides.
With depictured accompanying brochure

2501c Columnar epithelium of mammal
2502c Ciliated epithelium of mammal
2503d White fibrous connecrtive tissue, l.s. of tendon of cow
2504d Mucous tissue, t.s. of navel string
2505d Elastic cartilage of mammal, sec. stained for elastic fibres
2506d Bone development, l.s. of foetal finger showing all stages of development
2507d Striated (skeletal) muscle of cat, t.s. of muscle bundle
2508c Heart (cardiac) muscle of cat, l.s. and t.s.
2509d Red bone marrow of cow, sec. or smear
2510f Heart of mouse, sagittal l.s.
2511d Trachea of rabbit, t.s.
2512c Spleen of cat, t.s.
2513c Lymph gland of cat or rabbit, t.s.
2514d Adrenal (suprarenal) gland of rabbit, t.s.
2515e Epiphysis (pineal body) of cow or pig, t.s.
2516h Hypophysis (pituitary body) of cow or pig, l.s.
2517d Thyroid gland of cow, t.s.
2518d Thymus gland of cow, t.s. with Hassall bodies
2519d Parotid gland of cat or dog, t.s. of a pure serous gland
2520d Tooth, t.s. through root or crown
2521c Esophagus of rabbit, t.s.
2522c Vermiform appendix of rabbit, t.s.
2523c Large intestine (colon) of rabbit, t.s. stained for mucous cells
2524c Gall bladder of rabbit, t.s.
2525f Kidney t.s., vital stained with trypane blue showing storage
2526c Ureter of rabbit, t.s.
2527c Urinary bladder of rabbit, t.s.
2528d Ovary with corpus luteum t.s.
2529c Fallopian tube of pig, t.s.
2530c Uterus of rabbit, t.s.
2531c Placenta of rabbit, t.s.
2532d Uterus of rat, containing embryo t.s.
2533d Vagina of rabbit, t.s.
2534c Epididymis of rabbit, t.s.
2535d Sperm smear of bull
2536d Penis of rabbit, t.s.
2537d Prostate gland of pig, t.s.
2538e Brain of mouse, l.s. of entire organ showing all parts
2539f Cerebellum, t.s. silvered to show the Purkinje cells
2540f Sympathetic ganglion, t.s. with multipolar nerve cells
2541c Peripheral nerve of cat or rabbit, l.s.
2542e Eye of cat, anterior part with cornea, iris, ciliary body, t.s.
2543e Eye of cat, posterior part with retina t.s.
2544h Cochlea (internal ear) of Guinea pig, l.s. shows organ of Corti
2545d Olfactory region of dog or rabbit, t.s.
2546e Taste buds in tongue of rabbit (Papilla foliata), t.s.
2547d Skin of human palm, t.s. showing cornified layers, sweat glands
2548d Scalp, human, section showing t.s. of hair follicles and sebaceous glands
2549d Nail development of embryo, sagittal l.s.
2550c Mammary gland of cow, t.s. showing the active stage


2535d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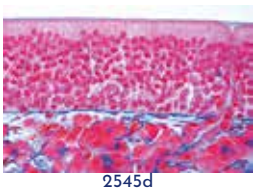
2544h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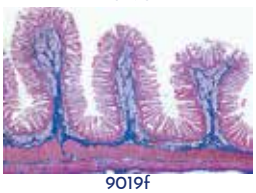
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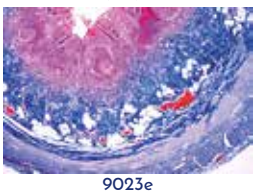
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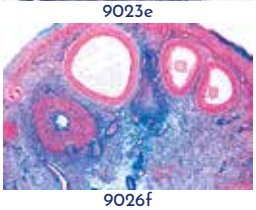
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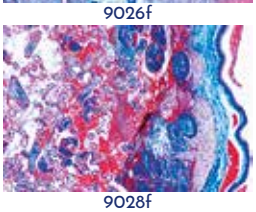
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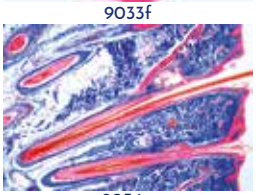
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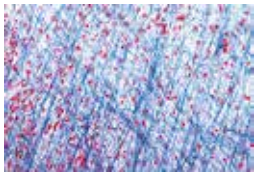
No. 9000 Normal Human Histology Basic Set

40 Microscope Slides.
With depictured accompanying brochure

This collection of 40 specially selected microscope slides shows the most important tissues and organs in humans. The thickness of the microtome sections is normally 6 – 8 µm. The use of special staining methods guarantees a clear, multicoloured representation of all tissue structures. This slide series occupies a special position due both to the quality of the original material and also with regard to the carefulness of the preparation.

9001c Squamous epithelium, human, isolated cells
9002f Areolar connective tissue, human w.m.
9003f Hyaline cartilage, human t.s.
9004f Compact bone, human t.s.
9005f Striated muscle, human l.s.
9006f Heart muscle, human l.s. and t.s.
9007f Artery, human t.s.
9008f Vein, human t.s.
9009f Lung, human t.s.
9010c Blood smear, human
9011f Spleen, human t.s.
9012f Thyroid gland, human t.s.
9013f Thymus gland from human child t.s.
9014f Tongue, human t.s.
9015f Tooth, human l.s.
9016f Parotid, human gland t.s.
9017f Esophagus, human t.s.
9018f Stomach, human, fundic region t.s.
9019f Duodenum, human t.s. (small intestine)
9020f Colon, human t.s. (large intestine)
9021f Pancreas, human t.s.
9022f Liver, human t.s.
9023e Vermiform appendix, human t.s.
9024f Kidney, human t.s.
9025f Adrenal (suprarenal) gland, human t.s.
9026f Ovary, human t.s.
9027f Uterus, human t.s.
9028f Placenta, human t.s.
9029f Testis, human t.s.
9030f Epididymis, human t.s.
9031f Cerebrum, human t.s.
9032f Cerebellum, human t.s.
9033f Spinal cord, human t.s.
9034f Sympathetic ganglion, human t.s.
9035e Skin of palm, human t.s.
9036g Scalp, human, l.s. of hair follicles
9037e Scalp, human, t.s. of hair follicles
9038f Retina, human t.s.
9039e Finger tip from fetus with nail development l.s.
9040f Mammary gland, human t.s.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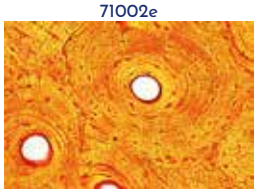
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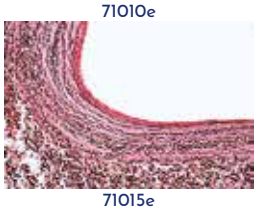
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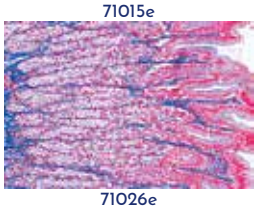
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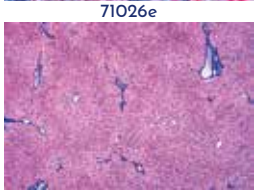
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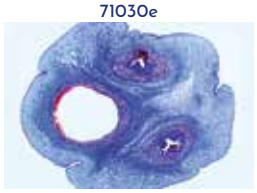
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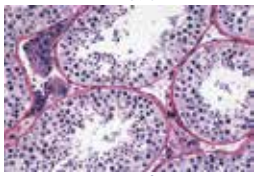
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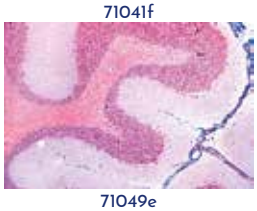
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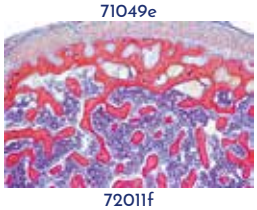

72011f


72011f


72026e

No. 71000 Human Histology, Large Set Part I.

50 Microscope Slides
With depictured accompanying brochure

71001c Isolated squamous epithelium, human
71002e Connective tissue, human, sec.
71003e Columnar epithelium, human gall bladder, t.s.
71004e Ciliated epithelium, human trachea, t.s.
71005e Smooth muscles, human, l.s. and t.s.
71006e Striated muscles, human, l.s.
71007e Heart muscles, human, l.s. and t.s.
71008e Hyaline cartilage, human, sec.
71009g Elastic cartilage of epiglottis, human, t.s.
71010e Bone, compact substance, human, t.s.
71011e White fibrous tissue (tendon), human, l.s.
71012e Red bone marrow, human, t.s.
71013g Scalp, human, l.s. of hair follicles
71014e Artery, human, t.s.
71015e Vein, human, t.s.
71016c Blood smear, human, Giemsa stain
71017e Lung, human, t.s.
71018f Larynx of human foetus, t.s.
71019e Lymph gland, human, t.s.
71020e Thyroid gland, human, t.s.
71021h Pituitary gland, human, t.s.
71022e Spleen, human, t.s.
71023e Tongue, human, t.s.
71024e Oesophagus, human, t.s.
71025e Sublingual gland, human, t.s.
71026e Stomach, pyloric region, human, t.s.
71027e Pancreas, human, t.s.
71028e Small intestine, human, t.s.
71029e Large intestine, human, t.s.
71030e Liver, human, t.s.
71031e Kidney, human, t.s.
71032f Adrenal gland, human, t.s.
71033e Ureter, human, t.s.
71034e Urinary bladder, human, t.s.
71035f Ovary, human, t.s.
71036e Uterus, human, t.s.
71037e Uterine tube, human, t.s.
71038e Placenta, human, t.s.
71039e Umbilical cord, human, t.s.
71040e Mammary gland, human, sec.
71041f Testis, human, t.s.
71042e Epididymis, human, t.s.
71043f Olfactory epithelium, human, t.s.
71044f Retina, human, t.s.
71045g Internal ear, human foetal, t.s.
71046f Touch corpuscles in human skin, t.s.
71047e Nerve, human, l.s.
71048e Spinal cord, human, t.s.
71049e Cerebellum, human, t.s.
71050e Cerebrum, cortex, human, t.s.

No. 72000 Human Histology, Large Set Part II.

50 Microscope Slide
With depictured accompanying brochure

72001e Soft palate, human t.s.
72002e Adipose tissue, human, sec. stained for fat
72003f White fibrous cartilage, human intervertebral disc, sec.
72004e Striated (skeletal) muscle, human t.s.
72005e Spongy (cancellous) bone, human t.s.
72006e Bone development (intermembranous), vertical l.s. of foetal skull-cap (cranial bone)
72007e Bone development (intracartilaginous), l.s. of foetal finger
72008e Joint of human foetus, l.s.
72009e Tooth, human, t.s. of crown
72010f Tooth, human, complete l.s.
72011f Tooth development from human foetus, medium stage l.s.
72012e Aorta, human, t.s. routine stained
72013e Trachea from human fetus t.s.
72014f Thymus from human child, t.s.
72015g Parathyroid gland (Gl. parathyreoidea), human t.s.
72016e Tonsil (Tonsilla palatina), human t.s.
72017e Parotid gland (Gl. parotis), human t.s.
72018e Submaxillary gland (Gl. submandibularis), human t.s.
72019e Stomach, fundic region, human t.s.
72020e Stomach, cardiac region, human t.s.
72021e Jejunum, human t.s.
72022f Small intestine (Duodenum) t.s. colouring of goblet cells, PAS-HE
72023e Vermiform appendix, human t.s.
72024e Rectum, human t.s.
72025e Gall bladder, human t.s.
72026e Liver of human foetus sec., developing blood cells
72027e Urethra, human, t.s.
72028e Seminal vesicle (Gl. vesiculosa), human t.s.
72029e Spermatic cord (Ductus deferens), human t.s.
72030e Prostate, human, t.s.
72031e Sperm smear, human
72032f Corpus luteum in t.s. of human ovary
72033e Vagina, human t.s.
72034g Cerebral cortex, human, t.s. silvered
72035g Cerebral cortex, human, t.s. stained for neuroglial cells after Held
72036g Cerebellum, human, t.s. silvered
72037f Thalamus, human, stained after Klüver - Barrera
72038f Medulla oblongata, human, t.s. routine stained
72039g Spinal cord, human, t.s. silvered
72040f Sympathetic ganglion, human t.s. routine stained
72041e Peripheral nerve, human t.s.
72042e Optic nerve, human t.s.
72043e Cornea from eye, human t.s.
72044e Eyelid, human, t.s.
72045e Skin from finger tip, human, vertical l.s.
72046d Scalp, human, horizontal l.s. shows t.s. of hair follicles,
72047e Nail development, sagittal l.s. finger tip of human foetus
72048i Human chromosomes in smear from culture of blood, male
72049i Human chromosomes in smear from culture of blood, female
72050f Barr bodies (human sex chromatin) in smear from female squamous epithelium *

No. 79500 Normal Human Histology, Special Complete Set of 100 slides.

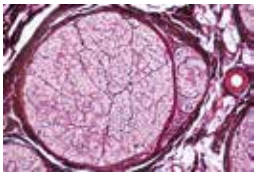
(Staining technology mostly with Hematoxylin-Eosin) With depictured accompanying brochure

Tissues

Ho111c Squamous epithelium, isolated cells from human mouth, smear
Ho1224e Stratified, non-cornified squamous epithelium, section of oesophagus
Ho114e Simple columnar epithelium, in sec. of secreting tubules of human kidney
Ho116e Simple ciliated columnar epithelium, in t.s. of oviduct
Ho118e Simple cuboidal epithelium, in sec. of human thyroid gland
Ho120e Transitional epithelium, in sec. of human bladder
Ho1202e Glandular epithelium, in sec. of human colon with unicellular mucous glands
Ho121e Areolar connective tissue, human w.m.
Ho126d Embryonic connective tissue from human foetus, sec.
Ho128e Adipose tissue, human, sec. fat removed to show the cells
Ho130e Hyaline cartilage, human t.s.
Ho131e Yellow elastic cartilage, human, sec. stained for elastic fibres
Ho135e Compact bone, human t.s.
Ho136e Compact bone, human l.s.
Ho138e Bone development (intracartilaginous), l.s. of foetal finger
Ho139e Bone development (intermembranous), vertical l.s. of foetal skull-cap (cranial bone)
Ho151e Striated (skeletal) muscle, human l.s.
Ho152e Striated (skeletal) muscle, human t.s.
Ho154e Smooth (involuntary) muscle, human l.s. and t.s.
Ho156e Heart (cardiac) muscle, human l.s. and t.s.

Respiratory and circulatory systems

Ho172e Artery, human, t.s. stained for elastic fibres
Ho174e Vein, human, t.s. stained for elastic fibres
Ho176e Aorta, human, t.s. routine stained
Ho1802c Blood smear, human, Wright's stain
Ho214f Trachea, human t.s.
Ho215f Trachea, human l.s.
Ho2152e Trachea from human fetus t.s.
Ho216e Lung, human, sec. routine stained
Ho219e Lung from human foetus, sec.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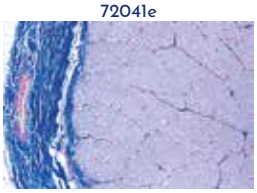
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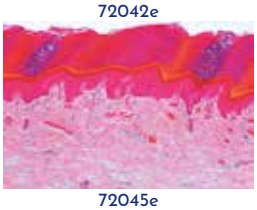
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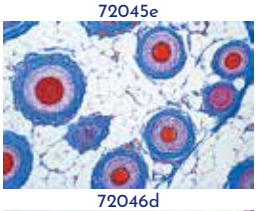
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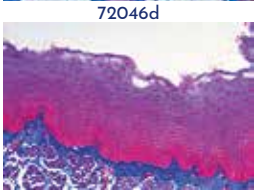
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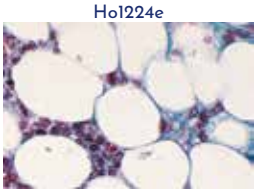
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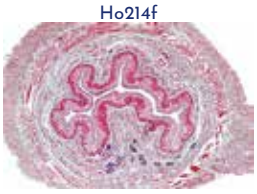
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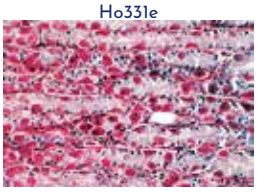
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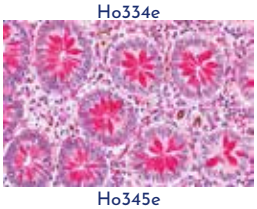
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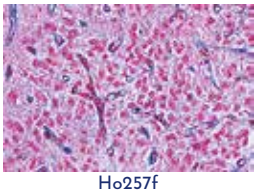
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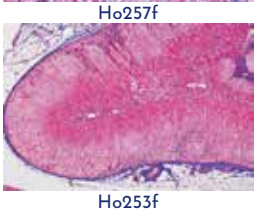
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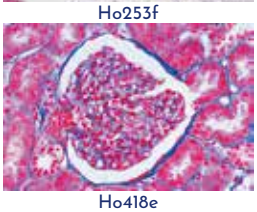
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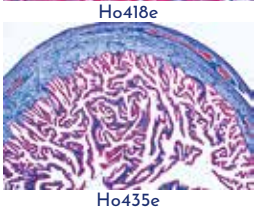
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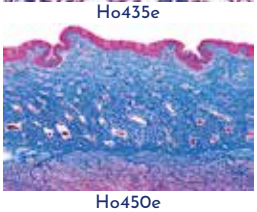
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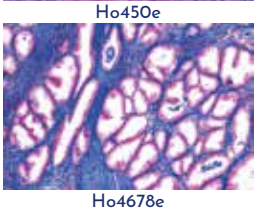
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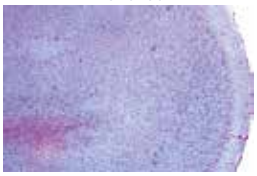
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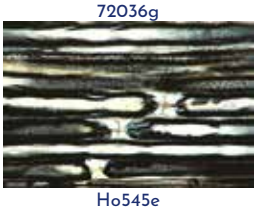
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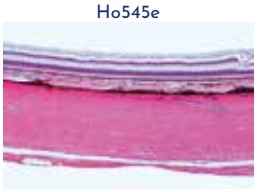
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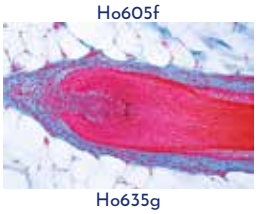
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Lymphatic system

Ho231e Lymphnode, human t.s.
Ho233e Tonsil (Tonsilla palatina), human t.s.
Ho234e Spleen, human t.s.
Ho236e Bone marrow, human t.s.
Ho238f Thymus from human child, t.s.

Endocrine glands

Ho252e Thyroid gland (Gl. thyreoidea), human t.s.
Ho253f Adrenal gland (Gl. suprarenalis), human t.s.
Ho255h Pituitary gland (Hypophysis), human t.s.

Digestive system

Ho310f Lip, human vertical l.s.
Ho311e Tooth, human, t.s. of crown
Ho313f Tooth, human, l.s. of entire specimen
Ho3234f Tongue, human, sec. with filiform papillae
Ho3235f Tongue, human, sec. with fungiform papillae
Ho326e Soft palate, human t.s.
Ho331e Oesophagus, human t.s.
Ho334e Stomach, fundic region, human t.s.
Ho337f Duodenum, human t.s.
Ho338e Jejunum, human t.s.
Ho339e Ileum, human t.s.
Ho341e Vermiform appendix, human t.s.
Ho345e Colon, human t.s.
Ho347e Rectum, human t.s.
Ho351g Parotid gland (Gl. parotis), human t.s.
Ho352g Submaxillary gland (Gl. submandibularis), human t.s.
Ho354e Pancreas, human t.s.
Ho357e Liver, human t.s.
Ho362e Gall bladder, human t.s.

Excretory system

Ho411e Kidney, human t.s.
Ho418e Renal papilla, human t.s.
Ho419e Kidney from human foetus, t.s.
Ho421e Ureter, human t.s.
Ho422e Urinary bladder, human t.s.
Ho423e Urethra, prostatic part, human t.s.

Reproductive system

Ho429f Ovary, mature, human t.s.
Ho434f Ovary with Corpus luteum, human t.s.
Ho435e Oviduct (fallopian tube), t.s. in region of ampulla
Ho437f Uterus, human, proliferative stage t.s.
Ho4395f Uterus, human, pregnant (gravid), t.s.
Ho440e Placenta, human t.s.
Ho4404e Umbilical cord (navel string), human t.s.
Ho450e Vagina, human t.s.
Ho460f Testis from human child, t.s.
Ho461f Testis from human adult, mature stage t.s.
Ho463e Epididymis, human t.s.
Ho464e Sperm smear, human
Ho466e Spermatic cord (Ductus deferens), human t.s.
Ho467e Seminal vesicle (Gl. vesiculosa), human t.s.
Ho4678h Prostata of young man, t.s.

Nervous system and organs of sense

Ho511e Cerebral cortex, human, t.s. routine stained
Ho514e Cerebellum, human, t.s. routine stained
Ho5155e Cerebellum from human foetus, t.s. routine stained
Ho516g Cerebrum and cerebellum composite slide, human, t.s. routine stained
Ho525g Medulla oblongata, human, t.s. routine stained
Ho5254f Medulla oblongata from human foetus, t.s.
Ho531e Spinal cord, human t.s. of cervical region
Ho532e Spinal cord, human t.s. of thoracic region
Ho533e Spinal cord, human t.s. of lumbar region
Ho5335f Spinal cord, human l.s. routine stained
Ho543f Spinal ganglion, human t.s.
Ho544e Peripheral nerve, human t.s.
Ho545e Peripheral nerve, human l.s.
Ho549e Optic nerve, human t.s.
Ho605f Retina from eye, t.s.
Ho612f Olfactory epithelium, human t.s.

Integument (skin)

Ho633e Skin from palm, human, vertical l.s.
Ho6334d Body skin, white, vertical l.s.
Ho635g Scalp, vertical l.s. shows l.s. of hair follicles, human
Ho636d Scalp, horizontal l.s. shows t.s. of hair follicles, human
Ho637e Scalp of human foetus, vertical l.s. shows l.s. of hairs
Ho638e Finger tip of human foetus, sagittal l.s. showing nail development
Ho645f Mammary gland, active, human t.s.

No. 9200 Human Pathology, Basic Set 50 Microscope Slides

With depictured accompanying brochure

Abnormal alterations of cells and tissues

9201e Parenchymatous and fatty degeneration of liver
9202e Hemosiderosis of liver
9203e Glycogenosis of kidney
9204e Pigmentary cirrhosis of liver
9205e Necrotic esophagitis
9206e Foreign body granulome with hemosiderin and giant cells
9207e Tonsillitis
9208t Liver cirrhosis

Injury of circulatory organs and blood-forming organs

9209e Adiposis of heart
9210e Cardiac callosity
9211e Myocarditis chronica acute recidivans
9212e Organized venous thrombosis of muscle
9213t Infarct of spleen
9214e Chronic myeloid leukemia of spleen
9215g Malarial melanemia of spleen

Pathologic alterations of lung and liver, tuberculosis, pneumonia

9216e Anthracosis of lung
9217t Hemorrhagic infarct of lung
9218e Influenzal pneumonia
9219e Croupous pneumonia
9220e Chronic pneumonia
9221e Necrotic (cheesy) pneumonia
9222e Miliary tuberculosis of lung
9223e Chronic tuberculous pulmonary cavity with bacteria
9224e Icterus hepatis

Reaction of kidney after arteriosclerosis, disturbance of metabolism, and inflammation; colitis

9225e Glomerular atrophy of kidney
9226e Amyloid degeneration of kidney
9227e Acute hemorrhagic nephritis
9228e Chronic glomerulonephritis
9229e Septic embolic nephritis
9230e Colitis dysenterica Shiga-Kruse

Specific inflammations after infection with syphilis spirochaetes

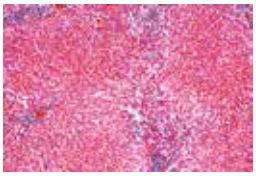
9231g Congenital syphilis of liver, spirochaetes silvered after Levaditi
9232f Congenital syphilis of liver (feuerstein liver), routine stained
9233f Gumma of testicle

Progressive alteration of injured tissues and organs (Hypertrophy and hyperplasia)

9234e Atheroma of head
9235e Goiter of thyroid gland (Struma colloides)
9236f Undescended testicle showing hyperplasia of Leydig's cells
9237e Hypertrophy of prostate
9238f Giant cell sarcoma of maxilla

Benignant and malignant tumors

9239e Chondroma of pubic bone
9240e Myoma of uterus
9241e Fibroadenoma of breast
9242e Fibroepithelial mixed tumor of parotid gland
9243e Melanosarcoma of skin
9244e Spindle cell sarcoma
9245e Carcinoma cervicis uteri
9246e Sarcoma of testicle
9247e Cystadenoma papilliferum of ovary
9248e Gelatinous carcinoma of rectum
9249e Lymphosarcoma mediastini
9250e Metastatic carcinoma of liver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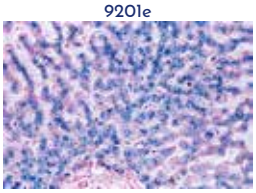
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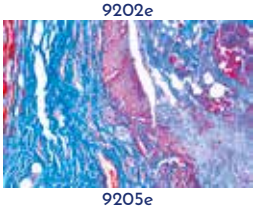
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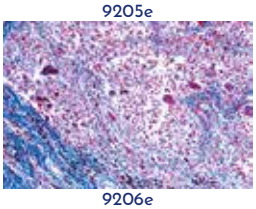
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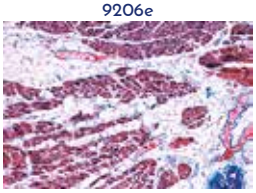
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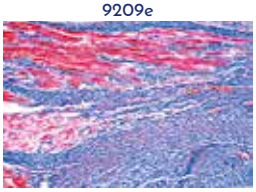
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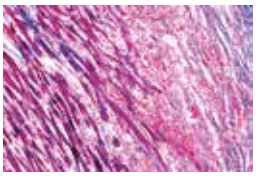
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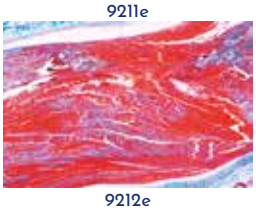
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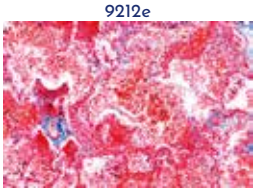
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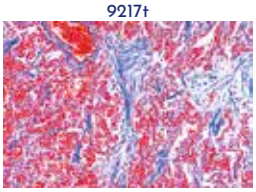
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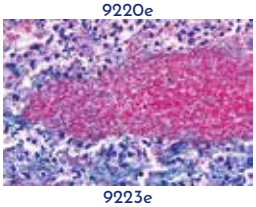
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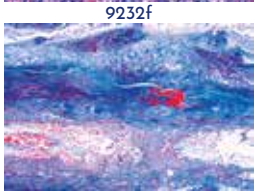
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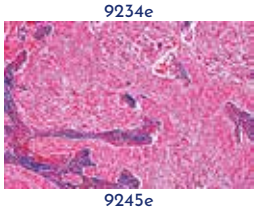
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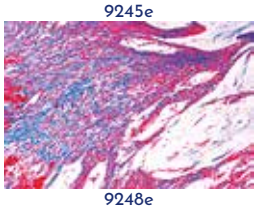
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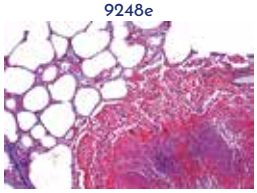
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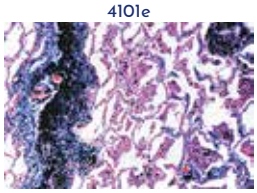
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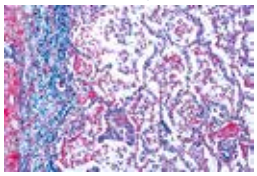
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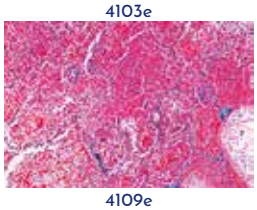
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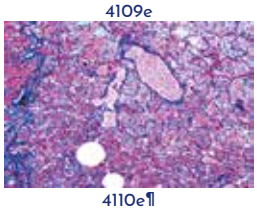
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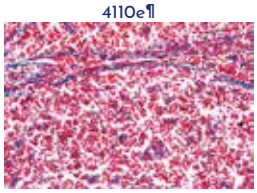
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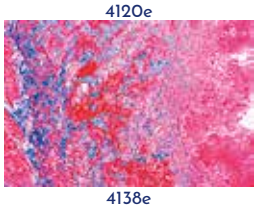

4138e

4100N **Human Pathology, Part I**
40 Microscope Slides
With depictured accompanying brochure

4101e Miliary tuberculosis of lung
4102e Anthracosis of lung
4103e Croupous pneumonia
4105e Cyanotic induration of lung
4106e Chronic pneumonia
4107e Chronic pulmonary emphysema
4109e Necrotic (cheesy) pneumonia
4110e Influenzal pneumonia
4111e Myeloid sarcoma of spleen
4113g Malaria melanemia of spleen
4114e Myocarditis chronica acute recidivans
4115e Amyloid degeneration of spleen
4116e Adiposis of heart
4118e Cardiac callosity
4119e Cor villosum
4120e Lymphosarcoma mediastini
4122e Myxoma mandibulae
4123e Erysipelas of spleen
4124e Tuberculosis of lymph glands
4125e Scirrhous carcinoma of thyroid gland
4127e Fibroepithelial mixed tumor of parotid gland
4128e Carcinoma medullare glandulae
4129e Struma colloides
4130e Miliary tuberculosis of liver
4133e Parenchymatous and fatty degeneration of liver
4134e Pigmentary cirrhosis of liver
4135e Hemosiderosis of liver
4137e Adenocarcinoma of colon
4138e Colitis dysenterica Shiga-Kruse
4139f Cirrhosis hepatis luetica
4140e Carcinoma of liver, primary
4141e Cyanotic atrophy of liver (nutmeg liver)
4142e Hemorrhagic necrosis of liver (eclampsia)
4143e Amyloid degeneration of liver
4144e Brown atrophy of liver
4145e Lymphatic leukemia of liver
4146e Icterus hepatis
4147e Necrotic oesophagitis
4148e Parenchymatous degeneration of liver
4149e Cavernous hemangioma of liver

No. 4200N **Human Pathology, Part II**
40 Microscope Slides
With depictured accompanying brochure

4201e Liver metastasis from a melanosarcoma rectis
4202e Malignant tumor of gall bladder
4204e Myoma of uterus
4205e Cardiac kidney
4206e Chronic glomerulonephritis
4207e Amyloid degeneration of kidney
4209e Carcinoma cervicis uteri
4210e Septic embolic nephritis
4211e Cystadenoma papilliferum of ovary
4212e Papilloma of uterine fundus
4213e Tuberculosis of kidney
4214f Undescended testicle with hyperplasia of Leydig's cells
4215e Perenchymatous degeneration of kidney
4216t Acute nephritis
4217e Acute hemorrhagic nephritis
4218e Glycogenosis of kidney
4219e Glomerularatrophy of kidney
4220e Adenoma of ovary
4221e Hypernephroma of kidney
4222e Malignant ovarian tumor
4223e Sarcoma of testicle
4224e Ovarian cysts
4225e Hypertrophy of the prostate
4226e Fibromyoma uteri
4227e Glioma cerebri
4229t Organized venous thrombosis of muscle
4232e Fibroadenoma of breast
4233e Spindle cell sarcoma
4234e Scirrhous carcinoma of breast
4235e Chondroma of pubic bone
4236f Giant cell sarcoma of maxilla
4237e Fibroadenoma intracanaliculare of mamma
4238e Melanosarcoma of skin
4239e Sarcoma of thigh
4240e Fibroma of skin
4242e Myxofibroma of abdominal wall
4244e Zenker's degeneration of M. rectus abdominis (influenza)
4246e Cicatricial tissue
4247e Carcinoma solidum simplex of breast
4248e Fat embolism after fracture of the leg
4250t Abscessus lumbalis

No. 71100 **Human Pathology, Supplementary Set**
Complementary to 4100 and 4200 – 41 Microscope Slides
With depictured accompanying brochure

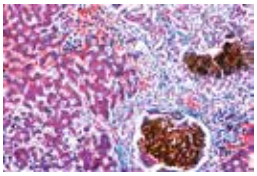
71101e Tuberculosis of lung
71102e Tuberculous coal lung
71103e Carcinoma of lung
71104e Carcinoma of large intestine
71105e Carcinoma of stomach
71106e Carcinoma of squamous epithelium, skin
71107e Carcinoma of mammary gland
71108t Nephritis, sec. of kidney
71109e Adenoma of adrenal gland
71110e Arteriosclerosis
71111t Meningitis
71112i Leukaemia, blood smear
71113i Anaemia, blood smear
71114e Adrenal adenoma
71115e Struma nodosa of thyroid gland
71116e Inflammation of appendix
71117e Tonsillitis, sec. of palatine tonsil
71118e Ovary, cyst
71119t Ovary, teratoma, sec.
71120e Uterus, myom, sec.
71121e Tuberculosis, liver, sec.
71122e Liver, fatty degeneration, sec.
71123e Liver, carcinoma, sec.
71124e Peritoneal metastasis of hepatoma, sec.
71125g Syphilis of kidney
71126e Cirrhosis of kidney
71127e Tuberculosis of kidney
71128e Icterus (jaundice), sec. of kidney
71129e Bleeding of kidney
71130e Pneumonia, sec. of lung
71131e Papilloma of urinary bladder
71132f Diphtheria, sec. of trachea
71133e Hypertrophy of prostate
71134e Thickening of intestine
71135f Bleeding of intestine caused by sublimate
71136e Fibroadenoma of mammary gland
71137e Icterus (jaundice) of testis
71138e Atrophy of testis
71139f Inhibition of spermatogenesis, testis (caused by hormone disorder)
71140e Carcinoma of praeputium
71141e Inflammation of gall bladder

Histology and Human Science

Detail Sets I

No. 70100 **Tissues, connective tissues, system of movement, skin**
15 Microscope Slides
With depictured accompanying brochure

70101c Squamous epithelium, scrapings from human mouth, w.m.
70103e Columnar epithelium, human gall bladder, t.s.
70104e Ciliated epithelium, human trachea, t.s.
70115d Skin, human, from general body surface showing sweat glands
70116h Human scalp, longitudinal section of hair
70122d Developing of nail, human embryo, l.s.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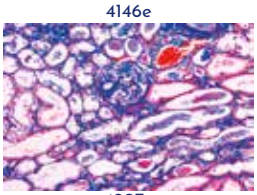
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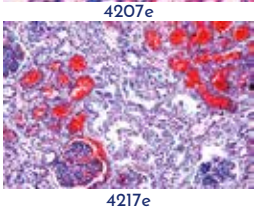
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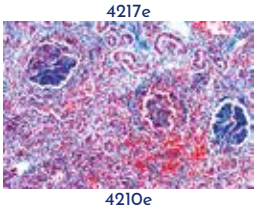
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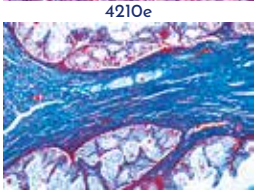
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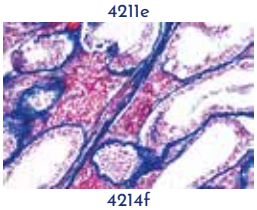
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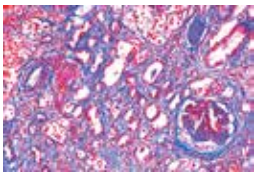
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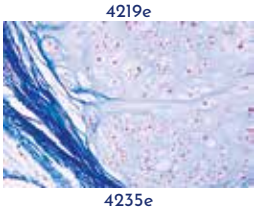
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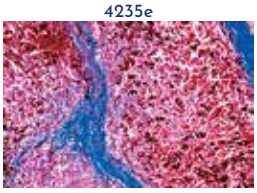
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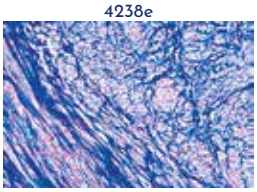
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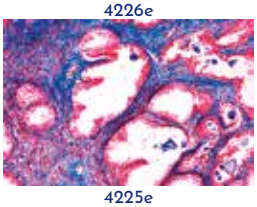
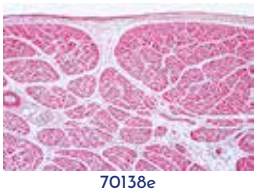

4225e


70128e

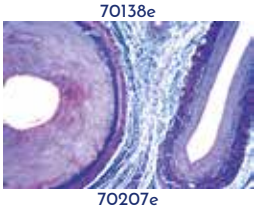
70123e Hyaline cartilage, human, t.s.
70125d Elastic cartilage, ear of pig, t.s.
70128e Developing cartilaginous bone, joint of human foetus, l.s.
70130e Compact bone, c.s. and l.s.
70136f Striated muscle, human, l.s., staining of striations
70138e Striated muscle, human, t.s.
70139e Smooth muscle, human, t.s. and l.s.
70141e White fibrous tissue, human tendon, l.s.
70144e Adipose tissue, human, t.s.


70130e

No. 70200 **Respiratory and Circulatory System**
10 Microscope Slides
With depictured accompanying brochure


70138e

70201d Trachea, cat, t.s. showing cartilage, ciliated epithelium
70202e Lung, human t.s. showing alveoli, blood vessels and pleura
70204c Blood, human, Giemsa or Wright stained smear
70205e Artery, human, t.s., elastica stained
70206e Vein, human, t.s., elastica stained
70207e Artery and vein of smaller size, human, t.s., routine stained
70208e Aorta, human, t.s.
70210e Heart muscle, human t.s. and l.s., striations, intercalated discs
70222e Lymph gland, human, t.s.
70230e Red bone marrow, human rib, t.s. Giemsa stained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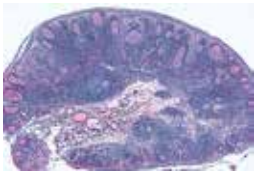
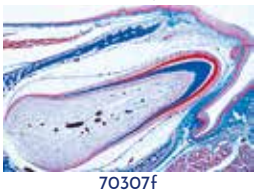
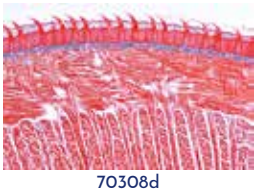

70222e

70300 **Digestive System**
11 Microscope Slides
With depictured accompanying brochure


70307f

70301e Lip, human foetus, t.s.
70307f Tooth, developing, human foetus, l.s.
70308d Tongue, cat, t.s. showing cornified papilla and muscular layers
70311e Sublingual gland, human, t.s.showing a pure mucous gland
70317d Oesophagus of rabbit, t.s.
70322e Stomach, human, pyloric region, t.s.routine stained
70334e Small intestine of cat, t.s. stained for goblet cells (PAS-HE)
70338e Appendix, human, t.s. showing the lymphatic tissue
70339e Colon (large intestine), human, t.s. stained for mucous glands
70344e Pancreas, human, t.s. showing islets of Langerhans
70347e Liver, human, t.s.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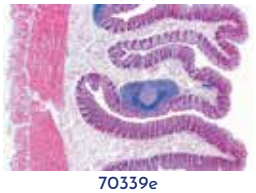
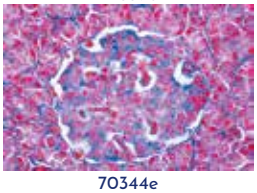

70339e

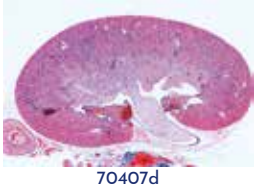
No. 70400 **Urinary system**
10 Microscope Slides
With depictured accompanying brochure


70344e

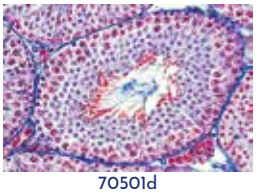
70401d Kidney, cat, t.s. showing cortex and medulla with glomeruli
70402f Kidney, pig, t.s. showing injected vessels
70403e Kidney, human, t.s. showing cortex and medulla with glomeruli
70406c Kidney, rat, t.s. of the whole organ
70407d Kidney, rat, l.s. of the whole organ
70408f Kidney of mouse, t.s. vital stained with trypane blue to demonstrate storage
70411e Ureter, human, t.s.
70412c Urinary bladder, cat, t.s.
70414e Urethra, human, t.s.
70415d Penis, rabbit, t.s.


70401d

No. 70500 **Genital system**
14 Microscope Slides
With depictured accompanying brochure

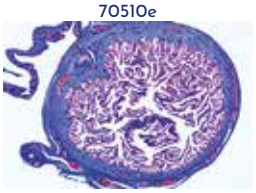

70407d

70501d Testis of rabbit, t.s. showing all stages of spermatogenesis
70507c Epididymis, rat, t.s.
70510e Spermatozoa, human, smear
70511e Vas deferens, human, t.s.
70513c Prostate of rat or cat, t.s.
70517d Ovary of cat or rabbit, t.s. to show alll stages of egg development, quadruple stained
70524c Fallopian tube (uterine tube), rabbit, t.s. with mucous folds and ciliary epithelium
70528d Uterus, rabbit, t.s.
70531d Uterus with embryo, rat, t.s.
70537c Vagina, rabbit, t.s.
70539d Mammary gland, cow, t.s. active stage
70543e Placenta, human, t.s.
70545e Umbilical cord, human, t.s.
70546f Mouse embryo, l.s.of entire young mouse showing all organs

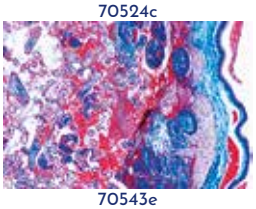

70501d


70510e

No. 70600 **Endocrine System**
6 Microscope Slides
With depictured accompanying brochure


70524c

70602h Pituitary gland (hypophysis), human or mammal, t.s.
70604d Pineal gland (epiphysis), sheep or other mammal, l.s.
70606d Thyroid gland, sheep, t.s. showing glandular lobules and colloid
70609d Pancreas with islets of Langerhans, cat, t.s.
70611d Adrenal gland, cat, t.s.
70615d Corpus luteum in ovary of pig, t.s.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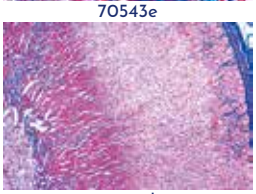
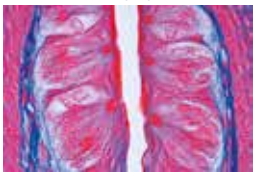
No. 70700 **Sensory Organs**
10 Microscope Slides
With depictured accompanying brochure


70611d

70701e Tongue, rabbit, t.s., of papilla foliata with taste buds
70704f Touch corpuscles in human skin, t.s.
70707d Olfactory epithelium, dog, t.s.
70711g External and internal ear with eardrum and cochlea, l.s.
70713f Eye, retina, human, t.s.
70715e Eye, optic nerve, human, t.s.
70717e Eye of mammal, t.s. through cornea, iris and ciliary body
70718f Eye, cornea of cow, t.s.
70720c Eyelid, cat, t.s. showing Meibomian gland
70722f Eye, posterior part with entrance of optic nerve in the retina, t.s.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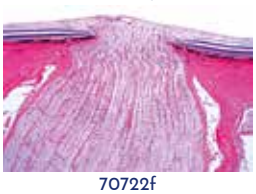
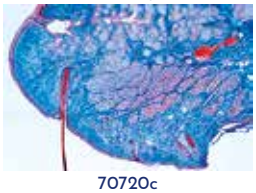
No. 70800 **Nervous System**
11 Microscope Slides
With depictured accompanying brochure


70722f

70801e Cerebrum, human, t.s. of cortex, routine stained
70803e Cerebellum, human, t.s. routine stained
70805f Cerebellum, human, t.s., Weigert stained for medullary sheaths
70812e Spinal cord, human, t.s. routine stained for general structure
70817e Nerve, human, l.s.
70818e Nerve, human, t.s.
70825f Spinal cord, cat, t.s., stained after Klüver-Barrera
70826e Spinal cord, cow, t.s., special stained for Nisslbodies
70829f Cerebrum, cat, t.s., silveredd to show the Purkinje cells
70833e Brain of rat, median sagittal section, routine stained
70834d Vertebra with spinal cord, rat, t.s.


70717e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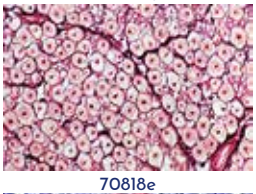
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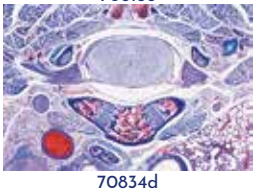
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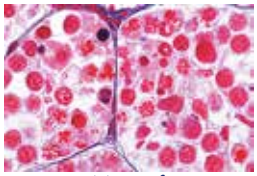
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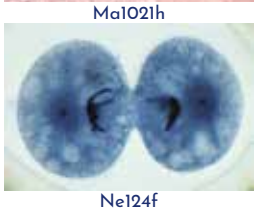
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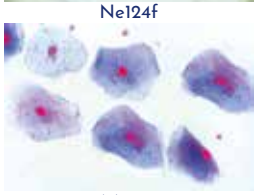
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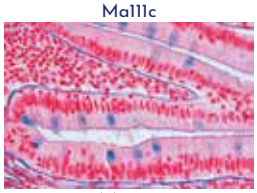
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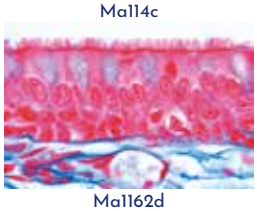
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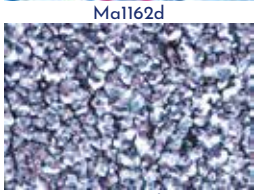
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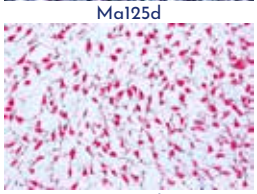

Ma126d


Ma127d


Ma1365d

Histology and Human Science

Detail Sets II

No. 72100 Histology: Cell Structure and cell division (Cytology)

10 microscope slides
With depictured accompanying brochure

Ma101d Simple animal cells in sec. of salamander liver showing nuclei, cell membranes and cytoplasm. For general study of the animal cell
Ma102f Mitotic stages in sec. through red bone marrow of mammal
Ma1033f Meiotic (maturation) stages in sec. through testis of salamander, selected material showing large structures *
Ma104i Human chromosomes in smear from culture of blood, male or female
Ma105f Mitochondria in thin sec. of kidney or liver, specially prepared and stained
Ma1058e Pigment cells in skin
Ma1061t Storage of glycogen in liver cells, sec. stained with carmine after Best or PAS reaction
Ma1021h Mitotic stages in sec. of whitefish blastula showing spindles *
Ne122f Ascaris megalocephala embryology. Sec. of uteri showing maturation stages (meiosis). Polar bodies can be seen.
Ne124f Ascaris megalocephala embryology. Sec. of uteri showing early cleavage stages (mitosis)

No. 72130 Histology: Epithelial tissue,

10 microscope slides
With depictured accompanying brochure

Ma111c Squamous epithelium, isolated cells from human mouth, smear
Ma112c Stratified, non-cornified squamous epithelium, in section through buccal gum
Ma114c Simple columnar epithelium, in t.s. of small intestine
Ma116d Simple ciliated columnar epithelium, in t.s. of oviduct
Ma1162d Pseudostratified ciliated columnar epithelium, in t.s. of trachea
Ma118d Cuboidal epithelium, in sec. of kidney papilla
Ma1182e Cuboidal epithelium, in sec. of human thyroid gland
Ma1201d Transitional epithelium, in sec. of urinary bladder of sheep
Ma1127d Stratified, cornified squamous epithelium, in vertical l.s. of human body skin
Ma1202d Goblet cells in sec. of colon, stained with muci-carmine

No. 72150 Histology: Connective tissues,

10 microscope slides
With depictured accompanying brochure

Ma121e Areolar connective tissue, w.m. and stained for fibres and cells
Ma123d White fibrous tissue, l.s. of tendon
Ma124d Yellow elastic fibrous tissue, l.s. of Ligamentum nuchae
Ma1244d Elastic tissue, fibres teased and w.m.
Ma125d Reticular tissue t.s.
Ma126d Embryonic connective tissue t.s.
Ma127d Mucous tissue, t.s. of navel string (umbilical cord)
Ma128c Adipose tissue, section fat removed to show the cells
Ma129e Adipose tissue, section showing fat in situ stained by sudan
Ma1242e Yellow elastic fibrous tissue, t.s. of Ligamentum nuchae

No. 72180 Histology: Cartilage and Bones,

11 microscope slides
With depictured accompanying brochure

Ma1302c Hyaline cartilage of cat, t.s.
Ma1305d Fetal hyaline cartilage, t.s.
Ma131d Yellow elastic cartilage, section specially stained for elastic fibres
Ma132d White fibrous cartilage, section
Ma135d Compact bone, t.s. specially prepared to show the cells and canaliculi
Ma136d Compact bone, l.s. specially prepared to show the cells and canaliculi
Ma1365d Cancellous (spongy) bone, t.s.
Ma138e Bone development, intracartilaginous ossification in foetal finger or toe, l.s.
Ma139e Bone development, intermembranous ossification in foetal head (cranial bone), vertical l.s.
Ma140d Yellow bone marrow t.s.
Ma141e Joint of finger or toe, sagittal l.s.

No. 72230 Histology: Muscle tissues,

6 microscope slides
With depictured accompanying brochure

Ma151d Striated muscle l.s. Detailed structures, contractile fibrils, isotropic and anisotropic substances, nuclei
Ma152d Striated (skeletal) muscle t.s.
Ma154d Smooth (involuntary) muscle l.s. Detailed structure, spindle-shaped cells with central nuclei
Ma156d Cardiac (heart) musclels. Detailed structure, branched fibres, striations, intercalated discs, nuclei
Ma1537f Striated (skeletal) muscle, thin l.s. specially stained to show details of the striations
Ma157e Heart muscle, l.s. and t.s. specially stained for intercalated discs

No. 72200 Histology: Blood,

10 microscope slides
With depictured accompanying brochure

Ma1902c Human blood smear, Wright's stain
Ma195c Rabbit blood smear, Giemsa stain
Ma196c Cat blood smear, Giemsa stain
Ma1965c Rat blood smear, Giemsa stain
Ma197c Rana, Frog, blood smear, nucleated erythrocytes
Am133c Salamandra, blood smear
Re211c Lacerta, lizard, blood smear
Av111c Gallus domesticus, chicken, blood smear
Pi162c Cyprinus, carp, blood smear
Ma236d Red bone marrow of cow, thin sec.

No. 72300 Histology: Circulatory System,

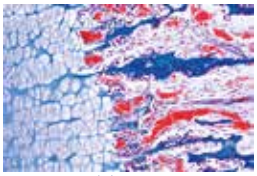
8 microscope slides
With depictured accompanying brochure

Ma171d Artery of rabbit, t.s. routine stained
Ma172d Artery of rabbit, t.s. stained for elastic fibres
Ma173d Vein of rabbit, t.s. routine stained
Ma174d Vein of rabbit, t.s. stained for elastic fibres
Ma175d Artery and vein of smaller size in one slide, guinea pig, t.s.
Ma1762d Aorta of rabbit, t.s. stained for elastic fibres
Ma179f Heart of mouse, entire sagittal l.s.
Ma180d Heart of mouse, t.s.

No. 72330 Histology: Lymphatic Tissues,

6 microscope slides
With depictured accompanying brochure

Ma2323c Lymph node of cat, t.s. routine stained
Ma231c Lymph node of pig, t.s. routine stained
Ma233e Tonsil, human, t.s.
Ma234c Spleen of rabbit, t.s. showing capsula, pulp etc.
Ma239d Thymus of young cat, t.s. with Hassall bodies
Ma237d Red bone marrow of cow, smear specially stained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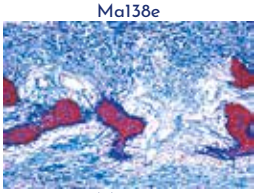
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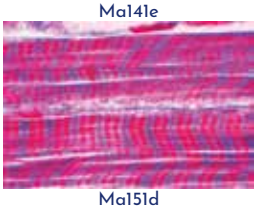
Ma141e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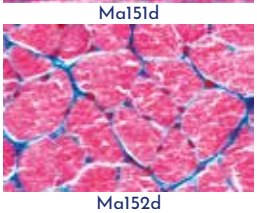
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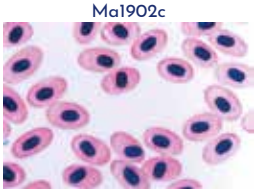
Ma1902c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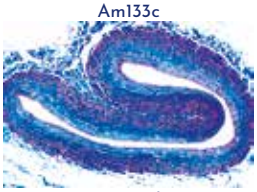
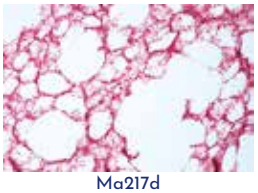

Ma173d


Ma171d


Ma214d


Ma211e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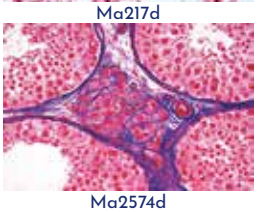
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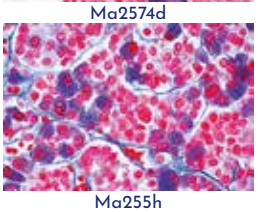
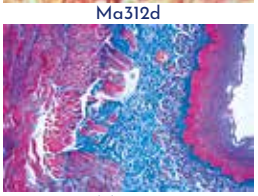

Ma255h


Ma312d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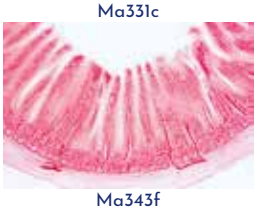
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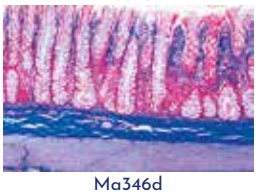
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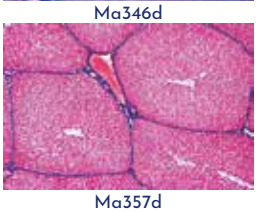
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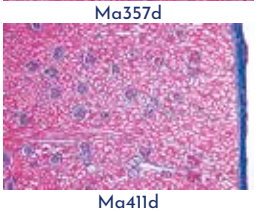
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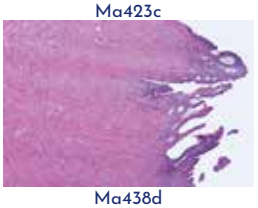
Ma423c


Ma438d

No. 72400 Histology: Respiratory System,

6 microscope slides
With depictured accompanying brochure

Ma211e Nasal region of small mammal (mouse or rat), t.s. showing respiratory and olfactory epithelium, bone etc.
Ma215d Trachea of cat or rabbit, l.s.
Ma214d Trachea of cat or rabbit, t.s. with ciliated epithelium, cartilage etc.
Ma216c Lung of cat, t.s. routine stained for all details
Ma217d Lung of cat, t.s. stained for elastic fibres
Pa4101e Miliary tuberculosis of lung

No. 72420 Histology: Hormone organs

6 microscope slides
With depictured accompanying brochure

Ma2523d Thyroid gland of cat, sec.
Ma253d Adrenal gland (Gl. suprarenalis) of rabbit, t.s. through cortex and medulla
Ma2543d Pancreas with islets of Langerhans of cat, sec.
Ma255h Pituitary gland (hypophysis), sag. l.s. of complete organ from cow or pig showing adeno- and neurohypophysis
Ma2574d Leydig's cells in testis of mouse, t.s.
Ma434d Ovary, sec. selected to show Corpus luteum

No. 72380 Histology: Digestive System,

15 microscope slides
With depictured accompanying brochure

Ma312d Tooth human, t.s. of root
Ma316e Tooth development, medium stage l.s.
Ma323d Tongue of cat, papilla with thick cornified layer, l.s.
Ma331c Oesophagus of cat or dog, t.s.
Ma334d Stomach of cat, fundic region t.s.
Ma337c Duodenum of cat or dog, t.s. showing Brunner's glands
Ma338c Jejunum of cat or dog, t.s.
Ma343f Small intestine of dog, injected to show the blood vessels and capillary network t.s.
Ma341d Vermiform appendix, human t.s.
Ma346d Colon, t.s. stained with muci-carmine or PAS for demonstration of mucous cells
Ma351d Parotid gland of cat, t.s. of a pure serous gland
Ma352d Submaxillary gland of cat, t.s. of a mixed serous and mucous gland
Ma354d Pancreas of pig, t.s. showing islets of Langerhans
Ma357d Liver of pig, t.s. showing well developed connective tissue
Ma3634c Gall bladder of sheep, t.s.

No. 72430 Histology: Excretory System,

6 microscope slides
With depictured accompanying brochure

Ma411d Kidney of cat, t.s. showing cortex with Malpighian corpuscles and medulla with tubules, Mallory's stain
Ma413e Kidney of mouse, sagittal l.s. through complete organ with cortex, medulla and pelvis
Ma415f Kidney of mouse, t.s. vital stained with try-pan-blue to demonstrate storage
Ma4214d Ureter of pig, t.s.
Ma422c Urinary bladder of rabbit, t.s.
Ma423c Urethra of rabbit, t.s.

No. 72450 Histology: Female Reproductive System,

10 microscope slides
With depictured accompanying brochure

Ma431d Ovary of cat, t.s. for general study, shows primary, secondary and Graafian follicles
Ma434d Ovary, sec. selected to show Corpus luteum
Ma435c Fallopian tube of pig, t.s.
Ma437d Uterus of pig, resting stage, t.s.
Ma438d Uterus of pig, pregnant stage, t.s.
Ma439d Uterus of rat with embryo in situ, t.s.
Ma440e Placenta, human , t.s.
Ma445f Embryo of mouse, sagittal l.s. of entire specimen
Ma451d Vagina of pig, t.s.
Ma454d Umbilical cord of pig, t.s.

No. 72480 Histology: Male Reproductive System,

7 microscope slides
With depictured accompanying brochure

Ma4613d Testis of rat, t.s. showing spermatogenesis
Ma463d Epididymis of bull, t.s.
Ma464d Sperm smear of bull
Ma466d Spermatic cord (Ductus deferens) of pig or rabbit, t.s.
Ma467d Seminal vesicle (Gl. vesiculosa) of pig, t.s.
Ma468d Prostate gland of monkey, t.s.
Ma470d Penis of rabbit, t.s.

No. 72250 Histology: Nerve tissues,

10 microscope slides
With depictured accompanying brochure

Ma511d Cerebral cortex of cat or dog, t.s. routine stained
Ma512f Cerebral cortex, t.s. silvered to show the pyramid cells
Ma514d Cerebellum of cat or dog, t.s. routine stained
Ma515f Cerebellum, t.s. silvered to show the Purkinje cells
Ma526d Spinal cord of cat, t.s. routine stained
Ma527e Spinal cord of cat, t.s. stained for Nissl bodies
Ma544c Peripheral nerve of cow or pig, l.s. routine stained
Ma545c Peripheral nerve of cow or pig, t.s. routine stained
Ma547g Peripheral nerve, teased material of osmic acid fixed material showing Ranvier's nodes and medullary sheaths
Ma551e Motor nerve cells, smear preparation from spinal cord of ox shows nerve cells and their appendages

No. 72280 Histology: Sense Organs,

10 microscope slides
With depictured accompanying brochure

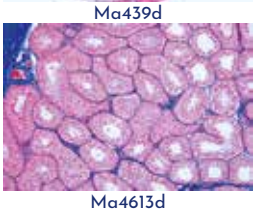
Ma601e Eye of cat, posterior part with retina, sagittal l.s.
Ma602e Eye of cat, anterior part with iris, ciliary body, cornea, sagittal l.s.
Ma608e Developing eyes in t.s. of head from guinea pig embryo
Ma6034d Retina of cat, t.s. for general study
Ma606f Retina of pig, sec. with entrance of optic nerve
Ma607d Cornea of eye from pig, sagittal l.s.
Ma609h Cochlea (internal ear) from guinea pig, l.s. showing organ of Corti
Ma612d Olfactory region from nose of rabbit, t.s.
Ma614e Taste buds, t.s. of papilla foliata in tongue of rabbit shows abundant taste buds, carefully stained
Ma617e Tactile hairs with blood sinus, l.s. or t.s.

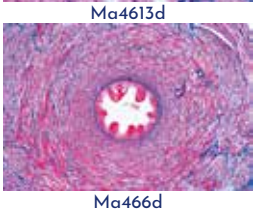
No. 72350 Histology: Skin and integument

10 microscope slides
With depictured accompanying brochure

Ma632d Human skin from palm, vertical sec. showing cornified layers, sweat glands, etc.
Ma633d Human skin from palm, horizontal sec.
Ma635g Human scalp, sagittal l.s.sec. showing l.s. of hair follicles, sebaceous glands, etc.
Ma636d Human scalp, horizontal sec. shows t.s. of hair follicles
Ma637d Human skin from foetus, vertical sec. showing hair development


Ma439d


Ma4613d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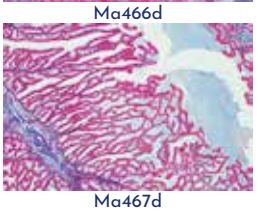
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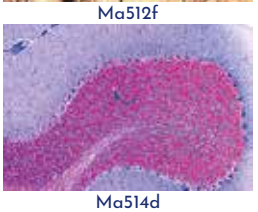
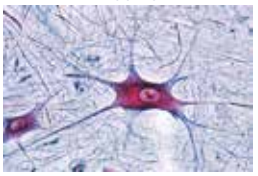
Ma512f


Ma514d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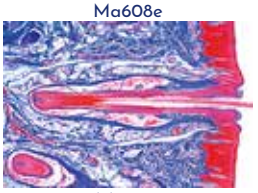
Ma608e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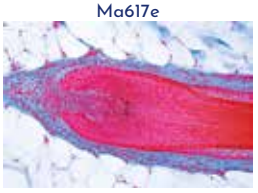
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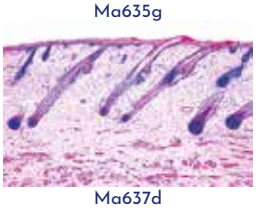
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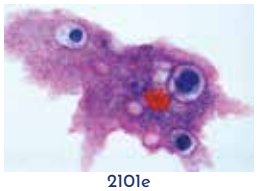

2101e


2113e


2121d


2122d


2123d


2125d


2201d


2208c


2209d


2210e


2218d

Ma638e Finger tip from human foetus, sagittal l.s. of nail development
Ma6404c Skin with hairs, cat, vertical sec.
Ma6402c Eyelid of cat, t.s. showing Meibomian gland
Ma647b Human hair, w.m.
Ma6468d Mammary gland of cow, active t.s.

Zoology

Comprehensive Sets

No. 2100 Invertebrata, Elementary Set

The most important representatives of Protozoa, Sponges, Coelenterata, Vermes, Arthropoda, Insecta, Mollusca, Echinodermata, Acrania – 25 Microscope Slides
With depictured accompanying brochure

2101e Amoeba proteus, showing nucleus and pseudopodia w.m.
2102c Euglena, a common flagellate with eye spot
2103d Paramecium, a common ciliate, nuclei stained
2104c Sycon, marine sponge, t.s. of body
2105e Hydra, extended specimen for general body structure w.m.
2106e Dicrocoelium lanceolatum, sheep liver fluke, w.m.
2107c Planaria, t.s. of body for general study
2108c Taenia saginata, tapeworm, proglottids in different stages t.s.
2109d Trichinella spiralis, l.s. of muscle with encysted larvae
2110c Lumbricus, earthworm, t.s. of body in region of typhlosole
2111c Daphnia, water flea w.m.
2112c Cyclops, copepod w.m.
2113b Spider, leg with comb w.m.
2114c Spider, spinneret w.m.
2115c Musca domestica, house fly, head and mouth parts w.m.
2116e Periplaneta, cockroach, biting mouth parts w.m.
2117e Apis mellifica, honey bee, mouth parts of worker w.m.
2118b Musca domestica, house fly, leg with pulvilli w.m.
2119b Apis mellifica, anterior and posterior wing w.m.
2120b Trachea from insect w.m.
2121b Spiracle from insect w.m.
2122d Drosophila, fruit fly, sagittal l.s. of adult specimen
2123d Snail, radula w.m. or section
2124d Snail, t.s. through body showing internal organs
2125d Asterias, starfish, t.s. of arm (ray)

No. 2200 Invertebrata, Supplementary Set

Complementary to Set No. 2100
50 Microscope Slides
With depictured accompanying brochure

2201d Radiolaria, strewn slide of mixed species
2202d Foraminifera, strewn slide of mixed species
2203c Ceratium, dinoflagellates from plankton
2204f Trypanosoma, causing sleeping disease, blood smear
2205m Plasmodium, malaria parasite, blood smear
2206d Eimeria stiedae, in t.s. of rabbit liver with parasites in situ
2207b Spongilla, fresh water sponge, gemmulae (winter bodies)
2208c Hydra, t.s. of body showing ectoderm and entoderm
2209d Obelia hydroid, w.m. of colony, hydrants and gonothecae
2210e Obelia medusa, jellyfish. w.m. for general study
2211d Actinia, sea anemone, t.s. young specimen
2212c Fasciola hepatica, beef liver fluke, t.s. of body
2213c Fasciola hepatica, ova w.m.
2214d Ascaris, roundworm, t.s. of female in region of gonads
2215d Ascaris, t.s. of male in region of gonads
2216e Lumbricus, earthworm, l.s. of anterior region with gonads
2217c Lumbricus, sperm smear with developing spermatozoa
2218d Hirudo medicinalis, leech, t.s. of body
2219d Sagitta, arrow worm, entire specimen w.m.
2220c Astacus, crayfish, gills t.s.
2221c Astacus, crayfish, liver t.s.
2222e Astacus, crayfish, testis t.s. showing spermatogenesis
2223d Astacus, crayfish, ovary t.s. showing developing ova
2224c Astacus, crayfish, intestine t.s.
2225d Spider, abdomen with internal organs l.s.
2226g Dermanyssus gallinae, chicken mite w.m.
2227e Pieris, butterfly, head and mouth parts (sucking tube) w.m.
2228e Vespa, wasp, biting mouth parts w.m.
2229f Carabus, ground beetle, biting mouth parts w.m.
2230d Culex pipiens, mosquito, piercing-sucking mouth parts w.m.
2231b Melolontha, cockchafer, antenna w.m.
2232b Apis mellifica, honey bee, anterior leg with eye brush w.m.
2233b Apis mellifica, posterior leg with pollen basket w.m.
2234b Pieris, butterfly, portion of wing with scales w.m.
2235b Apis mellifica, honey bee, cornea from eye w.m.
2236d Apis mellifica, honey bee, sting with poison sac w.m.
2237d Culex pipiens, common mosquito, t.s. of abdomen
2238e Apis mellifica, honey bee, head with compound eyes and brain t.s.
2239d Apis mellifica, honey bee, abdomen of worker t.s.
2240e Ctenocephalus, dog flea, w.m. of adult
2241c Chironomus, gnat, larva w.m.
2242d Bombyx mori, silkworm, t.s. of caterpillar, spinning glands
2243d Helix, snail, hermaphrodite gland (ovotestis) t.s.
2244c Helix, snail, liver t.s.
2245e Helix, snail, eye l.s.
2246d Mya arenaria, clam, gills t.s. and l.s.
2247e Asterias, starfish, horizontal section of young specimen
2248g Psammechinus, sea urchin, pluteus larva w.m.
2249d Branchiostoma lanceolatum, t.s. of body with testis
2250d Branchiostoma lanceolatum, t.s. of body with ovaries


2226e


2232d


2238e

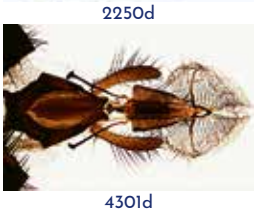

2247e


2250d

No.4300 Insecta, Elementary Set

25 Microscope Slides
With depictured accompanying brochure

4301d Musca domestica, housefly, leaking-sucking mouth parts w.m.
4302e Pieris, butterfly, sucking mouth parts w.m.
4303f Carabus, ground beetle, biting mouth parts (carnivore) w.m.
4304f Melolontha, cockchafer, chewing mouth parts (herbivore) w.m.
4305e Pyrrhocoris, bug, piercing sucking mouth parts w.m.
4306d Bombyx mori. silkworm moth, chewing mouth parts
4307e Apis mellifica, honey bee, leaking sucking mouth parts of worker w.m.
4308e Culex pipiens, mosquito, piercing sucking mouth parts w.m.
4309b Melolontha, cockchafer, antenna with sense organs w.m.
4310b Bombyx mori, silkworm moth, feathered antenna w.m.
4311b Apis mellifica, anterior leg with eye brush w.m.
4312b Apis mellifica, posterior leg with pollen basket w.m.
4313b Musca domestica, house fly, leg with pulvilli w.m.
4314c Apis mellifica, anterior and posterior wings w.m.
4315b Pieris, butterfly, portion of wings with scales w.m.
4316b Trachea from insect w.m.
4317b Spiracle from insect w.m.
4318b Cornea isolated from insect eye w.m.
4319d Apis mellifica, honey bee, sting and poison sac w.m.
4320e Apis mellifica, head with compound eyes and brain t.s.
4321d Bombyx mori, silkworm, t.s. showing silk spinning glands
4322d Drosophila, fruit fly, w.m. of adult
4323e Ctenocephalus canis, dog flea, w.m. of adult
4324d Culex pipiens, mosquito, w.m. of larva
4325d Chironomus, gnat, w.m. of larva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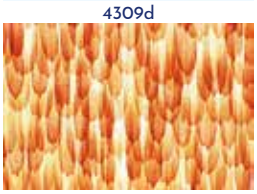
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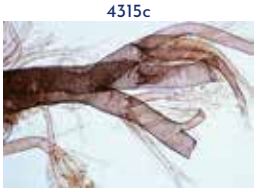
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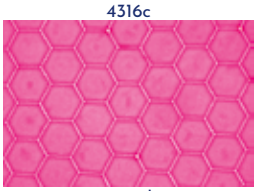
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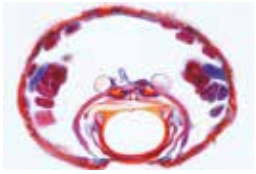
4353f

No. 4350 Insecta, Supplementary Set

Complementary to Set No. 4300
36 Microscope Slides
With depictured accompanying brochure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4363d


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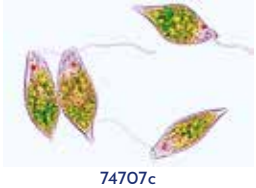
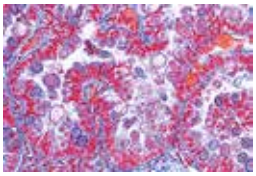
74704d


74707c

4351e	Gomphocerus, grasshopper, biting mouth parts of a herbivore w.m.
4352e	Vespa vulgaris, wasp, biting mouth parts of carnivore w.m.
4353f	Periplaneta, cockroach, chewing biting mouth parts w.m.
4354e	Apis mellifica, honey bee, mouth parts of worker t.s.
4355e	Culex pipiens, mosquito, mouth parts of female t.s.
4356e	Pieris, butterfly, mouth parts t.s.
4357e	Pyrrhocoris, bug, mouth parts t.s.
4358e	Curculionidae, weevil, head with mouth parts and geniculate antennae w.m.
4359e	Chironomus, gnat, head with mouth parts and feathered antennae w.m.
4360b	Pieris, butterfly, clubbed antenna w.m.
4361b	Pieris, butterfly, walking leg w.m.
4362b	Pieris, butterfly, abdominal foot of caterpillar w.m.
4363c	Melolontha, cockchafer, digging leg w.m.
4364b	Aquatic insect, swimming leg w.m.
4365c	Gomphocerus, grasshopper, leg with stridulatory organ w.m.
4366c	Chrysopa, wing of neuroptera w.m.
4367d	Musca domestica, house fly, wing and haltere w.m.
4368d	Cantharis, beetle, chitinous and membranous wings w.m.
4369f	Drosophila, fruit fly, sagittal l.s. for general insect anatomy
4370d	Carausius, walking stick, abdomen t.s. for internal organs
4371f	Cloeon or Baetis, May fly, head and eyes t.s.
4372d	Carabus, ground beetle, gizzard t.s.
4373d	Periplaneta, chyle, middle intestine t.s. (Malpighian tubules)
4374d	Periplaneta, rectum with ampulli t.s.
4375e	Ovaries of insect, sagittal l.s. for developing ova
4376f	Testis of insect, t.s. to show spermatogenesis and cell division
4377d	Colembola, spring tail, adult w.m.
4378e	Caenis, May fly, adult w.m.
4379d	Caenis, nymph with tracheal gills w.m.
4380f	Pediculus humanus, human louse, adult w.m.
4381d	Thysanoptera, thrips, adult w.m.
4382c	Aphidae, plant lice adults and larvae w.m.
4383d	Psylla, adult w.m.
4384e	Chironomus, gnat, adult male w.m.
4385d	Corethra, gnat, larva w.m.
4386d	Lasius, ant, adult w.m.

Zoology

Detail Sets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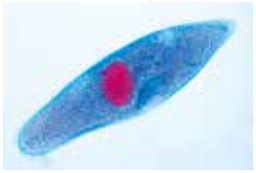
No. 74700 Protozoa

10 Microscope Slides
With depictured accompanying brochure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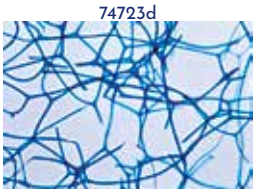
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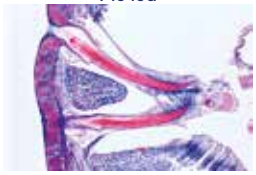
74619f


74501f


74545d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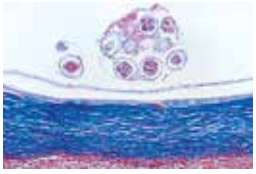
74539f


74526f


74403c


74405e

74701e	Amoeba proteus, Rhizopoda, w.m. showing nucleus and pseudopodia
74703d	Radiolaria, mixed species, fossil
74704d	Foraminifera from Mediterranean sea, mixed species, recent
74707c	Euglena viridis, a common green flagellate, w.m.
74709c	Ceratium hirundinella, fresh-water Dinoflagellate w.m.
74711v	Trypanosoma gambiense, causes African sleeping sickness, blood smear
74712m	Plasmodium, causes human malaria, blood smear
74720d	Eimeria stiedae, causing coccidiosis, t.s. of infected liver, different phases of developing
74723d	Paramecium, a common ciliate, micro- and macronuclei stained
74724e	Vorticella, a coloniate ciliate

No. 74600N Porifera and Coelenterata

10 Microscope Slides
With depictured accompanying brochure

74624e	Sycon, a small marine sponge of the sycon type, l.s. and t.s. on one slide
74621d	Spongilla, fresh-water sponge, t.s.
74623d	Euspongia, commercial sponge, t.s.
74625c	Sponge spicules of different kinds, mixed species w.m.
74601e	Hydra, fresh water polyp, extended and w.m.
74603d	Hydra, fresh water polyp t.s. in different levels showing the layerrs of the body wall
74608d	Laomedea, w.m. of colony, vegetative and reproductive polyps
74609g	Obelia, w.m. of medusa
74615g	Aurelia, jellyfish, w.m. of ephyra
74619e	Actinia, sea anemone, l.s. and t.s.showing the construction of an actinian

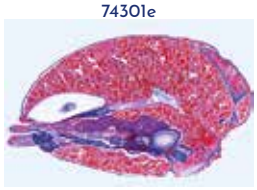
No. 74500 Vermes (Helminthes)

20 Microscope Slides
With depictured accompanying brochure

74501f	Planaria, (Turbellaria) w.m. *
74502c	Planaria, t.s. for general structure
74508m	Fasciola hepatica, large liver fluke, w.m. and stained for internal organs
74509c	Fasciola hepatica, t.s. of middle region of body
74515f	Taenia sp., tapeworm, proglottids, w.m.of mature or gravid segments
74517c	Taenia sp., mature proglottids, t.s.
74521g	Taenia or Moniezia, tapeworm, scolex and proglottides, w.m.
74526f	Echinococcus multilocularis, infected liver with scolices, sec.
74530i	Enterobius vermicularis, pinworm, w.m.
74532d	Trichinella spiralis, encysted larvae in muscles, l.s.
74539e	Ascaris lumbricoides, roundworm, adult male and female, t.s.
74542d	Nemertine, marine species, t.s. of middle region of body
74545d	Nereis, seaworm, t.s. of midbody for general structure
74548d	Tubifex, fresh water oligochaete, w.m.
74549d	Hirudo medicinalis, leech, t.s. for general structure
74552e	Lumbricus, earthworm, anterior end with mouth and esophagus, l.s.
74553c	Lumbricus, earthworm, region of seminal vesicles, t.s.
74555d	Lumbricus, earthworm, t.s. with stomach
74557c	Lumbricus, earthworm, t.s. with intestine and nephridia
74562d	Lumbricus, earthworm, t.s. selected to show the setae


74323d


74301e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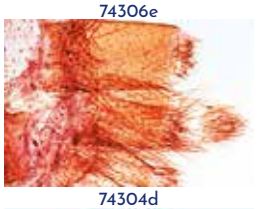

74304d


74202d


74205d


74105f


74108e


74116f


74007d


74011c

No. 74400 Crustacea

10 Microscope Slides
With depictured accompanying brochure

74401c Daphnia sp., water flea, w.m.
74403c Cyclops sp., copepode, w.m.
74405e Gammarus, amphipode, w.m.
74406d Lepas anatifera, barnacle, w.m. of catching leg
74410d Artemia salina, brine shrimp, various developing stages on each slide, w.m.
74411c Nauplius larva, w.m.
74414e Astacus, crayfish, eye, l.s.
74420c Astacus, gills, t.s.
74422c Astacus, stomach, t.s.
74425c Astacus, intestine, t.s.

No. 74300N Arachnoidea and Myriapoda

12 Microscope Slides
With depictured accompanying brochure

74301e Garden spider, chelicera and pedipalp, female, w.m.
74303b Garden spider, w.m. of leg
74304d Garden spider, w.m. of spinnerets
74306e Garden spider, abdomen with book-lungs and other organsl.s.
74307f Garden spider, l.s. of the cephalothorax showing the central nervous system
74310e Varroa, Acarapis woody, parasitic mite of bees w.m.
74313c Tyroglyphus farinae, mite from meal, w.m.
74325g Dermanyssus gallinae, chicken mite, w.m.
74316h Sarcoptes, infected skin, showing eggs and mites. sec.
74317e Lithobius, centipede, w.m. of mouth parts
74320d Lithobius, centipede, body, t.s.
74323d Diplopoda sp, body, t.s.

No. 74200N Insecta: Apterigota and Orthoptera

10 Microscope Slides
With depictured accompanying brochure

74201d Lepisma, silverfish, w.m. of scales from body
74202d Podura, spring tail, adult w.m.
74203d Forficula, earwig, forceps of male, w.m.
74204d Forficula, earwig, w.m. of upper and lower wing
74210f Periplaneta, cockroach, w.m. of dissected biting-lapping mouth parts
74209e Periplaneta, cockroach, gizzard with chitinous teeth w.m.
74211e Gomphocerus spec. , grasshopper, mouth parts w.m.
74205c Gomphocerus spec. , grasshopper, w.m. of jumping leg
74212d Cricket, t.s. of the body showing Malpighian tubules and intestine
74208f Carausius, grasshopper, t.s. of testis showing spermatogenesis, carefully stained for meiotic and mitotic stages

No. 74100N Insecta: Archiptera and Rhynchota

10 Microscope Slides
With depictured accompanying brochure

74113d Thysanoptera, thrips, w.m. of adult
74114e Caenis, May fly, adult w.m.
74103d Caenis, May fly, nymph, w.m. of trachea gill
74105g Pediculus corporis, human body louse, w.m. adult
74108e Louse eggs attached to the hair, w.m.
74107d Aphidae spec., plant lice, w.m. of several per slide
74109d Squash bug, wings, w.m.
74110d Squash bug, mouth parts w.m., long piercing-sucking tube
74116f Cimex lectularius, bed bug, adult w.m.
74117d Diving beetle or water bug (Gerris), swimming leg w.m.

No. 74000 Insecta: Neuroptera and Lepidoptera

10 Microscope Slides
With depictured accompanying brochure

74001c Chrysopa perla, w.m. of a typical neuroptera wing
74004d Caterpillar of Bombyx mori (silkworm moth) , t.s. of the body with spinning glands
74005d Caterpillar of Bombyx mori (silkworm moth), prolegs, w.m.
74010d Pieris, (Lepidoptera), mouth parts of butterfly with long sucking tube, w.m.
74007d Caterpillar of Pieris, butterfly, biting mouth parts, w.m.
74002d Caterpillar of butterfly, w.m. of entire young specimen
74006c Caterpillar of Bombyx, trachea w.m. showing cellular structure, tracheal rings and fine branches
74011c Lepidoptera, wing showing scales of butterfly, w.m.
74008c Lepidoptera, wing showing scales of moth, w.m.
74009e Lepidoptera, antennae of butterfly and of moth, w.m.

No. 73900N Insecta: Hymenoptera and Coleoptera

15 Microscope Slides
With depictured accompanying brochure

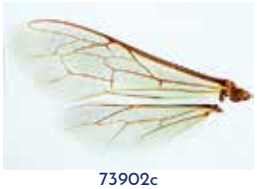
73901d Lasius, ant, worker w.m.
73902c Apis mellifica, Honeybee, wings with hooks and ridge for locking the wings, w.m.
73903d Apis mellifica, hind leg with pollen basket, w.m.
73917d Apis mellifica, anterior leg with eye brush w.m.
73904d Apis mellifica, sting apparatus with poison sac, w.m.
73905d Apis mellifica, mouth parts, dissected and w.m.
73918e Apis mellifica, posterior leg with pollen basket w.m.
73906e Vespa vulgaris, wasp, biting mouth parts of a carnivore, w.m.
73907d Melolontha, cockchafer, laminate antenna, w.m.
73919e Melolontha, cockchafer, ovary t.s.
73908c Water beetle, stigma, w.m.
73911e Colorado beetle, w.m. of chewing mouth parts,
73912d Cornea, isolated from eye of house fly, w.m. showing facets
73914d Beetle, w.m. of digging leg
73915d Water beetle (Gyrinus), w.m. of swimming leg

No. 73800N Insecta: Diptera and Aphaniptera

15 Microscope Slides
With depictured accompanying brochure

73801d Musca domestica, House fly, proboscis, lapping, w.m.
73803d Musca domestica, leg with clinging pads, w.m.
73807c Musca domestica, w.m. of wing
73811d Musca domestica, aristate antenna, w.m.
73809e Musca domestica, compound eye, rad. sec.
73816e Midge, haltera, w.m.
73819d Drosophila, fruit fly, w.m. of adult specimen, male or female
73802e Stomoxys calcitrans, stable fly, piercing sucking mouth parts w.m.
73804e Culex pipiens, mosquito, head, with piercing mouth parts, w.m.
73806d Culex pipiens, mosquito, larva, w.m.
73805d Culex pipiens, mosquito, pupa w.m.
73814f Culex pipiens, mosquito, adult female w.m.
73815f Culex pipiens, mosquito, adult male w.m.
73818d Chironomus, gnat, larva w.m.
73810e Ctenocephalus, dog flea, w.m. of adult specimen, male or female


73907b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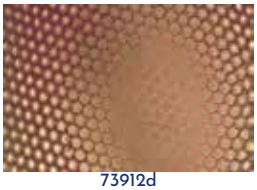
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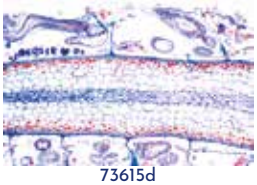
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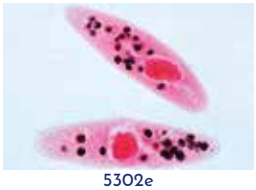
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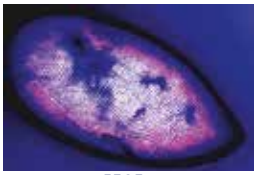
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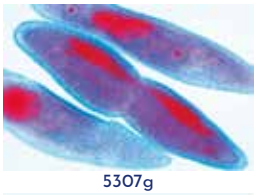
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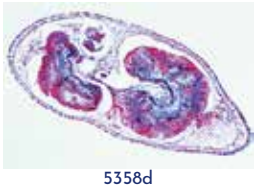

5358d

No. 73700N Mollusca

15 Microscope Slides
With depictured accompanying brochure

73701d Chiton sp., t.s. of midbody to show the internal organs
73703e Anodonta, mussel, t.s. of midbody to show the internal organs
73705e Mya arenaria, clam, t.s. and l.s. of gills showing well developed ciliated epithelium
73707d Mussel, t.s. of siphonal tube
73708d Mya arenaria, clam, adductor muscle of shell, l.s.
73709e Pecten opercularis, clam, t.s. of mantle margin showing primitive eye
73712e Anodonta, mussel, glochidia (larvae) w.m.
73728d Snail, typical t.s. of small specimen for general study
73720d Helix pomatia, snail, t.s. of lung cavity
73717d Helix pomatia, snail, t.s. of digestive gland (liver)
73718d Helix pomatia, snail, t.s. of kidney
73716d Helix pomatia, snail, t.s. of hermaphrodite gland (ovotestis)
73714f Helix pomatia, snail, l.s. of tentacle showing well developed lens eye
73724f Alloteuthis, young cuttlefish, l.s. of entire young specimen
73729d Octopus, cuttlefish, section through sucking tube

No. 73600 Echinodermata, Bryozoa and Brachiopoda

10 Microscope Slides
With depictured accompanying brochure

73606d Asterias, starfish, t.s. of ray showing general structure
73604e Young starfish, horizontal sec. or w.m.
73601f Asterias, starfish, bipinnaria larva, w.m.
73609d Echinus, young sea urchin, radial section
73607e Development of sea urchin, eggs in different stages
73608g Echinus, sea urchin, pluteus larva
73612e Holothuria, sea cucumber, t.s.
73613c Holothuria, w.m. of limy bodies
73615d Bryozoa, moss animals, colony, sec.
73617f Lingula, Brachiopode, t.s.

No. 73500 Cephalochordata (Acrania)

10 Microscope Slides
With depictured accompanying brochure

73501f Botryllus schlosseri, tunicate colony, w.m.
73503e Clavelina, tunicate, l.s. showing gill, intestine, gonads
73504d Clavelina, t.s. region of gills and intestine
73508f Balanoglossus, t.s. region of gonads
73512d Sagitta, arrow worm, w.m.
73515f Amphioxus, Branchiostoma, adult specimen, w.m.
73514f Amphioxus, Branchiostoma, larva, w.m.
73517d Amphioxus, Branchiostoma, t.s. region of gills and intestine
73518d Amphioxus, Branchiostoma, t.s. region of intestine
73521d Amphioxus, Branchiostoma, head region, t.s. showing light sensitive pigment cells

No. 5300 The Paramecium

8 Microscope Slides
With depictured accompanying brochure

5301d Paramecium, macro- and micronuclei stained
5302e Paramecium, food vacuoles and nuclei doubly stained
5303e Paramecium, pellicle stained after Bresslau
5304e Paramecium, silver stained to show the silver line system
5305e Paramecium, trichocysts shown by special preparation
5306f Paramecium, conjugation or after conjugation stages, nuclei stained
5307g Paramecium, fission stages, nuclei stained
5308d Paramecium, sections through many specimens, stained for internal structure

No. 5350 The Hydra

8 Microscope Slides
With depictured accompanying brochure

5351e Hydra, extended specimen for general body structure, carefully stained and w.m.
5352f Hydra with one or more buds w.m.
5353d Hydra, t.s. through body in different levels showing ectoderm with nematocysts, supporting lamella and entoderm
5354d Hydra, l.s. through body and tentacles
5355e Hydra with testis t.s.
5356e Hydra with ovaries t.s.
5357d Hydra, isolated cells showing the different cell types, nematocysts
5358d Hydra with food in digestive cavity, t.s.

No. 5400 The Earthworm (Lumbricus terrestris)

12 Microscope Slides
With depictured accompanying brochure

5401d Earthworm, region of typhlosolis, back of clitellum, the standard t.s.
5402d Earthworm, region of typhlosolis, back of clitellum, sagittal l.s.
5403d Earthworm, region of mouth, t.s. shows pharynx
5404e Earthworm, region of cerebral ganglion t.s.
5405d Earthworm, region of esophagus and heart t.s.
5406e Earthworm, region of gonads, section selected to show the ovary, t.s.
5407e Earthworm, region of gonads, section selected to show the testis, t.s.
5408d Earthworm, region of clitellum t.s.
5409e Earthworm, region of mouth, esophagus and hearts (1st to 9th segment) sag. l.s.
5410e Earthworm, region of gonads, seminal vesicles, (9th to 16th segment) sag. l.s.
5411e Earthworm, region of crop and gizzard (16th to 23rd segment) sag. l.s.
5412d Earthworm, spermatozoa in various stages of development, smear

No. 5450 The Cockchafer (Melolontha vulgaris)

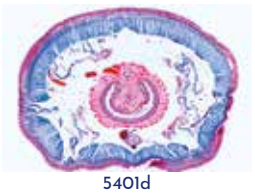
9 Microscope Slides
With depictured accompanying brochure

5451d Cockchafer, antenna w.m.
5452f Cockchafer, mouth parts, dissected and w.m.
5453f Cockchafer, head with brain and compound facet eyes t.s.
5454d Cockchafer, digging leg w.m.
5455d Cockchafer, intestine t.s.
5456e Cockchafer, ovary t.s.
5457e Cockchafer, testis t.s.
5458g Cockchafer, aedeagus w.m., male copulating organ
5459d Cockchafer, spiracle w.m.

No. 75400 The House Fly (Musca domestica)

7 Microscope Slides
With depictured accompanying brochure

75401d House fly, lapping mouth parts with proboscis, w.m.
75402d House fly, leg with clinging pads, w.m.
75403c House fly, wing, w.m.
75404e House fly, compound eye, rad. sec.
75405d House fly, haltera, rudimentary under wing, w.m.
75406d House fly, cornea,isolated and flat mount, showing facets
75407d House fly, aristate antenna, w.m.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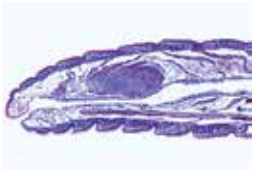
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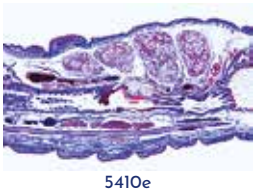
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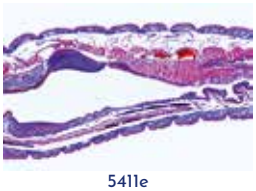
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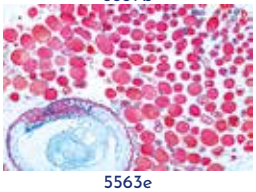
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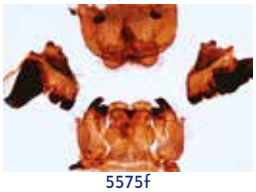
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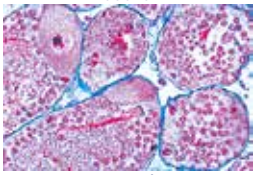
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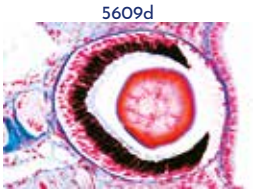
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No. 5550 The Honey Bee (Apis mellifica)

18 Microscope Slides
With depictured accompanying brochure

5551e Honey bee, mouth parts of worker, w.m.
5552e Honey bee, mouth parts of worker, t.s.
5553e Honey bee, head with compound eyes and brain, t.s.
5554d Honey bee, cornea from eye, isolated and w.m.
5555d Honey bee, ocelli, w.m.
5556b Honey bee, antenna with sensory organs, w.m.
5557c Honey bee, anterior and posterior wing, w.m.
5558b Honey bee, anterior leg with eye brush, w.m.
5559b Honey bee, posterior leg with pollen basket, w.m.
5560d Honey bee, sting and poison sac, w.m.
5561c Honey bee, wax plate of worker, w.m.
5562d Honey bee, abdomen of worker, t.s. with intestine, nephridia, wax glands
5563e Honey bee, abdomen of queen, t.s. showing ovaries
5564e Honey bee, abdomen of drone, t.s. showing testis
5565e Honey bee, thorax of worker, t.s. showing muscle bundles
5566d Honey bee, young larva, entire specimen, sagittal l.s.
5567e Nosema apis, causing bee dysentery, t.s. of diseased intestine
5568d Bacillus larvae, bacteria causing foul brood, smear

No. 5570 The Mouth Parts of Insects

20 Microscope Slides
With depictured accompanying brochure

5571f Periplaneta, cockroach, chewing biting mouth parts, dissected w.m.
5572f Carabus, ground beetle, biting mouth parts of a carnivore showing extraintestinal digestion, w.m.
5573e Gomphocerus, grasshopper, biting mouth parts of a herbivore w.m.
5574e Vespa vulgaris, wasp, biting mouth parts of a carnivore w.m.
5575f Melolontha, cockchafer, chewing mouth parts of a herbivore, dissected and w.m.
5576e Apis mellifica, honey bee, leaking sucking mouth parts of worker w.m.
5577e Apis mellifica, honey bee, t.s. of mouth parts
5578e Pieris, butterfly, sucking mouth parts w.m.
5579e Pieris, butterfly, t.s. of mouth parts
5580e Pyrrhocoris, bug, piercing sucking mouth parts w.m.
5581e Pyrrhocoris, bug, t.s. of mouth parts
5582e Culex pipiens, common mosquito, piercing sucking mouth parts of female w.m.
5583e Culex pipiens, common mosquito, mouth parts of male w.m.
5584e Culex pipiens, t.s. of female mouth parts
5585e Stomoxys or Tabanus, stable fly, piercing sucking mouth parts w.m.
5586e Tabanus, t.s. of mouth parts
5587d Musca domestica, house fly, leaking sucking mouth parts w.m.
5588e Musca domestica, house fly, t.s. of mouth parts
5589d Bombyx mori, silkworm moth, chewing mouth parts w.m.
5590e Curculionidae, weevil, head with mouth parts w.m.

No. 5600 The Snail (Helix pomatia)

12 Microscope Slides
With depictured accompanying brochure

5601d Helix, snail, foot t.s., mucous and serous glands, muscles
5602d Helix, snail, mantle margin t.s., chalk glands, mantle glands
5603d Helix, snail, stomach t.s., digestive glands
5604d Helix, snail, intestine t.s., mucous membrane, muscles
5605d Helix, snail, digestive gland, "liver" t.s., chalk cells and liver cells
5606d Helix, snail, hermaphrodite gland (ovotestis) t.s., ova and spermatozoa
5607d Helix, snail, crystalline style and glands t.s.
5608d Helix, snail, penis t.s., or spermoviduct, t.s.
5609d Helix, snail, flagellum t.s.
5610d Helix, snail, heart and kidney t.s.
5611d Helix, snail, lung, t.s., showing the respiratory epithelium
5612e Helix, snail, eye with lens and retina l.s.

No. 5700 The Crayfish (Astacus fluviatilis)

12 Microscope Slides
With depictured accompanying brochure

5701d Astacus, crayfish, gills t.s., epithelium and vessels
5702d Astacus, crayfish, striated muscle l.s., showing striations very clearly
5703d Astacus, crayfish, antenna (decalcified) t.s., showing the chitinous skeleton
5704e Astacus, crayfish, compound eye l.s.
5705f Astacus, crayfish, cerebral ganglion t.s., nerve cells and fibres
5706d Astacus, crayfish, blood smear, with blood cells
5707d Astacus, crayfish, green gland t.s., an excretory organ
5708d Astacus, crayfish, stomach t.s., internal chitineous layer
5709d Astacus, crayfish, intestine t.s., folds of mucous membrane
5710d Astacus, crayfish, liver t.s., glandular tubules for reabsorption of food
5711d Astacus, crayfish, ovary t.s., development of ova
5712e Astacus, crayfish, testis t.s., spermatogenesis, cell division stages

No. 5800 The Amphioxus (Branchiostoma lanceolatum)

8 Microscope Slides
With depictured accompanying brochure

5801t Branchiostoma, entire specimen, stained and w.m. for general body study
5802d Branchiostoma, mouth region t.s., shows buccal cirri
5803d Branchiostoma, anterior pharynx with gills and notochord t.s.
5804d Branchiostoma, region of liver and ovaries t.s.
5805d Branchiostoma, region of liver and testis t.s.
5806d Branchiostoma, region of intestine t.s.
5807d Branchiostoma, tail t.s.
5808d Branchiostoma, midbody sagittal l.s.

No. 5900 Histology of the Frog (Rana sp.)

20 Microscope Slides
With depictured accompanying brochure

5901d Rana, frog, lung t.s., simple sac-like respiratory organ
5902d Rana, frog, heart l.s. through the entire organ
5903d Rana, frog, blood smear, shows nucleated red corpuscles
5904d Rana, frog, spleen t.s., lymphatic tissue
5905d Rana, frog, tongue t.s., papillae, glands, muscle bundles
5906d Rana, frog, esophagus t.s., shows ciliated epithelium
5907d Rana, frog, stomach t.s., showing glandular epithelium
5908d Rana, frog, small intestine t.s., folds of intestinal membrane, chyle
5909d Rana, frog, large intestine (colon) t.s. showing the goblet cells
5910d Rana, frog, pancreas t.s., showing islets of Langerhans
5911d Rana, frog, liver t.s., showing liver parenchyma cells and bile ducts
5912d Rana, frog, kidney t.s., Malpighian corpuscles, renal vessels
5913d Rana, frog, urinary bladder t.s., smooth muscles, transitional epithelium
5914d Rana, frog, ovary t.s. shows follicle development, formation of yolk
5915d Rana, frog, testis t.s. showing spermatogenesis and mature spermatozoa
5916d Rana, frog, fallopian tube (Müllerian duct) t.s., glandular cells
5917d Rana, frog, interior brain t.s. showing nerve cells and nerve fibres


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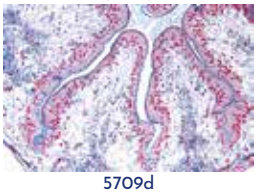
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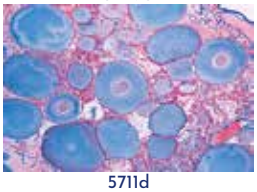
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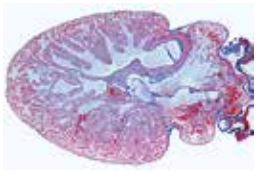
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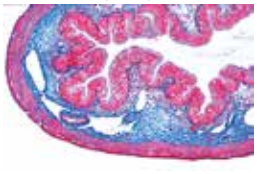
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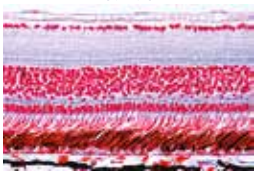
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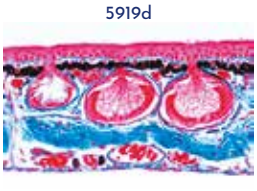
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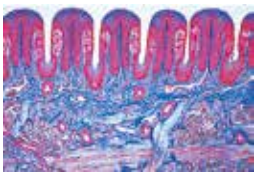
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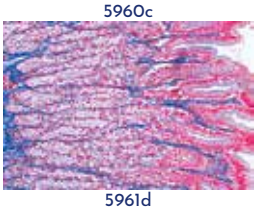
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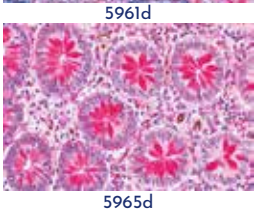
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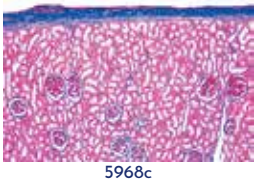
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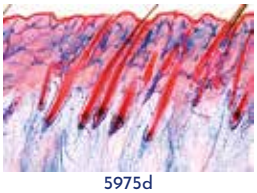
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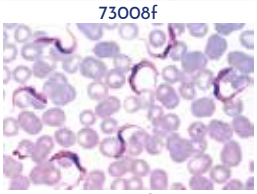
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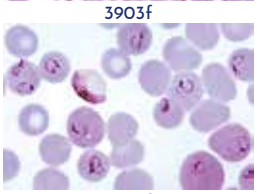
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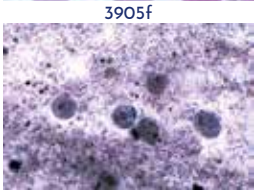
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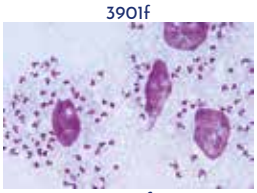
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5918d Rana, frog, spinal cord t.s., showing motor nerve cells
5919d Rana, frog, t.s. of the posterior part of the eye showing the retina with rods and cones
5920d Rana, frog, skin t.s., skin glands, epidermis, pigment cells

No. 5950 Histology of the Rabbit (Lepus cuniculus)

25 Microscope Slides
With depictured accompanying brochure

5951d Rabbit, elastic cartilage from ear pinna, sec.
5952c Rabbit, striated muscle l.s.
5953c Rabbit, subcutaneous fat tissue, t.s.
5954c Rabbit, heart (cardiac) muscle l.s. and t.s.
5955c Rabbit, blood smear
5956c Rabbit, trachea t.s. with ciliated epithelium
5957c Rabbit, lung t.s.
5958d Rabbit, spleen t.s.
5959d Rabbit, thyroid gland t.s. with colloid
5960c Rabbit, tongue t.s., muscular layers
5961d Rabbit, stomach with digestive glands t.s.
5962c Rabbit, small intestine (duodenum) with villi, t.s.
5963c Rabbit, blind gut (caecum) t.s.
5964d Rabbit, symbiotic bacteria from the blind gut
5965d Rabbit, rectum with goblet cells, t.s.
5966c Rabbit, salivary gland t.s.
5967c Rabbit, liver t.s.
5968c Rabbit, kidney, sec. through cortex and medulla
5969d Rabbit, ovary t.s. showing follicles
5970c Rabbit, uterus t.s.
5971d Rabbit, testis t.s., showing spermatogenesis
5972d Rabbit, spermatozoa, smear
5973d Rabbit, olfactory region of nose, t.s.
5974c Rabbit, hair w.m.
5975d Rabbit, skin of body with hair follicles, l.s.

No. 73000N Different Types of Larvae *

10 Microscope Slides
With depictured accompanying brochure

Co230g Obelia, sec. through budding medusae in different stages *
Co212g Obelia medusa, small jellyfish, w.m.
Co218g Ephyra larva of Aurelia, w.m.
73008f Bipinnaria larva of starfish (Asterias), w.m.
73010g Pluteus larva of sea-urchin (Psammechinus), w.m.
73011e Glochidia larva of clam, w.m.
73012c Nauplius larva of Copepoda, w.m.
73013e Zoea larve of Decapoda, w.m.
Cr118e Megalopa larva of crab (Carcinus maenas), w.m.
73015d Larva of mosquito (Culex pipiens), w.m.

Parasites and Pathogenic

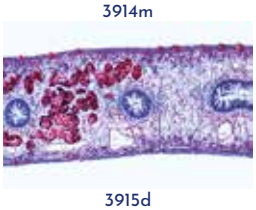
BACTERIA

No. 3900 General Parasitology, Large Set

50 Microscope Slides
With depictured accompanying brochure

3901f Entamoeba histolytica, amebic dysentery, smear or section
3902f Leishmania donovani, causes Kala-Azar, smear or section
3903v Trypanosoma gambiense, Central African sleeping disease, blood smear
3904f Trypanosoma cruzi, Chagas disease, blood smear, Giemsa stain
3905m Plasmodium falciparum, human malaria, blood smear with typical ring stages
3906f Plasmodium berghei, malaria in rodents, blood smear with vegetative forms and schizogony stages
3907g Plasmodium sp., malaria melanemia in human spleen, sec. showing pigment granules in endothelium
3908h Toxoplasma gondii, causing toxoplasmosis, smear or section of cyst
3909f Babesia canis, blood smear shows very heavy infection
3910f Sarcocystis sp., section of muscle showing the parasites in Miescher's tubes
3911e Nosema apis, honey bee dysentery, t.s. of diseased bee intestine
3912d Monocystis agilis, from earthworm seminal vesicle
3913d Eimeria stiedae, causes coccidiosis in rabbit liver, t.s. shows parasites in all stages
3914m Fasciola hepatica, beef liver fluke, w.m. of adult flat mount and carefully stained
3915c Fasciola hepatica, typical t.s. of body in different regions
3916d Fasciola hepatica, ova w.m.
3917e Fasciola hepatica in bile ducts of liver, t.s.
3918e Schistosoma mansoni, t.s. of adulat male and female
3919f Fasciola hepatica, redia and cercaria in sec. through infected snail liver
3920i Schistosoma mansoni, ova in faeces *
3921t Taenia spec. or Moniezia spec., tapeworm, scolex w.m.
3922g Taenia pisiformis, dwarf tapeworm, mature proglottids w.m.
3923d Taenia saginata, tapeworm, proglottids in different stages t.s.
3924g Taenia saginata, tapeworm, ova in faeces w.m.
3925f Hymenolepis nana, dwarf tapeworm, proglottids w.m.
3926f Echinococcus granulosus, dog tapeworm, scolices from cyst w.m. showing hooklets
3927f Echinococcus granulosus, cyst wall and scolices sec.
3928d Ascaris lumbricoides, roundworm of human, adult female t.s. in region of gonads
3929d Ascaris lumbricoides, adult male t.s. in region of gonads
3930d Ascaris lumbricoides, roundworm, ova from faeces w.m.
3931i Enterobius vermicularis (Oxyuris), pin worm, adult specimen w.m.
3932d Trichinella spiralis, muscle with encysted larvae l.s.
3933i Ancylostoma, hookworm, adult male or female w.m.
3934d Trichuris trichiura, whip worm, ova from faeces w.m.
3935e Strongyloides stercoralis, larvae w.m.
3936f Heterakis spumosa, intestinal parasite of rat, adult male or female
3937h Ixodes sp., tick, adult w.m. Carrier of relapsing fever and borreliosis
3938g Dermanyssus gallinae, chicken mite w.m. of adult specimen


3914m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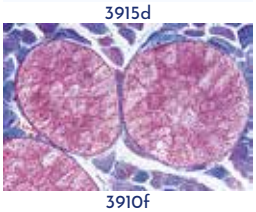
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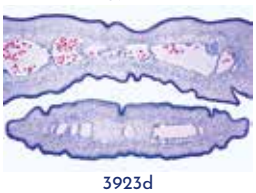
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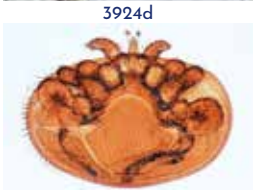
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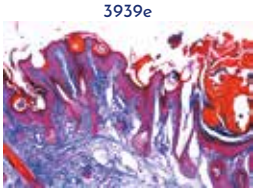
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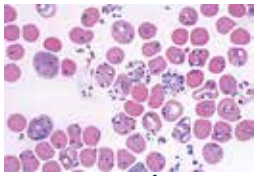
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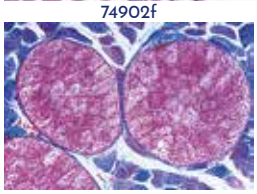
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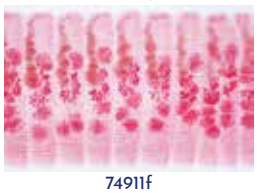
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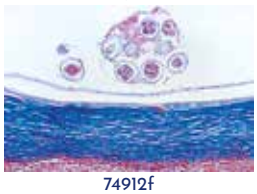
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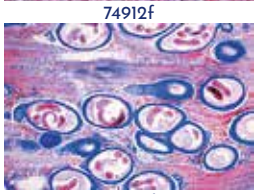
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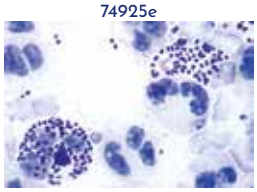
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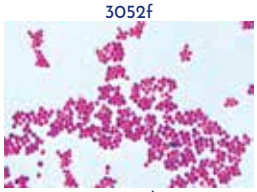

3054d

3939e Acarapis woodi, varroa, parasitic mite of honey bee, w.m.
3940e Sarcoptes scabiei (Acarus siro), section of diseased skin with parasites
3941e Stomoxys calcitrans, stable fly, piercing sucking mouth parts w.m.
3942g Anopheles, malaria mosquito, head and mouth parts of female w.m.
3943e Culex pipiens, common mosquito, head and mouth parts of female w.m.
3944f Anopheles, malaria mosquito, larva w.m.
3945d Culex pipiens, common mosquito, larva w.m.
3946d Culex pipiens, common mosquito, pupa w.m.
3947g Cimex lectularius, bed bug, w.m. of adult specimen
3948g Pediculus humanus, human louse, w.m. of adult specimen
3949e Pediculus humanus, louse eggs attached to the hair, w.m.
3950e Ctenocephalus canis, dog flea, adult male or female, w.m.

No. 74900 General Parasitology, Short Set

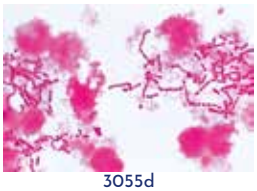
25 Microscope Slides
With depictured accompanying brochure

74901v Trypanosoma gambiense, Central African sleeping disease, blood smear
74902f Plasmodium berghei, malaria in rodents, blood smear with vegetative forms and schizogony stages
74903f Sarcocystis sp., section of muscle showing the parasites in Miescher's tubes
74904e Nosema apis, honey bee dysentery, t.s. of diseased bee intestine
74905d Eimeria stiedae, causes coocidiosis in rabbit liver, t.s. shows parasites in all stages
74906m Fasciola hepatica, beef liver fluke, w.m. of adult flat mount and carefully stained
74907d Fasciola hepatica, ova w.m.
74908t Taenia spec. or Moniezia spec., tapeworm, scolex (head) w.m.
74909g Taenia pisiformis, dog tapeworm, mature proglottids w.m.
74910d Taenia saginata, tapeworm, proglottids in different stages t.s.
74911f Hymenolepis nana, dwarf tapeworm, proglottids w.m.
74912f Echinococcus granulosus, cyst wall and scolices sec.
74913d Ascaris lumbricoides, roundworm of human, adult female t.s. in region of gonads
74914d Ascaris lumbricoides, roundworm, ova from faeces w.m.
74915i Enterobius vermicularis (Oxyuris), pin worm, adult specimen w.m.
74916d Trichinella spiralis, muscle with encysted larvae l.s.
74917h Ixodes sp., tick, adult w.m. Carrier of relapsing fever and borreliosis
74918g Dermanyssus gallinae, chicken mite w.m. of adult specimen
74919e Acarapis woodi, varroa, parasitic mite of honey bee, w.m.
74920e Sarcoptes scabiei (Acarus siro), section of diseased skin with parasites
74921g Anopheles, malaria mosquito, head and mouth parts of female w.m.
74922e Culex pipiens, common mosquito, head and mouth parts of female w.m.
74923g Cimex lectularius, bed bug, w.m. of male or female
74924h Pediculus humanus, human louse, w.m. of male or female
74925e Ctenocephalus canis, dog flea, adult male or female, w.m.

No. 3050 Pathogenic Bacteria

25 Microscope Slides
With depictured accompanying brochure

3051e Diplococcus pneumoniae, causing croupous pneumonia, smear
3052f Neisseria gonorrhoeae, causing gonorrhoea, smear *
3053e Neisseria meningitidis (intracellularis), causing epidemic meningitidis, smear from culture
3054d Staphylococcus aureus, pus organism, smear from culture
3055d Streptococcus pyogenes, smear from culture showing short chains
3056d Corynebacterium diphtheriae, smear from culture
3057t Mycobacterium tuberculosis, smear from positive sputum stained after Ziehl-Neelsen
3058e Bacterium erysipelatos (Erysipelothrix rhusiopathiae), smear
3059d Brucella abortus, causing abortation in cattle (Bang disease), smear
3060d Proteus vulgaris, inflammation of urinary system, smear from culture
3061d Escherichia coli, colon bacteria, possibly pathogen, smear
3062d Eberthella typhi, causing typhoid fever, smear from culture
3063d Salmonella paratyphi, paratyphoid fever, smear from culture
3064d Hemophilus influenzae (Pfeiffer), smear from culture
3065e Klebsiella pneumoniae (Friedlander), causing pneumonia smear
3066f Pasteurella (Yersinia) pestis, bubonic plague, smear
3067d Salmonella enteritidis, causes meat poisoning, smear
3068d Shigella dysenteriae, causes bacillary dysentery, smear
3069t Bacillus anthracis, causes wool sorter's disease, smear
3070t Clostridium botulinum, causing food poisoning, smear
3071d Clostridium septicum, smear from culture
3072e Clostridium tetani, causing lockjaw, smear
3073t Clostridium perfringens, causing gas gangrene, smear
3074t Vibrio comma, causing Asiatic cholera, smear
3075g Borrelia duttoni (Spirochaeta recurrentis), causes Central African relapsing fever, blood smear with organisms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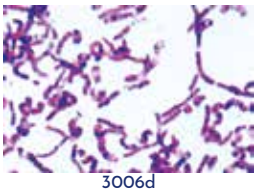
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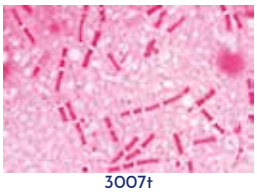
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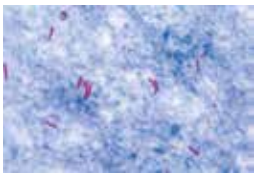
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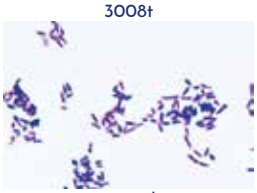
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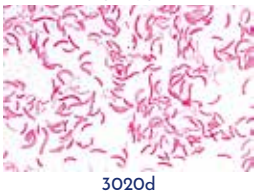

3020d

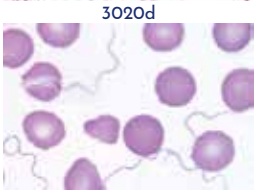
Botany

Comprehensive Sets

No. 3000 Bacteria, Basic Set

25 Microscope Slides
With depictured accompanying brochure

3001d Staphylococcus aureus, pus organism, smear from culture
3002d Sarcina lutea, chromogenic rods, smear from culture
3003e Streptococcus pyogenes, pus organism
3004d Streptococcus lactis, milk souring organism, short chains
3005d Bacillus subtilis, hay bacillus, smear with bacilli and spores
3006d Bacillus mycoides, soil organism
3007t Bacillus anthracis, wool sorters disease, smear from culture
3008t Mycobacterium tuberculosis, causing tuberculosis, smear from positive sputum
3009d Corynebacterium diphtheriae, causing diphtheria, smear from culture
3010e Bacterium erysipelatos, causing red murrain, smear from culture
3011d Rhizobium radicicola, nitrogen fixing bacteria in root nodules, section or smear
3012d Proteus vulgaris, putrefaction causing germs, smear from culture
3013d Escherichia coli, colon bacteria, smear from culture
3014d Eberthella typhi, causing typhoid fever, smear from culture
3015d Salmonella paratyphi, causing paratyphoid fever, smear from culture
3016t Vibrio comma, Asiatic cholera, smear from culture
3017d Shigella dysenteriae, bacillary dysentery, smear from culture
3018d Hemophilus influenzae, Pfeiffer bacillus, smear from culture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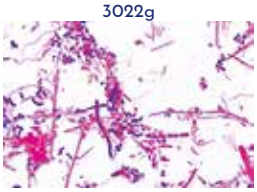
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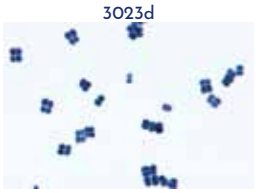
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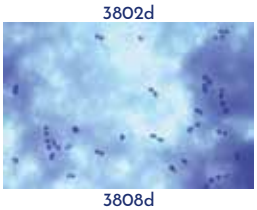
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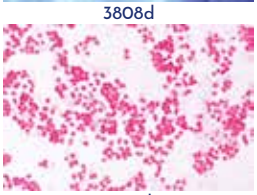
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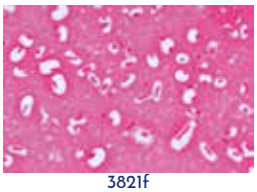
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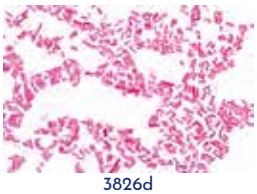
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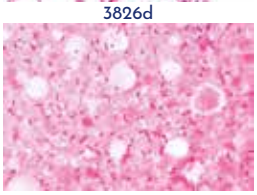
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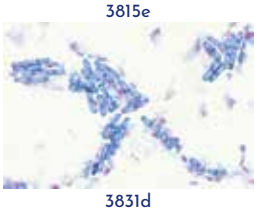
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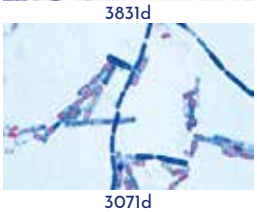
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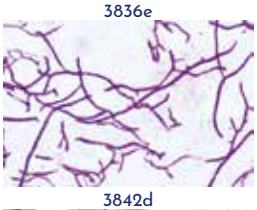
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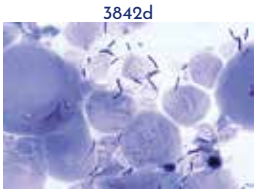
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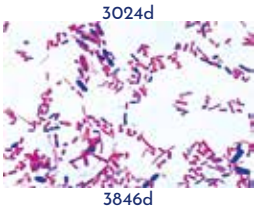

3846d

3019e Spirillum volutans, smear from putrid water
3020d Rhodospirillum rubrum, chromogenic spirilli, smear from culture
3021t Clostridium botulinum (botulism), causing food poisoning, smear
3022g Spirochaeta duttoni (Borrelia recurrentis), in blood smear
3023d Bacteria from mouth, smear with Gram positive and negative rods
3024d Bacteria from bread
3025d Bacteria from cheese

No. 3800 Bacteria, Large Set (New version)

50 Microscope Slides
With depictured accompanying brochure

Spherical bacteria, cocci

3801e Diplococcus pneumoniae, causing croupous pneumonia, smear
3802d Gaffkya tetragena, occurring as tetrads, smear
3803f Neisseria gonorrhoeae, causing gonorrhoea, smear *
3804e Neisseria meningitidis (intracellularis), causing epidemic meningitidis, smear from culture
3805d Sarcina lutea, chromogenic rods occurring in packets
3806d Staphylococcus aureus, pus organism, smear from culture
3807d Streptococcus pyogenes, smear from culture showing short chains
3808d Streptococcus lactis, milk souring organism, smear from culture showing short chains

Rod-shaped bacteria, non spore-forming, gram-positive

3809d Corynebacterium diphtheriae, smear from culture
3810d Lactobacillus bulgaricus (Thermobacterium), Yoghurt bacteria (Bulgarian soured milk), from culture
3811h Mycobacterium leprae, causing leprosy, smear or tissue section *
3812t Mycobacterium tuberculosis, smear from positive sputum stained after Ziehl-Neelsen

Rod-shaped bacteria, non spore-forming, gram-negative

3813d Acetobacter aceti, manufacture of vinegar, smear
3814d Azotobacter, rods from soil, smear
3815e Bacterium erysipelatos (Erysipelothrix rhusiopathiae), smear
3816d Bacterium prodigiosum (Serratia marcescens), formation of red pigment, smear
3817d Brucella abortus, causing abortation in cattle (Bang disease), smear
3818d Eberthella typhi, causing typhoid fever, smear
3819d Escherichia coli, colon bacteria, smear
3820d Hemophilus influenzae (Pfeiffer), smear
3821f Klebsiella pneumoniae (Friedlander), causing pneumonia smear
3822f Pasteurella pestis, bubonic plague, smear
3823d Proteus vulgaris, putrefaction, smear from culture
3824d Rhizobium radicicola, smear from culture
3825d Rhizobium radicicola, nitrogen fixing organisms, section through root nodule of lupin showing bacteria in situ
3826d Salmonella enteritidis, causes meat poisoning, smear
3827d Salmonella paratyphi, paratyphoid fever, smear
3828d Shigella dysenteriae, causes bacillary dysentery, smear

Rod-shaped bacteria, spore-forming (bacilli)

3829t Bacillus anthracis, smear from culture
3830d Bacillus mycoides, large soil organisms growing in chains
3831d Bacillus subtilis, hay bacillus, smear showing bacilli and spores doubly stained
3832t Clostridium botulinum, causing food poisoning, smear
3833t Clostridium perfringens, causing gas gangrene, smear
3834e Clostridium tetani, causing lockjaw, smear

Spiral bacteria and spirochaetes

3835t Vibrio comma, causing Asiatic cholera, smear
3836e Spirillum volutans, a very large spirillum, smear *
3837d Rhodospirillum rubrum, chromogenic rods, smear
3838g Borrelia duttoni (Spirochaeta recurrentis), causes Central African relapsing fever, blood smear with organisms

Miscellaneous groups

3839d Actinomyces alni, sec. of root nodule showing mycorrhiza of alder
3840d Sphaerotilus natans, from putrid water, long chains with sheaths
3841d Methanobacterium, forming methane, smear
3842d Streptomyces griseus, streptomycin antibiotic, smear
3843d Bacteria from mouth, Gram positive and negative bacteria can be observed in this slide, ideal for demonstration
3844d Bacteria from sauerkraut, smear
3845d Bacteria from cheese, smear or section
3846d Bacteria from human intestine, smear

Cytological slides, special staining techniques

3847d Typical mixed bacteria, including Gram-positive and Gram-negative rods, smear
3848g Monotrichous flagella on Vibrio or Pseudomonas, specially stained *
3849g Peritrichous flagella on Salmonella or Proteus, specially stained
3850g Nuclear stain (Bacillus cereus), smear specially stained for nuclear material (DNA)

No. 2600 Cryptogamae, Elementary Set

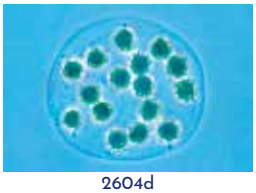
25 Microscope Slides
With depictured accompanying brochure

2601e Bacteria type slide shows cocci, bacilli, spirilli
2602c Oscillatoria, blue green alga
2603c Pleurococcus, green alga
2604d Eudorina, small colonies
2605c Diatoms, strewn slide of mixed species
2606e Spirogyra in conjugation with zygotes
2607d Fucus, brown alga, female conceptacle with oogonia t.s.
2608d Fucus, brown alga, male conceptacle with antheridia t.s.
2609c Mucor, black mold, mycelium and sporangia
2610c Peziza, apothecium with asci t.s.
2611e Claviceps purpurea, ergot, stroma with perithecia l.s.
2612c Morchella, morel, fruiting body with asci t.s.
2613b Saccharomyces, yeast, budding cells
2614c Psalliota, gill fungus, pileus with lamellae t.s.
2615c Coprinus, mushroom, t.s. showing typical basidia and spores
2616d Lobaria pulmonaria, foliose lichen, thallus with symbiotic algae t.s.
2617d Moss stem with leaves w.m.
2618d Marchantia, liverwort, thallus with cupule and gemmae l.s.
2619d Marchantia, liverwort, antheridia l.s.
2620d Marchantia, liverwort, archegonia l.s.
2621d Polytrichum, moss, capsule with spores t.s.
2622d Equisetum, horsetail, strobilus with spores l.s.
2623c Aspidium (Dryopteris), stem t.s.
2624d Aspidium (Dryopteris), leaf with sporangia and spores t.s.
2625d Fern prothallium w.m.

No. 2700 Cryptogamae, Supplementary Set I

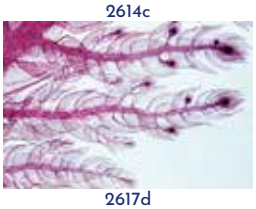
Complementary to Set No. 2600
25 Microscope Slides
With depictured accompanying brochure

2701d Streptococcus lactis, milk souring bacteria
2702d Bacillus subtilis, hay bacillus, with spores
2703c Nostoc, blue green alga with heterocysts
2704e Volvox, with daughter colonies
2705d Zygnema, vegetative and conjugation stages with zygotes
2706d Closterium, crescent shaped desmid
2707d Chara, stonewort, thallus with reproductive organs
2708d Ectocarpus, brown alga, plurilocular gametangia
2709d Rhodomela, marine red alga, tetraspores
2710c Plasmodiophora brassicae, club root, host cells with spores t.s.
2711c Albugo candida, white rust of cruzifers, t.s.
2712c Penicillium, blue mold, mycelium and conidiophores


2604d


2611e


2614c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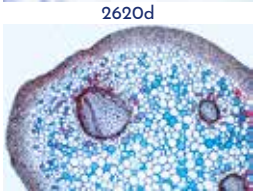
2620d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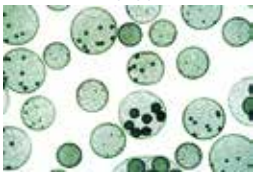
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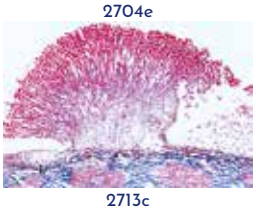
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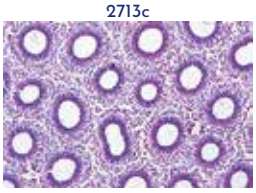
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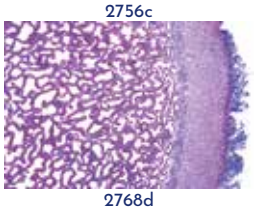
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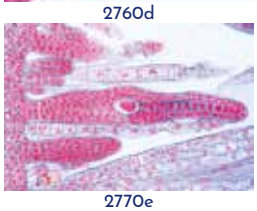
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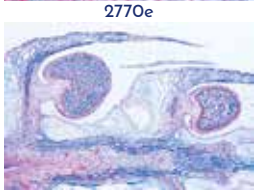
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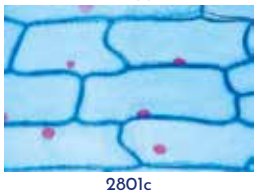
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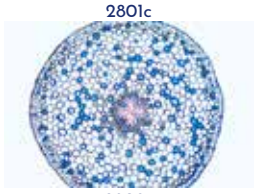
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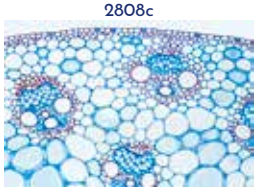
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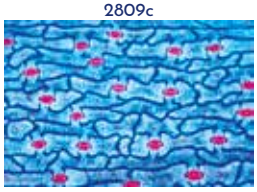
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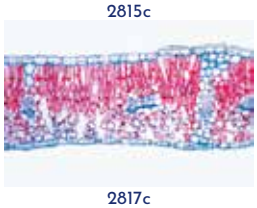

2817c

2713c Sclerotinia (Monilia), plum rot, host tissue with conidia t.s.
2714c Boletus, pore fungus, pileus t.s.
2715d Ustilago zeae, corn smut, pustule with spores t.s.
2716d Puccinia graminis, wheat rust, uredinia on wheat t.s.
2717d Puccinia graminis, aecidia and pycnidia on barberry leaf t.s.
2718d Xanthoria, lichen, apothecium with asci and ascospores t.s.
2719d Moss protonema w.m.
2720c Sphagnum, peat moss, leaf w.m.
2721c Polytrichum, moss, stem with leaves t.s.
2722e Selaginella, strobilus with spores l.s.
2723b Equisetum, horse tail, spores with elaters w.m.
2724c Pteridium, braken fern, rhizome t.s.
2725d Phyllitis scolopendrium, fern, leaf with sori and sporangia t.s.

No. 2750 Cryptogamae, Supplementary Set II

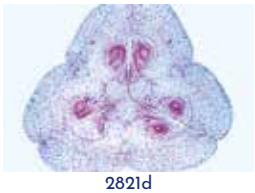
Complementary to 2600 and 2700
25 Microscope Slides
With depictured accompanying brochure

2751d Sphaerotilus natans, bacteria from putrid water, long chains
2752d Cosmarium, desmid
2753c Chlamydomonas, biflagellate algae, stained and w.m.
2754c Cladophora, green alga, branched filaments and multinucleate cells, w.m.
2755c Oedogonium, green alga, simple vegetative filaments
2756c Enteromorpha, seaweed, inflated narrow frond w.m.
2757c Laminaria saccharina, t.s. showing thallus with sporangia
2758d Polysiphonia, marine red alga, antheridia
2759d Polysiphonia, marine red alga, cystocarps
2760d Polysiphonia, marine red alga, tetraspores
2761d Batrachospermum, fresh water red alga
2762d Exoascus pruni (Taphrina), plum pockets, infected tissue t.s.
2763d Erysiphe pannosa, rose mildew, conidia t.s.
2764c Tuber rufum, truffle, t.s. of fruiting body
2765c Venturia pirinum (Fusicladium), pear scab, t.s. with conidia
2766c Rhytisma acerinum, tar-spot of maple, leaf with sclerotia t.s.
2767c Botrytis allii, grey mold of onions, infected tissue t.s.
2768d Scleroderma vulgare, puff ball, young fruiting body t.s.
2769e Mnium, moss, antheridia l.s.
2770e Mnium, moss, archegonia l.s.
2771d Psilotum, primitive fern, stem and leaflets t.s.
2772e Lycopodium, clubmoss, sporophyll with spores l.s.
2773c Lycopodium, clubmoss, stem with stele t.s.
2774c Equisetum, horse tail, stem t.s.
2775c Salvinia natans, water fern, sporocarp t.s.

No. 2800 Phanerogamae, Elementary Set

Plant cells, cell division, cell walls, metabolic products in the cell, roots, stems and vascular bunbdles, leaves, flowers and fruits, seeds,
25 Microscope Slides
With depictured accompanying brochure

2801c Simple plant cells, epidermis of Allium cepa w.m.
2802d Cell division (mitosis) all stages, in Allium root tips l.s.
2803c Starch grains, in t.s. of potato tuber
2804c Cork cells, in sec. of bark of Quercus
2805d Stone cells, in sec. of fruit of Pirinus (pear)
2806d Root hairs on root tip
2807c Zea mays, corn, typical monocot root t.s.
2808c Ranunculus, buttercup, typical dicot root t.s.
2809c Zea mays, corn, typical monocot stem t.s.
2810c Triticum, wheat, gramineous stem t.s.
2811c Aristolochia, birthwort, one year stem t.s.
2812c Aristolochia, birthwort, older stem t.s.
2813d Cucurbita, pumpkin, stem with bundles and sieve tubes l.s.
2814c Sambucus, elderberry, stem with lenticels t.s.
2815c Tulipa, tulip, leaf epidermis with stomata and guard cells w.m.
2816c Zea mays, corn, leaf t.s., a monocot gramineous leaf
2817c Syringa, lilac, leaf t.s., a typical dicot leaf
2818c Fagus, beech, leaf bud t.s. shows leaf origin and development
2819d Lilium, lily, flower bud t.s. shows flower diagram
2820d Lilium, lily, anthers t.s. shows pollen chambers and pollen grains
2821d Lilium, lily, ovary t.s. showing embryosac for general study
2822e Lilium, lily, stigma with pollen and pollen tubes l.s.
2823c Pinus, pine, leaf (needle) t.s.
2824d Triticum, wheat, grain (semen) t.s. shows embryo and endosperm
2825d Capsella, shepherd's purse, l.s. of embryos in situ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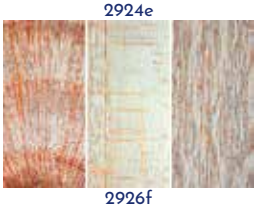
2901d


2924e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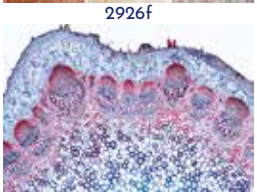
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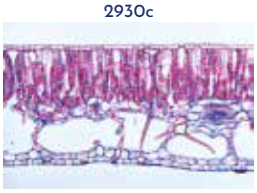
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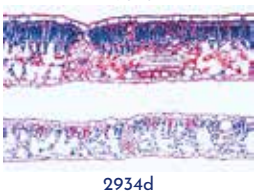
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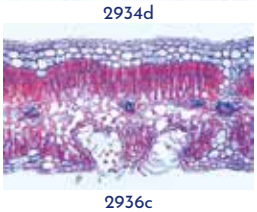
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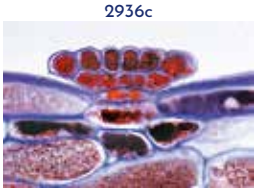
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2943e


2948d

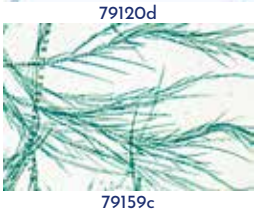
No. 2900 Phanerogamae, Supplementary Set

Complementary to Set No. 2800
50 Microscope Slides
With depictured accompanying brochure

2901d Stem apex and meristematic tissue of Asparagus near median l.s.
2902c Aleurone grains, t.s. of Ricinus endosperm
2903d Fat in sec. through endosperm of Corylus (hazel), stained for fat
2904c Lysigenous oil glands, t.s. through rind of Citrus fruit
2905d Inulin crystals, t.s. of Dahlia tuber
2906b Calcium oxalate crystals, in w.m. of Allium (onion) dry shell
2907b Wood cells, macerated and w.m.
2908c Lactiferous vessels, l.s. through stem of Euphorbia (spurge)
2909d Chloroplasts, leaf of Elodea w.m.
2910b Branched leaf hairs, isolated from Verbascum (mullein)
2911d Reserve cellulose, t.s. of Phoenix (date) seed
2912c Rheum, rhubarb, root with crystals t.s.
2913c Dendrobium, orchid, aerial root with velamen t.s.
2914c Pinus, pine, older woody root t.s.
2915c Smilax, root with thickened endodermis t.s.
2916d Lupinus, lupin, root nodules with nitrogen fixing bacteria t.s.
2917c Quercus, oak, older woody root t.s.
2918c Daucus carota, carrot, storage root t.s.
2919c Pinus, pine, older woody stem t.s.
2920c Zea mays, corn, monocot stem with vascular bundles l.s.
2921c Elodea, waterweed, aquatic stem with primitive bundle t.s.
2922c Juncus, bulrush, stem with internal stellate cells t.s.
2923c Pelargonium, geranium, young stem of an annual plant t.s.
2924d Tilia, lime, older woody stem t.s. and l.s.
2925c Acorus calamus, sweet flag, rhizome t.s.
2926d Pinus, pine, three sections of wood: transverse, radial, tangential
2927d Fagus, beech, three sections of wood: transverse, radial, tangential
2928c Bryonia, stem with sieve plates t.s.
2929c Ribes, currant, stem with phellogen t.s.
2930c Helianthus, sunflower, typical dicot stem t.s.
2931c Salvia, sage, square stem with angular collenchyma t.s.
2932c Nymphaea, water lily, floating leaf of an aquatic plant t.s.
2933c Dionaea, Venus fly trap, leaf with digestive glands t.s.
2934d Fagus, beech, sun and shadow leaves on one slide t.s.
2935c Pinguicula, butterwort, leaf with glandular hairs t.s.
2936c Nerium, oleander, xeromorphe leaf with sunken stomata t.s.
2937d Drosera, sundew, insectivorous leaf with glandular hairs w.m.
2938d Urtica, stinging nettle, leaf with stinging hairs
2939c Utricularia, bladderwort, w.m. or section of catching bladders
2940d Pinus, pine, male cone with pollen grains l.s.


79101c


79120d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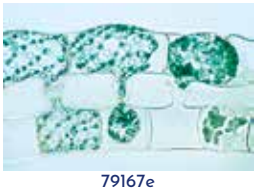
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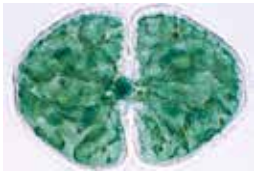
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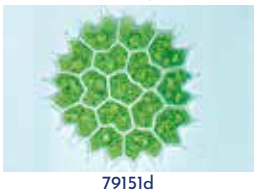
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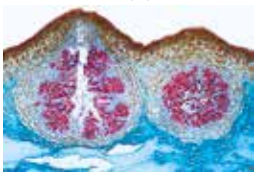
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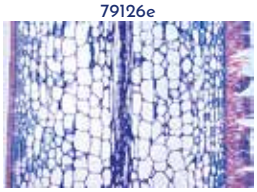
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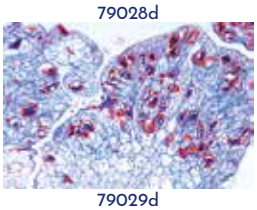

79029d

2941d Pinus, pine, young female cone with ovules l.s.
2942f Pinus, pine, ovule with archegonia l.s.
2943e Pinus, pine, mature embryo with endosperm t.s.
2944b Pinus, pine, pollen grains with wings w.m.
2945f Lilium, lily, young anthers showing meiosis of pollen mother cells
2946d Tulipa, tulip, ovary t.s. showing arrangement of ovules
2947d Taraxacum, dandelion, composite flower l.s.
2948d Papaver, poppy, flower, t.s. shows floral diagram
2949d Phaseolus, bean, t.s. of pod showing pericarp and seed
2950d Lycopersicum, tomato, young fruit t.s.

Botany

Detail Sets

No. 79100 Algae

30 Microscope Slides
With depictured accompanying brochure

Cyanophyceae
79101c Chroococcus, a single-cell blue-green alga, w.m.
79103c Anabaena sp., blue-green alga, w.m. of filaments with heterocysts
79106d Nostoc sp., blue-green alga, sec. through colony with hormogonia
79108d Aphanizomenon sp., blue-green alga, w.m. showing heterocysts
79112c Scytonema, unbranched filaments with false branching, w.m.
79113d Stigonema, blue-green alga, branching filaments, w.m.
Chromophyta
79116c Diatoms, fresh water, recent, mixed species
79120d Diatoms, showing protoplasmic structure, mixed
Conjugatae
79166c Spirogyra sp., vegetative filaments w.m.
79167e Spirogyra sp., scalariform conjugation and zygotes following conjugation, w.m.
79169c Zygnema sp., w.m. of vegetative filaments
79174e Desmids, strewn slide showing several selected forms
Chlorophyceae
79145c Chlamydomonas, biflagellate cells, w.m.
79147f Pandorina morum, biflagellate cells in a spherical colony, w.m.
79149e Volvox, spherical colonies with daughter cells, w.m.
79151d Pediastrum sp., stellate colonies, w.m.
79156d Oedogonium sp., w.m. of filaments with sex organs, macrandrous
79158c Cladophora sp., branching filaments with multinucleate cells
79159c Draparnaldia glomerata, w.m. of filaments with clusters of branches
79162d Ulva lactuca, green alga showing thallus of one celled layer
79115d Vaucheria sp., w.m. of oogonia and antheridia
Charophyceae
79164d Chara vulgaris, w.m. of thallus with sex organs
Phaeophyceae
79126e Fucus serratus, antheridia and oogonia t.s. on one slide
79127d Fucus spiralis, monecious, t.s. of conceptacle with oogonia and antheridia
79129d Ectocarpus, plurilocular, w.m.
79123c Laminaria saccharina, thallus with sporangia t.s.
Rhodophyceae
79137d Polysiphonia, marine red alga, w.m. of thallus with antheridia
79138d Polysiphonia, marine red alga, w.m. of thallus with cystocarps
79139d Polysiphonia, marine red alga, w.m. of thallus with tetraspores
79141d Batrachospermum moniliforme, fresh-water red alga, w.m.

No. 79000 Fungi and Lichenes

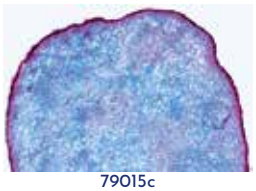
20 Microscope Slides
With depictured accompanying brochure

Phycomycetes
79025c Mucor mucedo, w.m. of hyphae showing sporangia
79028d Rhizopus nigricans, w.m. of hyphae with developing zygotes
79029d Synchytrium endobioticum, potato black wart, sec. of infected tissue
79030c Plasmodiophora, sec. of cabbage rot
Ascomycetes
79015c Claviceps purpurea, t.s. of sclerotium
79016c Tuber rufum, truffle, sec. fruiting body showing asci
79018c Peziza sp., cup-fungus, t.s. of fruiting body with asci
79019d Erysiphe sp., mildew, t.s. of leaf with perithecia
79021d Penicillium sp., blue mold on orange-rind, sec. of hyphae with conidiophores
79022c Aspergillus glaucum, brown-mold, w.m. of hyphae with sporangia
79023b Saccharomyces sp., yeast, showing budding cells, w.m.
79013d Taphrina pruni (Exoascus pruni), plum pockets, t.s. of host tissue with haustoria and asci
Basidiomycetes
79002d Puccinia graminis, t.s. of uredinia on wheat, black rust
79001d Puccinia graminis, wheat rust, t.s. of aecidia on infected barberry leaf
79007d Ustilago zeae, corn smut, infected tissue with spores, sec.
79008c Psalliota sp., mushroom, l.s. through pileus and lamellae showing basidia and spores
79010c Boletus edulis, pore fungus, l.s. through pileus with pores
79012c Lycoperdon gemmatum, puff-ball, sec. of fruiting body
Lichenes
79033d Xanthoria parietina, t.s. of thallus showing hyphae with symbiotic algae
79034d Xanthoria parietina, t.s. of apothecium showing asci and spores

No. 78900 Bryophyta (Liverworts and Mosses)

15 Microscope Slides
With depictured accompanying brochure

Liverworts (Hepaticae)
78907d Marchantia, liverwort, t.s. of thallus with gemma cup
78908d Marchantia, liverwort, l.s. of antheridial branch
78910d Marchantia, liverwort, l.s. of archegonial branch
78913d Marchantia, liverwort, l.s. of mature sporogon
78904e Ricciocarpus, t.s. of thallus showing sexual organs
78905e Ricciocarpus, t.s. of thallus showing sporophytes
Mosses (Musci)
78914c Polytrichum, moss, t.s. of stem
78915c Polytrichum, moss, t.s. of leaves
78916e Polytrichum, moss, l.s. of antheridial branch
78917e Polytrichum, moss, l.s. of archegonial branch
78919d Polytrichum, moss, l.s. of capsule (sporogon)
78922d Polytrichum, moss, w.m. of protonema
78923d Mnium, moss, w.m. of leaf showing chloroplasts
78926c Sphagnum, peat moss, w.m. of branch with leaves, showing water storing cells
78928d Sphagnum, l.s. of capsule with spores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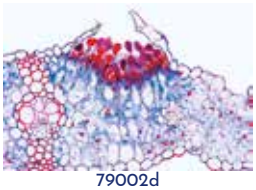
Peziza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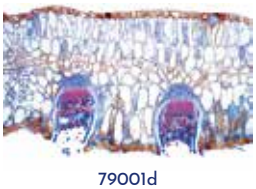
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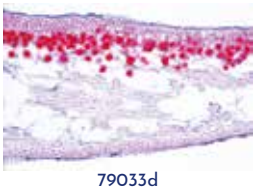
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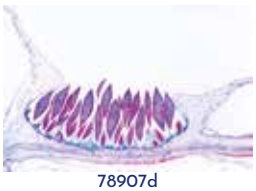
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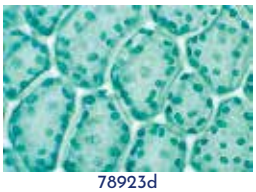
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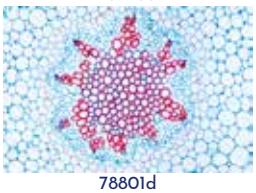
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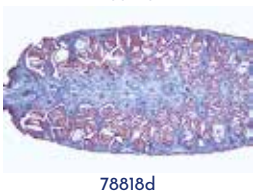
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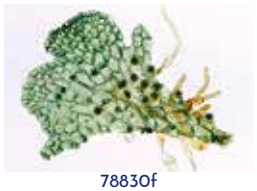
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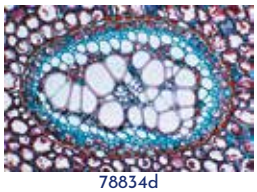
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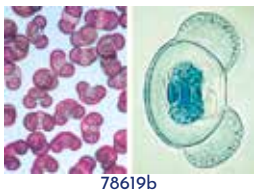
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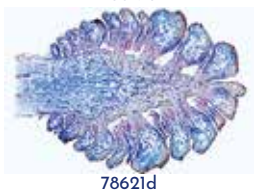
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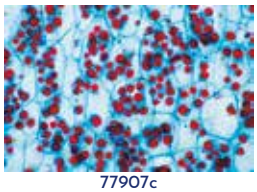
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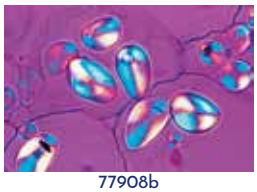
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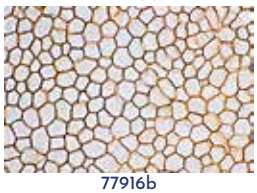
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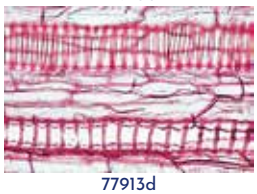
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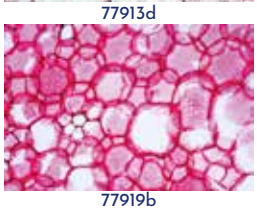
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No. 78800 Pteridophytes (Ferns and Fern Allies)

15 Microscope Slides
With depictured accompanying brochure

Primitive ferns (Psilophytatae)

78801d Psilotum, primitive fern, t.s. of rhizome showing protostele
78802d Psilotum, t.s. of stem showing squamous leaves, aktinostele

Clubmosses (Lycopodiatae)

78805c Lycopodium, clubmoss, t.s. of stem showing plectostele
78807e Lycopodium, clubmoss, t.s. of strobilus showing isospores
78811c Selaginella, t.s. of stem showing siphonostele

Horse-tails (Equisetatae)

78816c Equisetum, t.s. of stem
78818d Equisetum, t.s. of strobilus showing spores
78820b Equisetum, w.m. of spores with elaters

Ferns (Filicatae)

78825c Aspidium, common fern, t.s. of root
78826c Aspidium, t.s. of stem
78827d Aspidium, t.s. of leaf showing sori
78830f Aspidium, w.m. of prothallium showing antheridia and archegonia
78834d Pteridium, t.s. of rhizome
78845c Osmunda, royal fern, rhizome with ectophloic siphonostele t.s.
78847d Phyllitis scolopendrium, hart's tongue fern, leaf with sori and sporangia t.s.

No. 78600 Gymnospermae

15 Microscope Slides
With depictured accompanying brochure

78602e Ephedra, l.s. of male cone
78603f Ephedra, l.s. of female cone at pollination time
78605c Ginkgo, young sprout, t.s.
78607c Ginkgo, t.s. of a primitive gymnosperm leaf
78611c Pinus, pine, t.s. of young root showing primary structures
78612c Pinus, pine, t.s. of first year stem
78614e Pinus, pine, l.s. of bud showing vascular anatomy and origin of leaves
78616d Pinus, pine, wood, transverse, radial and tangential sections
78618c Pinus, pine, t.s. of needles (leaves)
78619b Pinus, pine, w.m. of mature pollen grains showing wings
78620d Pinus, pine, l.s. of mature male cone with pollen grains
78621d Pinus, pine, l.s. of young female cone showing developing ovules
78626c Larix, larch, t.s. of needles (leaves)
78627d Larix, larch, l.s. of male cone
78628e Larix, larch, l.s. of female cone with ovules

No. 77900 Angiospermae, Cells and Tissues

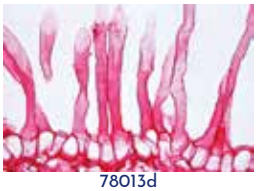
20 Microscope Slides
With depictured accompanying brochure

77901c Epidermal cells of Allium cepa (onion), flat mount shows typical plant cells with nuclei, cytoplasm and cell walls
77902d Mitosis, l.s. from Allium root tips showing all stages of plant mitosis carefully stained with iron-hematoxyline after Heidenhain
77903f Meiosis, t.s. of Lilium anthers showing different stages of meiotic divisions
77904d Stem apex and meristematic tissue of Asparagus l.s.
77905d Chloroplasts, w.m. of leaf of Elodea or Spinacea showing detail of large chloroplasts
77906c Chromoplasts, t.s. of root of Daucus carota (carrot)
77907c Aleurone grains, sec. of Ricinus endosperm
77908b Starch grains, different kinds of mixed species w.m.
77909d Fat, t.s. of endosperm of Corylus (hazel) stained for fat
77910d Inulin crystals, t.s. of tuber of Dahlia
77911d Acid tannic, t.s. bark of Rosa
77912b Calcium oxalate crystals in w.m. of dry Allium scale
77913d Annular and spiral vessels, isolated and w.m.
77914c Wood cells, macerated and w.m.
77915c Lactiferous vessels, l.s. stem of Euphorbia (spurge)
77916b Cork cells, t.s. bark of Quercus suber (oak) showing simple plant cell walls
77917b Scale-like stellate hairs, isolated w.m. from Elaeagnus (olive tree)
77918c Lysigenous oil glands, t.s. of the rind of Citrus fruit
77919b Parenchyme cells, t.s. of marrow of Sambucus niger (elderberry)
77920d Stone cells, shown in t.s. fruit of Pyrus communis (pear)

No. 78000 Angiospermae, Roots

15 Microscope Slides
With depictured accompanying brochure

78001d Allium cepa, onion, root tips, l.s. showing all stages of mitosis
78002c Zea mays, corn, t.s. through typical monocot root with central stele
78009c Iris, t.s. of typical monocot root
78018c Ranunculus, buttercup, t.s. of a typical dicot root for general study showing all structures very clearly
78003c Sarothamnus, broom, t.s. through woody root, special stained
78004c Taraxacum, dandelion, t.s. through tap root showing lactiferous duct.
78006d Vicia faba, bean, root nodule t.s. showing nitrogen fixing bacteria
78007d Ranunculus ficaria, tuber during fall season, t.s. showing starch
78011d Alnus, alder, t.s. of tuber showing symbiotic actinomycetes
78010d Neottia, orchid, t.s. of root showing endotrophic mycorrhiza
78008d Cuscuta, dodder, on host, t.s. showing haustorium
78013d Root hairs, w.m. of root tip showing root cap and root hairs, stained
78014d Zea mays, root tip, medium, l.s. showing central pith, cap and starch
78021c Monstera, aerial root t.s.
78027c Elodea, Canadian waterweed, t.s. of an aquatic root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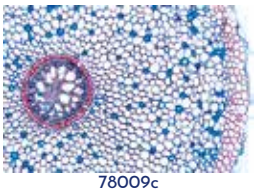
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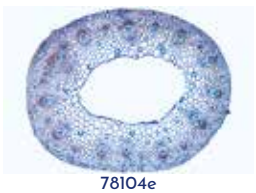
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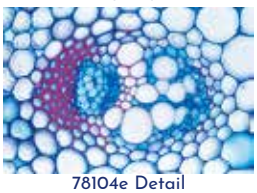
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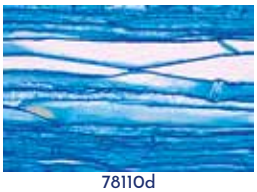
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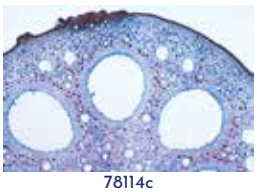
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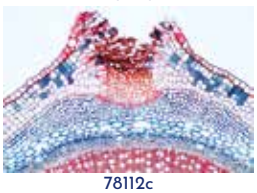
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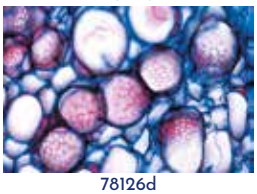
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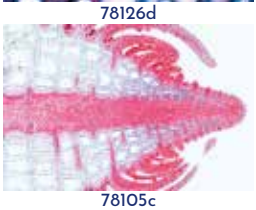
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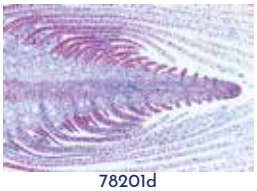
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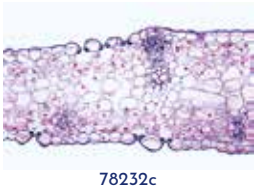
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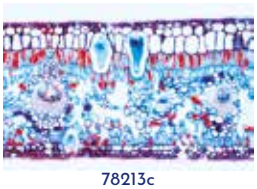
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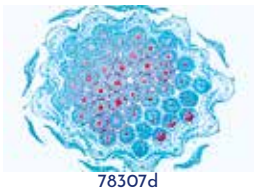
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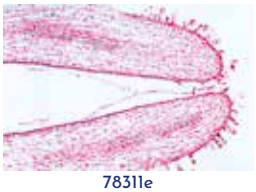
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78401d

No. 78100 Angiospermae, Stems

20 Microscope Slides
With depictured accompanying brochure

78101c Tulipa, t.s. of typical monocot stem showing scattered bundles
78102f Aristolochia, t.s. of one year stem with widely separate bundles, two years stem and older stem, all 3 in on slide
78103e Dicot and monocot stem, t.s. of Helianthus and Canna on one slide
78104e Dicot and monocot stem, t.s. of Ranunculus and Zea on one slide
78115e Tilia, lime, two t.s. of stems, first year growth and two years on one slide
78140d Fagus silvatica, beech, three sections of wood, t.s., r.l.s., t.l.s.
78170d Fraxinus excelsior, ash, three sections of wood, t.s., r.l.s., t.l.s.
78120c Quercus, oak, t.s. of stem showing cambium and bark
78112c Sambucus niger, elder, t.s. of bark showing lenticells
78107c Linum, flax, t.s. of stem showing husk fibres
78108b Linum, flax, isolated husk fibres, w.m.
78109d Ranunculus, l.s. of herbaceous stem showing all vascular elements in the bundles
78110d Cucurbita pepo, l.s. of stem with sieve tubes and sieve plates
78126d Sieve plates in top view, t.s. of Cucurbita stem showing large structures
78111c Lamium, t.s. of typical square stem showing collenchyma cells
78131c Secale, rye, t.s. of typical grass stem
78114c Nymphaea, water lily, t.s. of aquatic stem showing reduced vascular tissue and spicular cells
78105c Hippuris, t.s. of stem showing typical aquatic stem with large central pith
78118d Urtica, nettle, stinging hairs with poison ducts
78169c Solanum tuberosum, potato, t.s. of tuber with starch grains and cork

No. 78200 Angiospermae, Leaves

15 Microscope Slides
With depictured accompanying brochure

78201d Elodea, med. l.s. of stem tip showing apical meristem and origin of leaves
78212d Leaves, monocot and dicot, Zea and Ranunculus, t.s.
78206c Syringa, lilac, t.s. of typical dicot leaf showing numerous stomata, palisade layer and parenchyma
78232c Iris, typical monocot isobilateral leaf, t.s.
78246c Eucalyptus, a bifacial foliage leaf with schizogenous oil glands t.s.
78210d Fagus, beech, t.s. of sun and shade leaves on one slide
78203c Calluna, ling, t.s. of rolled leaf showing sunken stomata
78204c Nerium oleander, t.s. of leaf showing thick three layered epidermis, several palisade layers and sunken stomatal pits lined with protective epidermal hairs
78213c Ficus elastica, rubber plant, t.s. of leaf showing cystoliths
78227c Elodea, t.s. of leaf showing the simple structure of an aquatic leaf
78207c Tulipa, tulip, epidermis w.m. showing many stomata, doubly stained
78208d Aesculus hippocastanum, t.s. of leaf bud showing bud squama and embedded folded leaves
78205d Drosera, sundew, w.m. of leaf to show glandular hairs
78215d Nepenthes, t.s. of pitcher with glands
78241d Utricularia, bladderwort, w.m. of bladder

No. 78300 Angiospermae, Flowers

15 Microscope Slides
With depictured accompanying brochure

78304e Zea and Ranunculus, t.s. of monocot and dicot flowers
78303d Bellis perennis, l.s. of flower bud showing composite flower
78307d Taraxacum, dandelion, t.s. of flower bud, composite flower
78306d Papaver, poppy, t.s. of flower bud showing parietal placentation
78319d Cheirantus, wallflower, t.s. of flower bud with marginal-parietal placentation
78330d Solanum, potato, t.s. of ovary showing marginal-central placentation
78341d Prunus avium, cherry, flower bud with perigynous ovary l.s.
78342d Pyrus malus, apple, flower bud with hypogynous ovary l.s.
78316e Arum maculatum, flower but, t.s. showing ovary
78329d Lilium, ovary t.s., showing arrangement of ovules and all structures for general study
78313d Lilium, anther t.s. for general study showing pollen chambers and pollen grains
78344e Lilium, anther t.s., early prophase for general study
78311e Stigma of Eschscholtzia or Lilium,, w.m. showing penetrating pollen
78326b Pollen of Corylus, hazelnut, w.m.
78310c Pollen types, w.m. of a great variety of mixed pollen

No. 78400 Angiospermae, Fruits and Seeds

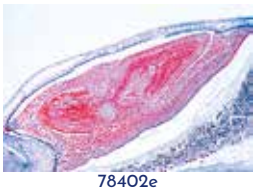
15 Microscope Slides
With depictured accompanying brochure

78401d Triticum, wheat, t.s. of kernel (grain) with endosperm and starch grains
78402e Triticum, wheat, l.s. of kernel showing early origin of embryo
78425d Zea mays, corn, young cob t.s.
78404d Phaseolus, bean, t.s. of pod showing developing seeds
78416d Solanum, potato, t.s. of ovary with developing embryos
78419d Helleborus, l.s. of an atrope ovary
78417d Capsella bursa pastoris, l.s. of ovary showing developing embryos in different stages
78421d Papaver, poppy, t.s. of ovary showing developing embryos
78411d Phoenix, date-palm, t.s. of seed
78413d Prunus domestica, plum, t.s. of young stony fruit
78445d Juglans regia, walnut, young drupe (stone fruit) t.s.
78423d Ribes, gooseberry, l.s. of young fruit
78442d Helianthus, sunflower, t.s. of an achene fruit
78443d Pyrus malus, apple, young pome t.s., a fleshy, many seeded fruit
78444d Fragaria, strawberry, young aggregate fruit l.s.

No. 6070 The Pine (Pinus sp.)

12 Microscope Slides
With depictured accompanying brochure

6071c Pine, root t.s.
6072c Pine, older woody stem (twig) t.s., with annular rings and resin ducts
6073f Pine, wood, three sections: transverse, radial, tangential
6074b Pine, wood cells, macerated and w.m.
6075e Pine, stem apex l.s., for meristematic tissue and leaf origin
6076c Pine, leaves (needles) t.s.
6077d Pine, male cone with pollen l.s.
6078b Pine, mature pollen grains, w.m. showing wings
6079d Pine, young female cone, l.s. shows ovules
6080f Pine, ovule with growing female gametophyte l.s.
6081f Pine, ovule with archegonia l.s.
6082e Pine, mature embryo with endosperm, t.s. with cotyledons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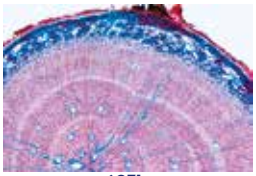
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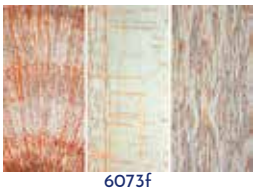
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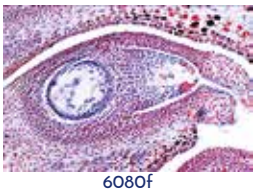
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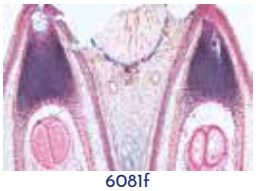
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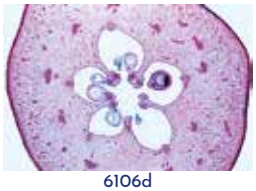
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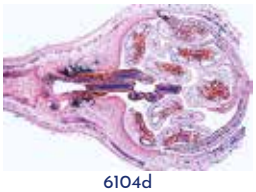
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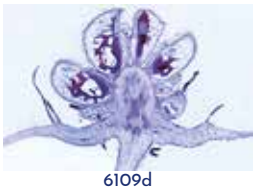
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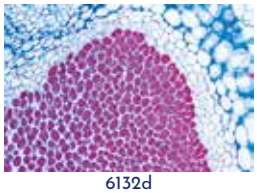
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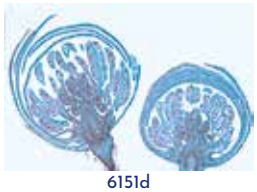
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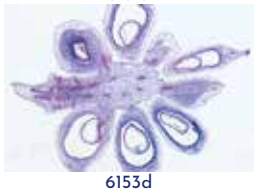
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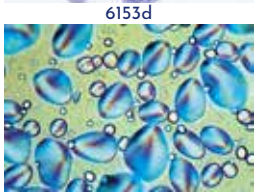
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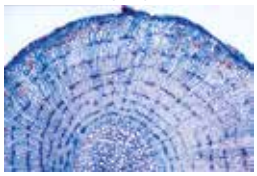
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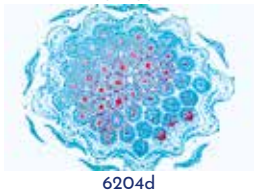
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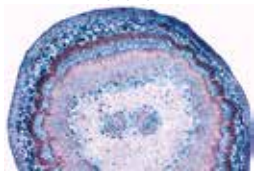
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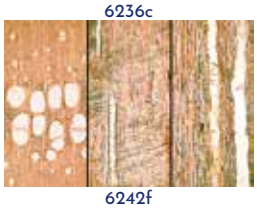
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No. 6050 The Tulip (Tulipa gesneriana)

8 Microscope Slides

6051d Tulip, flower bud t.s., shows floral diagram
6052b Tulip, pollen grains w.m.
6053d Tulip, ovary t.s. shows arrangement of ovules
6054c Tulip, young bulb t.s.
6055c Tulip, young bulb l.s.
6056c Tulip, stem t.s. shows scattered bundles
6057c Tulip, root t.s. shows central vascular cylinder
6058c Tulip, leaf t.s.

No. 6100 Flowers and Fruits of Rosaceae

12 Microscope Slides
With depictured accompanying brochure

6101d Cherry (Prunus avium), flower bud t.s.
6102d Cherry, flower bud l.s. showing perigynous ovary
6103d Cherry, young stony fruit l.s.
6104d Apple (Pyrus malus), flower l.s. showing hypogynous ovary
6105d Apple, young pome t.s., a fleshy many seeded fruit
6106d Apple, young pome l.s.
6107d Gooseberry (Ribes uva-crispa), flower l.s.
6108d Gooseberry, many seeded berry l.s.
6109d Raspberry (Rubus idaeus), flower showing many carpels l.s.
6110d Raspberry, young aggregate fruit l.s.
6111d Strawberry (Fragaria), flower l.s.
6112d Strawberry, young aggregate fruit l.s.

No. 6130 Fabaceae (Papilionaceae)

6 Microscope Slides
With depictured accompanying brochure

6131c Pea (Pisum sativum), stem and petiolar tendril t.s.
6132d Pea, root with root nodules and nitrogen fixing bacteria t.s.
6133d Bean (Phaseolus vulgaris), flower bud t.s.
6134d Bean, flower bud l.s.
6135d Bean, flower showing young fruit l.s.
6136d Bean, pod with pericarp and seed t.s.

No. 6150 Ranunculaceae

10 Microscope Slides
With depictured accompanying brochure

6151d Buttercup (Ranunculus sp.), flower l.s.
6152d Buttercup, fruit (achene) l.s.
6153d Buttercup, fruit (achene) t.s.
6154d Cowslip (Caltha sp.), fruit l.s.
6155c Buttercup (Ranunculus sp.), stem with open collateral bundles t.s.
6156c Buttercup, root with radial concentric vascular bundle t.s.
6157c Ranunculus ficaria, root nodules showing starch grains t.s.

No. 6170 Solanaceae

7 Microscope Slides
With depictured accompanying brochure

6171c Potato (Solanum tuberosum), tuber with starch grains t.s.
6172c Potato, stem t.s.
6173d Potato, young flower l.s.
6174d Potato, young flower t.s.
6175d Potato, fruit l.s.
6176d Tomato (Lycopersicum esculentum), young fruit t.s.
6177c Tobacco (Nicotiana tabacum), leaf t.s.

No. 6200 Compositae

8 Microscope Slides
With depictured accompanying brochure

6201c Dandelion (Taraxacum), taproot t.s.
6202c Dandelion, root with lactiferous vessels l.s.
6203d Dandelion, composite flower l.s.
6204d Dandelion, composite flower t.s.
6205d Dandelion, lingulate flower isolated and w.m.
6206d Dandelion, tubular flower isolated and w.m.
6207d Sunflower (Helianthus), seed (achene) t.s.
6208c Sunflower stem with open collateral bundles t.s.

No. 6230 Trees and Shrubs

12 Microscope Slides
With depictured accompanying brochure

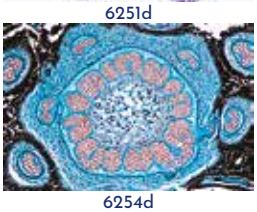
6231d Hazel (Corylus avellana), female flower l.s.
6232d Hazel, male flower l.s.
6233b Hazel, mature pollen grains w.m.
6234d Hazel, young fruit (nut) l.s.
6235d Willow (Salix alba), young aggregate fruit l.s.
6236c Horse chestnut (Aesculus hippocastanum), petiole t.s.
6237c Horse chestnut, leaf bud t.s., shows leaf origin
6238d Horse chestnut, flower bud l.s.
6239d Horse chestnut, young fruit t.s.
6240d Beech (Fagus silvatica), sun and shadow leaves t.s.
6241f Beech, wood sections: transverse, tangential, radial
6242f Oak (Quercus robur), wood sections: transverse, tangential, radial

No. 6250 Arrangement and Types of Vascular Bundles

13 Microscope Slides
With depictured accompanying brochure

6251d Protostele. Psilotum, stem t.s.
6252d Actinostele. Lycopodium, stem t.s.
6253d Polystele. Pteridium, rhizome t.s. showing concentric vascular bundles with inner xylem
6254d Ectophloic siphonostele. Osmunda, rhizome t.s.
6255d Amphiphloic siphonostele. Adiantum, rhizome t.s.
6256d Dictyostele. Polypodium, rhizome t.s.
6257d Eustele. Ranunculus, stem t.s., open collateral bundles
6258d Eustele. Lamium, stem t.s.
6259d Eustele. Cucurbita pepo, stem t.s., bicollateral bundles
6260d Atactostele. Zea mays, stem t.s., closed collateral bundles
6261d Arrangement of bundles similar to atactostele in a dicot plant. Podophyllum, stem t.s.
6262d Concentric vascular bundles with outer xylem. Convallaria, rhizome t.s.
6263d Radial concentric vascular bundle. Ranunculus, root t.s.


6251d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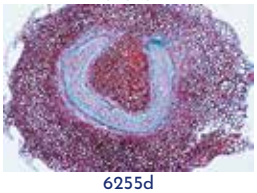
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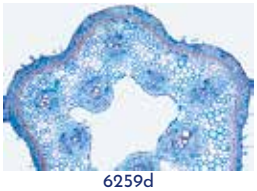
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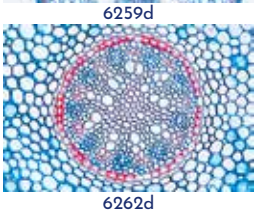
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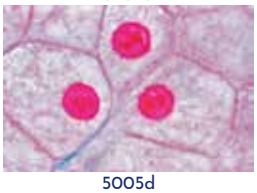
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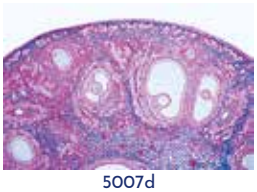
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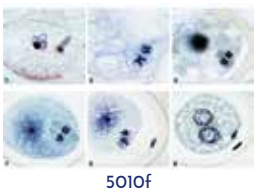
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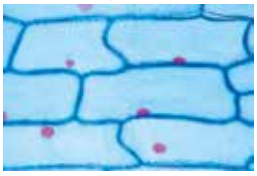
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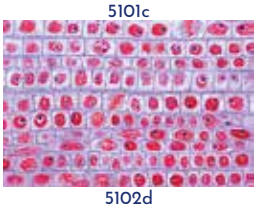
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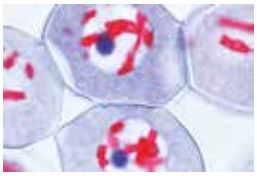
Cytology Embryology Genetics

No. 5000 The Animal Cell

12 selected Microscope Slides of animal cytology
With depictured accompanying brochure

5001c Squamous epithelium, isolated cells from human mouth. Nuclei and cytoplasm are shown
5002d Striated muscle l.s. showing nuclei, striations, myofibrils
5003d Compact bone and hyaline cartilage t.s., two sections on one slide for comparison
5004g Nerve fibres isolated, fixed and stained by osmic acid to show myeline sheaths and Ranvier's nodes
5005d Liver of Salamandra t.s., showing simple animal cells with cellular membranes, nuclei, and cytoplasm
5006f Kidney of mouse, t.s. vital stained with trypan-blue to demonstrate the storage of epithelial cells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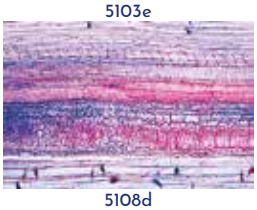
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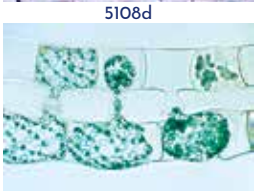
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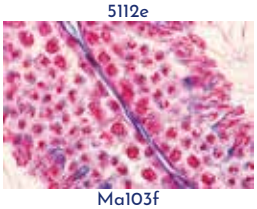
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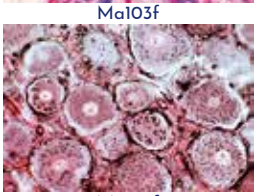
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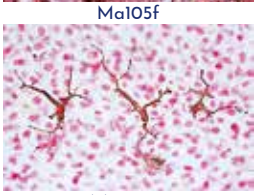
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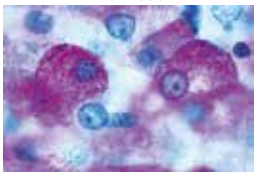
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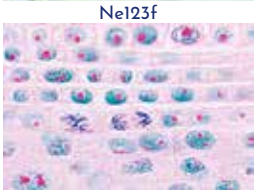
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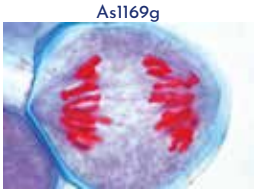
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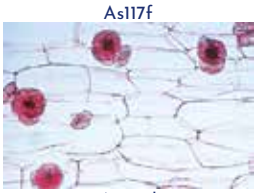

As135d

5007d Ovary of cat, t.s. showing primary, secondary, and Graafian follicles
5008d Testis of frog, t.s. showing spermatogenesis. Spermatogonia, spermatocytes, spermatids, and mature spermatozoa
5009e Salamandra larva, t.s. of skin and other organs selected to show cell division (mitosis) in various stages
5010f Uteri of Ascaris megalocephala, t.s. iron hematoxyline stained to show details of meiosis with chromosomes and nuclear spindles
5011h Salivary gland of Chironomus larva. Giant chromosomes showing large chromomeres. Stained for DNA after Feulgen
5012e Ova from Psammechinus (sea urchin). Unfertilized ova, fertilized ova, early cleavage stages

No. 5100 The Plant Cell

12 selected Microscope Slides of plant cytology
With depictured accompanying brochure

5101c Epidermis of Allium cepa (onion), w.m. showing simple plant cells with cell walls, nuclei and cytoplasm
5102d Root tips of Allium cepa l.s. showing cell division (mitosis) in all stages, clearly stained
5103e Pollen mother cells of Lilium. Prophase of first maturation division (meiosis) showing chromosomes
5104f Pollen mother cells of Lilium. Metaphase and anaphase of first maturation division (meiosis) showing nuclear spindles and contracted chromosomes
5105c Wood of Tilia macerated and w.m. showing wood cells, vessels and fibres
5106d Fruit of Pyrus (pear) t.s. showing stone cells (sclerenchyma cells)
5107c Tuber of Solanum (potato) t.s. shows cork and starch grains
5108d Cucurbita pepo (pumpkin) l.s. of stem showing vascular bundles with sieve tubes, spiral and annular vessels, sclerenchyma fibres
5109c Ricinus endosperm t.s. showing aleurone grains
5110d Anthers of Lilium (lily), t.s. showing pollen sacs and pollen grains
5111d Ovary of Lilium (lily), t.s. showing arrangement of ovules and embryosac
5112e Spirogyra showing conjugation stages and formation of zygotes

No. 79600 Animal, Human and Plant Cytology,

Special Set comprising 25 prepared microscope slides of best quality
With depictured accompanying brochure

Ma101d Simple animal cells in sec. of salamander liver showing nuclei, cell membranes and cytoplasm. For general study of the animal cell
Ma1023f Mitotic stages in smear of red bone marrow of mammal *
Ma103f Meiotic (maturation) stages in testis of mouse, sec. iron hematoxyline stained after Heidenhain
Ma1033f Meiotic (maturation) stages in sec. through testis of salamander, selected material showing large structures *
Ma1045f Barr bodies (human sex chromatin) in smear from female squamous epithelium *
Ma105f Mitochondria in thin sec. of kidney or liver, specially prepared and stained
Ma1055g Golgi apparatus in sec. of spinal ganglion or other organ *
Ma1058e Pigment cells in skin
Ma1061t Storage of glycogen in liver cells, sec. stained with carmine after Best or PAS reaction
Ma1063e Storage of fat in cells of costal cartilage, sec. stained with Sudan
Ma1065f Secretion of fat in mammary gland, section stained with Osmic acid
Ma1067f Phagocytosis in Kupffer's star cells of the liver, sec. of mammalian liver injected with trypan blue
In245f Giant chromosomes in smear of the salivary gland of Chironomus larva, carefully fixed and stained
Ne121f Ascaris megalocephala embryology. Sec. of uteri showing entrance and modification of sperm in ova
Ne122f Ascaris megalocephala embryology. Sec. of uteri showing maturation stages (meiosis). Polar bodies can be seen.
Ne123f Ascaris megalocephala embryology. Sec. of uteri showing ova with male and female pronuclei
Ne124f Ascaris megalocephala embryology. Sec. of uteri showing early cleavage stages (mitosis)
Ne125f Ascaris megalocephala embryology. Sec. of uteri showing later cleavage stages (mitosis)
As114d Mitosis, l.s. from Allium root tips showing all stages of plant mitosis carefully stained with iron-hematoxyline after Heidenhain
As1169g DNA and RNA, thin l.s. from Allium root tips, specially fixed and stained with methylgreen and pyronine to show DNA and RNA in different colours *
As119g Mitochondria, thin l.s. of Allium root tips specially fixed and stained to show the mitochondria clearly
As117f Meiosis, t.s. of Lilium anthers showing different stages of meiotic divisions
As131c Aleurone grains, sec. of Ricinus endosperm
As135d Inulin crystals, t.s. of tuber of Dahlia
As148d Chloroplasts, w.m. of leaf of Elodea or Spinacea showing detail of large chloroplasts

No. 5150 Mitosis and Meiosis Set I, 6 selected Microscope Slides

With depictured accompanying brochure

As114d Mitosis, l.s. from Allium root tips showing all stages of plant mitosis carefully stained with iron-hematoxyline after Heidenhain
Ma102f Mitotic stages in sec. through red bone marrow of mammal
Am146e Meiotic and mitotic stages in sec. of Salamandra testis. Many meiotic and mitotic stages can be observed
As5242f Lilium, anther t.s., microspore mother cells showing telophase of first and prophase of second (homeotypic) division
In245h Giant chromosomes, smear from salivary gland of Chironomus, carefully fixed and stained *
Ne122f Ascaris megalocephala embryology. Sec. of uteri showing maturation stages (meiosis). Polar bodies can be seen.

No. 5170 Mitosis and Meiosis Set II, 5 selected Microscope Slides

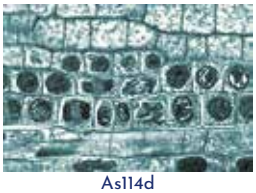
With depictured accompanying brochure

As116d Mitosis, l.s. from Vicia faba (bean) root tips showing all mitotic stages. Iron hematoxyline stained
As5242f Lilium, anther t.s., microspore mother cells showing telophase of first and prophase of second (homeotypic) division
Ma1021h Mitotic stages in sec. of whitefish blastula showing spindles *
In238g Spermatogenesis with meiotic and mitotic stages, sec. of testis of Carausius, grasshopper, carefully stained
Pr417g Paramecium, in fission, nuclei stained *

No. 76000 Set of Genetic Slides

25 Microscope Slides
With depictured accompanying brochure

76001d Allium, root tips, l.s. showing all stages of mitosis
76002e Eschscholtzia, stigma, w.m. showing penetrating pollen
76003e Lilium, microspore mother cells, first division, leptotene – zygotene stage
76004e Lilium, microspore mother cells, first division, diakinesis – telophase
76005f Lilium, microspore mother cells, second division, interkinesis – four cells stage
76006f Polytrichum, moss, archegonium, w.m.
76007e Polytrichum, moss, archegonium, l.s.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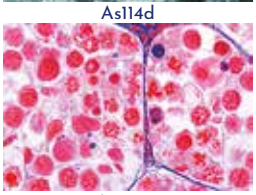
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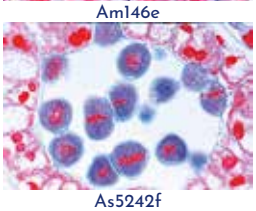
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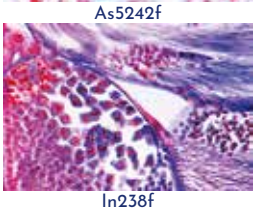
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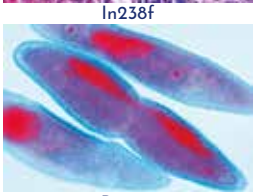
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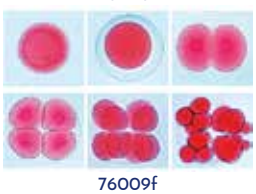
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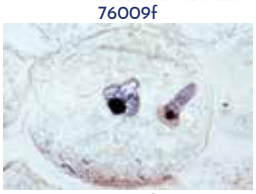
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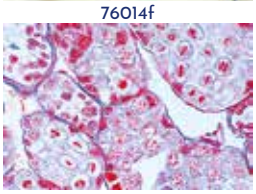
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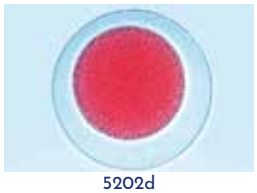
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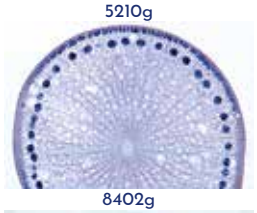
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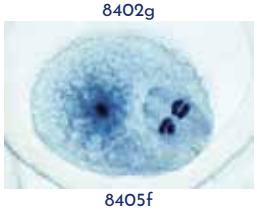
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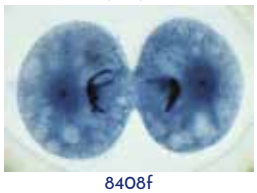
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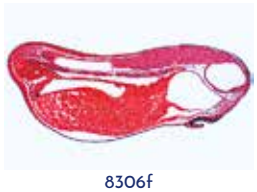
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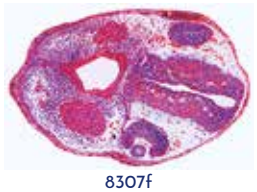
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8309e


8203g

76008d Spirogyra scalariform conjugation showing zygotes following conjugation
76009f Sea urchin, developing of eggs, w.m. of most stages up to pluteus in the same slide
76010h Giant chromosomes from salivary gland of Chironomus, squash preparation special stained for chromomeres
76011e Giant chromosomes from salivary gland of Chironomus, section
76012f Ascaris, fertilisation of eggs, sec.
76013f Ascaris, male and female pronuclei, sec.
76014f Ascaris, meiosis and early cleavage, sec.
76015e Testis of crayfish, sec. showing meiosis and spermatogenesis
76016d Testis of mouse, t.s. showing spermatogenesis
76017d Ovary of rabbit, l.s. showing follicles in various stages of development
76018f Embryology of fish, l.s. of embryo showing animal mitosis
76019i Chromosomes, human, female, of culture of peripheral blood
76020i Chromosomes, human, male, of culture of peripheral blood
76021f Drosophila genetics, adult wild type, w.m.
76022f Drosophila genetics, „barr eye" mutant, w.m.
76023f Drosophila genetics, „brown eye" mutant, w.m.
76024f Drosophila genetics, „vestigial wing" mutant, w.m.
76025f Drosophila genetics, „white eye" mutant, w.m.

No. 5200 The Sea Urchin Embryology (Psammechinus miliaris)

12 Microscope Slides
With depictured accompanying brochure

5201d Sea urchin, unfertilized eggs
5202d Sea urchin, fertilized eggs
5203g Sea urchin, two cells
5204g Sea urchin, four cells
5205g Sea urchin, eight cells
5206g Sea urchin, sixteen cells
5207g Sea urchin, thirty-two cells
5208d Sea urchin, morula
5209g Sea urchin, blastula
5210g Sea urchin, blastula, beginning gastrulation
5211g Sea urchin, blastula, progressive gastrulation
5212g Sea urchin, pluteus larva

No. 8400 The Ascaris megalocephala Embryology

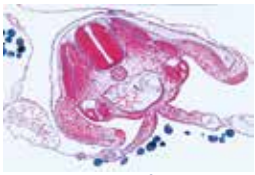
10 Microscope Slides
With depictured accompanying brochure

8401d Cell division in l.s. of Allium root tips, each slide showing all mitotic stages, carefully stained. For general study of mitosis
8402e Ascaris, primary germ cells in the growing zone of oviduct
8403f Ascaris, entrance of sperm in the oocytes
8404f Ascaris, first and second maturation divisions in oocytes I
8405f Ascaris, first and second maturation divisions in oocytes II
8406f Ascaris, mature oocytes with male and female pronuclei
8407f Ascaris, early cleavage stages
8408f Ascaris, later cleavage stages
8409d Ascaris, adult female roundworm, t.s. in region of gonads
8410d Ascaris, adult male roundworm, t.s. in region of gonads

No. 8300 The Frog Embryology (Rana sp.)

10 Microscope Slides
With depictured accompanying brochure

8301g Frog, morula, l.s. with macro- and micromeres
8302g Frog, blastula. l.s. shows blastocoel
8303g Frog, gastrula, sagittal l.s. shows germ layers, dorsal lip, yolk plug
8304g Frog, neurula, t.s. showing primordium of notochord, entoderm with primary intestinal cavity
8305g Frog, early tail bud stage, t.s. with neural tube, notochord
8306f Frog, early tail bud stage, sagittal l.s. with primordium of brain, intestine, segmentation of mesoderm
8307f Frog, hatching stage, t.s. through region of head or gills
8308f Frog, hatching stage, t.s. through region of midbody
8309e Frog, young tadpole, t.s. through head
8310e Frog, young tadpole, t.s. through thorax or abdomen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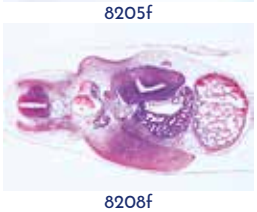
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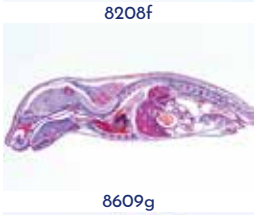
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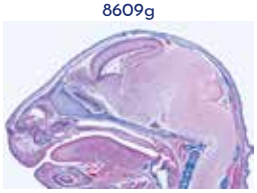
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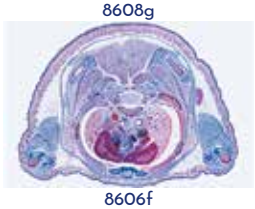
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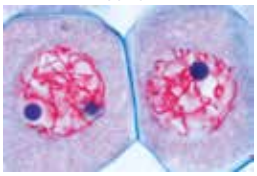
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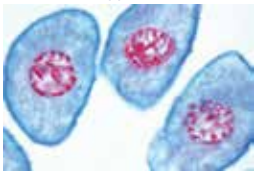
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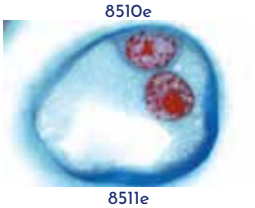
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No. 8200 The Chicken Embryology (Gallus domesticus)

10 Microscope Slides
With depictured accompanying brochure

8201f Chicken, 24 hour, t.s. with neural groove, notochord, germ layers
8202f Chicken, 36 hour, t.s. with neural tube, differentiation of mesoderm
8203g Chicken, 48 hour, l.s. with differentiation of mesoderm and ectoderm
8204f Chicken, 3 day, t.s. through body showing amnion and serosa. myotom, primordium of kidney, aorta, extraembryonic vessels
8205f Chicken, 3 day, t.s. of head with primordium of brain, eyes and heart
8206g Chicken, 3-4 day, horizontal section of entire specimen shows primordia of various organs, gill slits
8207f Chicken, 4-5 day, t.s. through region of head with brain, gill arches
8208f Chicken, 4-5 day, t.s. through region of heart shows heart, lungs, vertebrae, spinal cord
8209g Chicken, 8 day, sagittal l.s. through entire specimen showing various embryonic organs
8210f Chicken, feather development, sec. through wings in different stages of the development

No. 8600 The Pig Embryology (Sus scrofa)

10 Microscope Slides
With depictured accompanying brochure

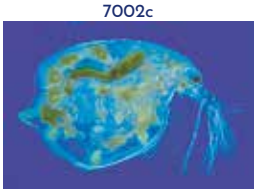
8601g Pig embryo, 4-6 mm, typical t.s.
8602g Pig embryo, 7-9 mm, sagittal l.s.
8603f Pig embryo, 11-12 mm, typical t.s. through region of head
8604f Pig embryo, 11-12 mm, typical t.s. region of abdomen
8605f Pig embryo, 15 mm, typical t.s. through region of head
8606f Pig embryo, 15 mm, typical t.s. through region of thorax
8607f Pig embryo, 15 mm, typical t.s. through region of abdomen
8608g Pig embryo, 15 mm, sagittal l.s.
8609g Pig embryo, 20-25 mm, sagittal l.s.
8610g Pig embryo, 20-25 mm, frontal l.s.

No. 8500 Development of the Microspore Mother Cells of Lilium candidum

12 Microscope Slides
With depictured accompanying brochure

8501e Leptotene, the chromosomes appear as fine threads
8502e Zygotene, the homologous chromosomes associate in pairs. The chromosomes appear as strings of beads
8503e Pachytene, complete pairing of the chromosomes


7002c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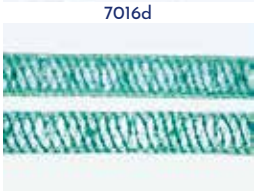
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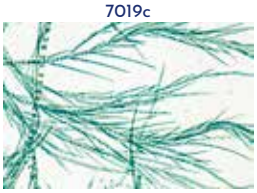
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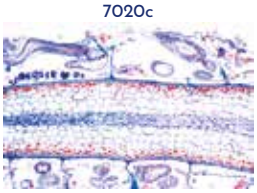
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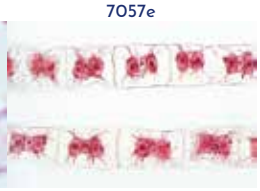
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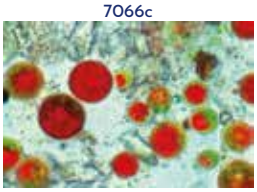
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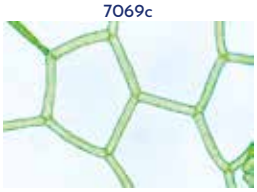

7070d


7073d

8504e Diplotene, shortening of the chromosomes by contraction. Interchange of chromatin between the maternal and paternal chromosomes (crossing over)
8505e Diakinesis, further contraction of the bivalents, the nuclear membrane disappears
8506f Metaphase and anaphase of the first (heterotypic) division, showing spindle threads. Two haploid sets of chromosomes are separated
8507f Telophase of the first and prophase of the second division
8508f Metaphase and anaphase of the second (homeotypic) division, two mitotic figures are present
8509f Pollen tetrads, four nuclei are formed after the second division, each bearing the haploid number of chromosomes. Formation of cell walls
8510e Uninucleate microspores after separation of daughter cells
8511e Mature two-nucleate pollen grains at the time of shedding. Each pollen grain possesses a tube cell and a generative cell
8512b Mature pollen grains, w.m. to show structure of the cell walls

Ecology and Environment

No. 7000 The Microscopic Life in the Water, Part I

25 Microscope Slides
With depictured accompanying brochure

7001e Amoeba proteus, ameba
7002c Ceratium hirundinella, dinoflagellates
7003c Euglena, green flagellate with eyespot
7004d Radiolaria, marine rhizopods
7005c Paramecium, nuclei stained
7006d Stylonychia, a common ciliate
7007c Spongilla, fresh water sponge, w.m. of isolated spicules
7008d Hydra, w.m. or section
7009d Rotatoria, rotifers, mixed species w.m.
7010c Daphnia, water flea, a phyllopod w.m.
7011c Cyclops, a fresh water copepod w.m.
7012d Chironomus, gnat, larva w.m.
7013d Putrefaction causing bacteria from hay infusions, smear
7014c Oscillatoria, a filamentous blue green alga
7015c Diatomeae, diatoms, strewn slide of mixed species
7016d Desmidiaceae, desmids, strewn slide of mixed species
7017c Spirogyra, green alga with spiral chloroplasts, large species w.m.
7018d Eudorina, small colonies within gelatinous sheaths
7019c Cladophora, green alga, branched filaments with multinucleate cells
7020c Draparnaldia, main filaments and branchings
7021c Microcystis, irregular colonies, causing "blooming" in stagnant water
7022c Ulothrix, filamentous green alga with girdle-shaped chloroplasts w.m.
7023d Oedogonium, vegetative filaments w.m.
7024e Volvox, spherical green alga with daughter colonies and sexual stages w.m.
7025d Mesothaenium, rod-shaped desmids w.m.

No. 7050 The Microscopic Life in the Water, Part II

Supplementary to Set No. 7000
25 Microscope Slides
With depictured accompanying brochure

7051d Arcella, shelled ameba w.m.
7052e Vorticella, a stalked ciliate w.m.
7053e Colpidium, a common holotrich ciliate w.m.
7054d Spongilla, fresh water sponge, t.s. showing channels
7055c Planaria, fresh water flat worm, t.s. of body showing the internal organs
7056d Tubifex, a fresh water oligochaete w.m.
7057e Plumatella, moss animal, section of colony
7058c Cyclops, nauplius larva w.m.
7059d Culex pipiens, common mosquito, larva w.m.
7060d Sphaerotilus natans, bacteria from putrid water forming chains, smear
7061c Nostoc, blue green alga with heterocysts w.m.
7062c Anabaena, filamentous blue green alga w.m.
7063c Gloeocapsa, small colonies within sheaths w.m.
7064f Rivularia, blue green alga with basal heterocysts w.m.
7065c Beggiatoa, a colourless alga showing lack of chlorophyll
7066c Zygnema, filamentous alga with stellate chloroplasts w.m.
7067d Cosmarium, desmid showing the typical isthmus w.m.
7068c Chlamydomonas, biflagellate alga w.m.
7069c Haematococcus, unicellular red algae w.m.
7070f Hydrodictyon, water-net w.m.
7071c Chlorella, unicellular green alga w.m.
7072d Dynobrion, a golden alga forming colonies w.m.
7073d Mixed plankton, strewn slide No. I
7074d Mixed plankton, strewn slide No. II
7075d Mixed plankton, strewn slide No. III

No. 4510 Our Environment Part I. The Wood.

Consequences of Environmental Pollution
20 Microscope Slides
With depictured accompanying brochure

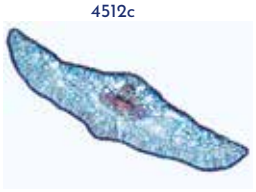
4511c Pine (Pinus), healthy leaves, t.s.
4512c Pine (Pinus) leaves damaged by acid rain, t.s.
4513c Fir (Abies), healthy leaves, t.s.
4514c Fir (Abies), stem tip damaged by acid rain t.s.
4515c Beech (Fagus), healthy leaves t.s.
4516c Beech (Fagus), t.s. of leaves with destroyed epidermis and chloroplasts
4517d Rhytisma acerinum, tar spot of maples, consequence of single-crop farming
4518d Early leaf fall, caused by thawing salt
4519d Healthy lichen, indicator of clean air, t.s. of thallus showing fungus and embedded algae
4520d Damaged lichen, caused by air pollution, t.s. showing destroyed structures
4521c Healthy wood of beech, t.s.
4522d Wood destroyed by fungus, t.s.
4523d Polyporus, wood rot fungus, fruiting body t.s.
4524d Root nodules of Alnus, t.s. with symbiotic bacteria (actinomyces)
4525d Spruce beetle (Cryphalus picea), larva t.s.
4526c Wood with normal annual rings, t.s.
4527c Wood with anomalous narrow annual rings caused by drought, t.s.
4528d Bark of spruce with larval galleries of spruce beetle, t.s.
4529d Pineapple-like gall on spruce caused by various plant lice, t.s.
4530d Gall nut on oak caused by insects, t.s.

No. 4540 Our Environment Part II. The Water Pollution.

Problems and Results
20 Microscope Slides
With depictured accompanying brochure

4541d Intestinal bacteria (Escherichia coli) from putrid water
4542e Putrefactive bacteria (Spirillum) from sludge poor in oxygen
4543d Putrefactive bacteria (Sphaerotilus) bacteria, forming long chains with sheaths
4544d Sludge bacteria (Methanobacterium) causing sewer gas
4545d Sulphur bacteria (Thiocystis)
4546c Wasserbluthe (Microcystis), blue-green alga „blooming" in stagnant water
4547c Anabaena, blue green algae, in eutrophic water
4548c Spirogyra, filamentous green alga in nutrient-rich water


4512c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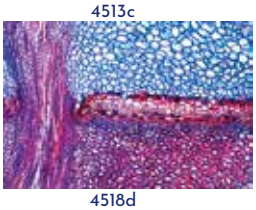
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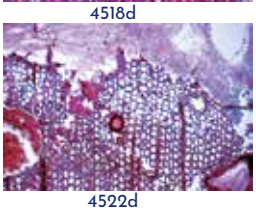
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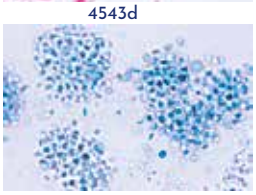
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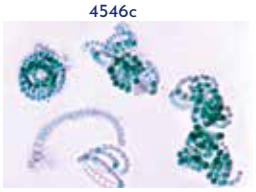
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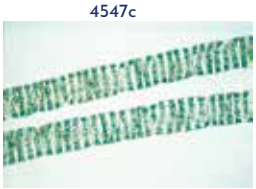
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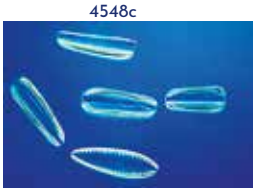
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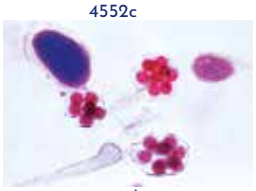
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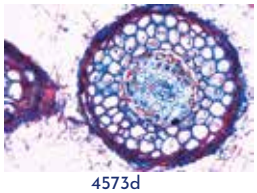
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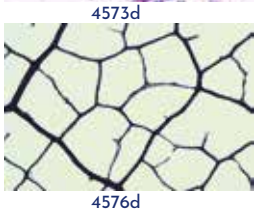
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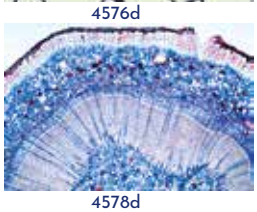
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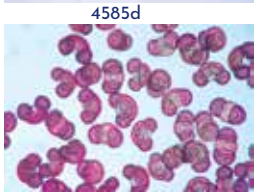
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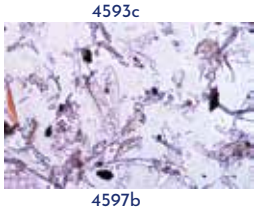
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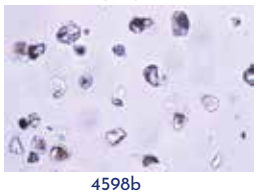
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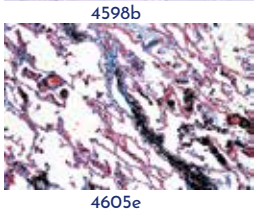
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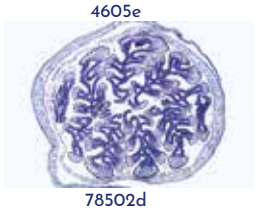
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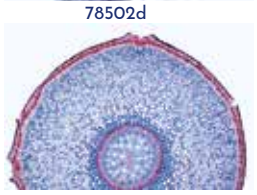
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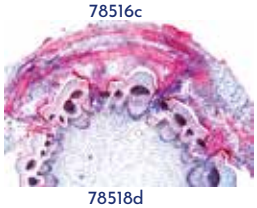
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4549d Spirulina, corkscrew-shaped algae occurring in bitter seas
4550c Chlamydomonas, one-celled green alga in eutrophic water
4551c Cladophora, green alga with branching filaments from moderately polluted water
4552c Diatoms, mixed algae from scarcely polluted water
4553c Euglena, common green flagellates occurring in stagnant eutrophic water
4554d Ciliates, different species from nutrient-rich water
4555d Rotifers (Rotatoria), small animals from putrid water
4556d Tubifex, fresh water oligochaete, living in the sludge
4557d Carchesium, bell-shaped stalked ciliate from moderately polluted water
4558d Water mold (Saprolegnia), harmful to plants and animals
4559d Skin of fish injured by chemicals, t.s.
4560d Skin ulcer of an amphibian, t.s.

No. 4570 Our Environment Part III.

Life in the Soil

17 Microscope Slides
With depictured accompanying brochure

4571d Acidophile soil bacteria, solution of heavy metals
4572d Nitrite bacteria, forming harmful nitrogenous substances
4573d Root of beech with ectotrophic mycorrhiza, t.s.
4574d Root of birch with partly endotrophic mycorrhiza, t.s.
4575d Root of lupin with symbiotic nitrogen fixing bacteria
4576d Netted venation, portion of rotted deciduous leaf
4577c Charlock (Sinapis), t.s. of stem. Green manure plant
4578d Soil bacteria (Bacillus megaterium), smear
4579d Hyphae of root fungi, t.s.
4580d Lichen, indicator of clean air
4581c Mushroom (Xerocomus), mycelium
4582c Root of willow (Salix), planting protecting against erosion
4583c Earthworm (Lumbricus) t.s., causing soil improvement
4584d Springtails (Collembola), w.m.
4585d Mite from forest soil, w.m.
4586c Constituents of humous soil
4587c Constituents of peaty soil

No. 4590 Our Environment Part IV.

Air Pollution and Allergens

15 Microscope Slides
With depictured accompanying brochure

4591c Pollen grains of different kinds of grass
4592c Pollen grains of different deciduous trees
4593c Pollen grains of different conifers
4594b Mixed house dust
4595c Dust mite from a living room
4596b Spores of different fungi
4597b Wood powder
4598b Asbestos powder (cancerogenous)
4599b Talcum powder
4600b Crystals of washing-powder
4601b Polyamide fibres
4602b Nylon fibres
4603e Mucous membrane of human nose, t.s.
4604e Healthy human lung, t.s.
4605e Human lung injured with dust particles, t.s.

No. 78500 Adaptation of Plants to Manner of Life and Environment

50 Microscope Slides
With depictured accompanying brochure

Adaptation to temperature

78501c Ilex, t.s. of leaf showing thick cuticula
78502d Aesculus, t.s. of leaf bud showing bud squama
78503c Fern, t.s. of subterraneous rhizome
78504c Beta, beet, t.s. of a subterraneous storage root
78505c Solanum, potato, t.s. of subterraneous stem tuber storing starch
78506c Allium, l.s. of a subterraneous bulb
78507d Ranunculus ficaria, t.s. of subterraneous tuber
78508c Taraxacum, dandelion, t.s. of tap root
78509d Dentaria, l.s. of germinal bulb

Adaptation for gaining light

78510c Galium, w.m. of leaf showing climbing hairs
78511d Cucurbita, l.s. of stem showing sieve tubes and sieve plates
78512c Viscum album, t.s. of leaf
78513d Lemna, duckweed, root tip and cap (calyptra) w.m.
78514f Dischidia, pitcher plant, t.s. of pitcher leaf with root

Adaptation to unusual modes of nutrition

78515c Rhiziphora, mangrove, t.s. of adventitious root
78516c Philodendron (Araceae), t.s. of aerial root
78517c Liana, climbing plant, t.s. of root
78518d Cuscuta, dodder, t.s. of host showing haustorium
78519d Viscum album, mistletoe, l.s. showing parasitic root in host
78520d Orchid, t.s. of root showing endotrophic mycorrhiza
78521d Alnus, alder, t.s. of tuber showing actinomyces in symbiosis
78522d Drosera, sundew, w.m. of leaf showing glandular hairs
78523c Drosera, sundew, t.s. of leaf showing glandular hairs
78524c Pinguicula, t.s. of leaf showing gland cells
78525d Utricularia, bladderwort, w.m. of bladder
78526d Nepenthes, t.s. of pitcher showing digestive glands
78527c Dionaea, Venus flytrap, t.s. of leaf

Adaptation to water: Hydrophytic plants

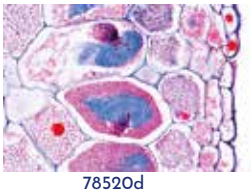
78528d Elodea, w.m. of a submersed leaf without stomata
78529c Elodea, t.s. of a simple hydrophytic leaf
78530c Nymphaea, t.s. of aquatic stem showing air vascular system
78531c Hippuris, t.s. of stem showing regular placed air chambers
78532c Nymphaea, t.s. of leaf showing air chambers, a typical floating leaf
78533c Potamogeton, pondweed, t.s. of leaf
78534c Taxodium (Cypressacea), t.s. of root for respiration
78535c Potamogeton, t.s. of an aquatic stem showing air chambers

Adaptation to damp habitats: Hygrophytic plants

78536c Ruellia, t.s. of leaf showing raised stomata
78537c Polypodium (fern), t.s. of leaf showing modification of epidermis (water pit)
78538d Urtica, nettle, w.m. of stinging hairs (one cellular)
78539c Myosotis palustris, w.m. of leaf showing hairs for water reservoir

Adaptation to dry habitats: Xerophytic plants

78540c Hedera, t.s. of an evergreen leaf
78541c Nerium, oleander, t.s. of leaf showing sunken stomata
78542c Dune grass, t.s. of rolled leaf
78543c Verbascum, t.s. of leaf showing multicellular branched hairs
78544b Elaeagnus, scale-like stellate hairs of leaf or stem, w.m.
78545c Orchid, epiphytic, t.s. of aerial root
78546d Aloe, t.s. of succulent leaf
78547c Sedum, t.s. of succulent leaf
78548c Pelargonium, t.s. of succulent root
78549c Cactus, t.s. of succulent stem
78550c Cactus, t.s. of succulent leaf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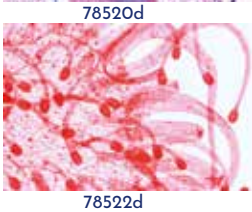
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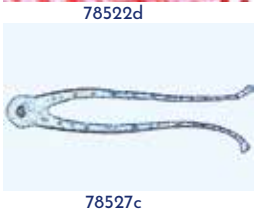
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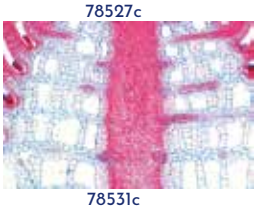
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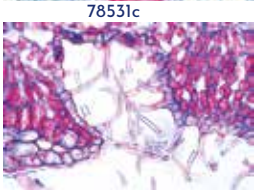
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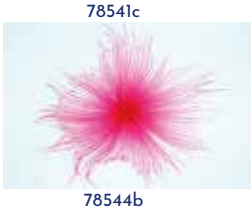
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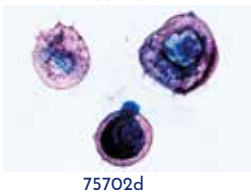
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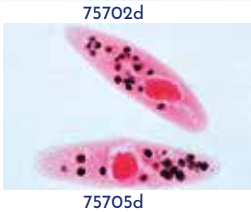
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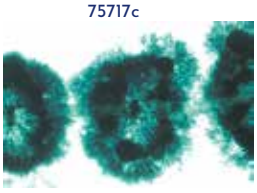
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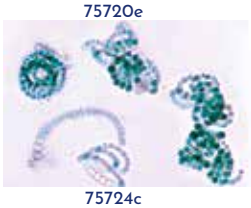
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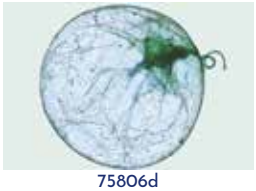
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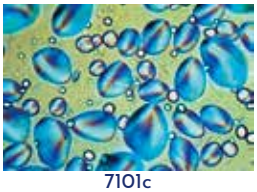
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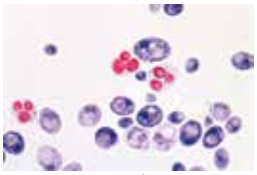
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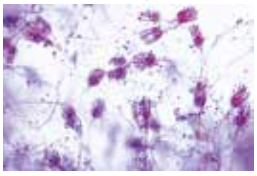
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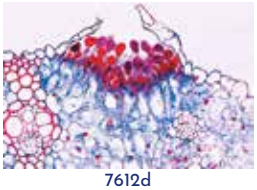
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No. 75700 Micro Organisms of the Fresh Water

25 Microscope Slides
With depictured accompanying brochure

75701e Amoeba proteus, w.m.
75702d Arcella shells, w.m.
75703c Euglena viridis, w.m.
75704c Ceratium hirundinella, w.m.
75705d Paramecium, w.m.
75706e Vorticella, freshwater, w.m.
75707d Plankton showing Difflugia and Rotatoria
75708e Hydra, w.m. (Pelmatohydra)
75709d Freshwater sponge, w.m. of gemmulae
75710c Daphnia, w.m. of freshwater flea
75711c Cyclops, w.m.
75712f Pandorina morum, colonies of green algae, w.m.
75713e Volvox, w.m.
75714c Chlamydomonas, green algae, w.m.
75715f Hydrodiction, water net, w.m.
75716c Cladophora, branching filaments, w.m.
75717c Oedogonium, w.m.
75718d Planktonic algae, Eudorina, Pediastrum, Microcystis
75719d Vegetative filaments, Spirogyra, Zygnema, Mougeotia
75720e Desmids, various species
75721d Diatoms stained for protoplasmatic structure
75722d Batrachospermum, w.m. red alga
75723c Chroococcus, w.m.
75724c Anabaena, w.m.
75725d Bacteria from putrefaction smear

No. 75800 Micro Organisms of the Sea Water

15 Microscope Slides
With depictured accompanying brochure

75801d Silicoflagellatae
75802d Radiolaria, strewn slide of cleaned shells
75803d Foraminifera, strewn slide of cleaned shells
75804d Peridinium, marine dinoflagellates
75805e Vorticella, marine ciliates
75806d Noctiluca, a luminescent flagellate
75807d Marine plankton, mixed species
75808g Pluteus larvae of sea urchin
75809e Eggs of sea urchin, different phases of development
75810d Sagitta, transparent marine worm, w.m.
75811d Caprella, a marine amphipode, w.m.
75812e Zoea, development stage of a marine decapode crab, w.m.
75813g Obelia, w.m. of medusa
75814d Campanularia, w.m. of colony
75815d Hydractinia, w.m. or section

Technology Vocational Training Miscellaneous

No. 7100 Vegetable-based Staple Foods, Luxury, Foods and Spices

25 Microscope Slides
With depictured accompanying brochure

7101c Potato tuber t.s.
7102b Wheat flour
7103b Rye flour
7104b Rice starch
7105b Potato starch
7106d Bean, pod with pericarp and seed t.s.
7107b Yeast
7108d Fresh milk, stained for fat
7109d Sour milk, stained for bacteria
7110d Bacteria from cheese
7111c Mold in spoiled foodstuffs
7112c Coffee bean t.s.
7113b Silvery pellicle of coffee bean
7114c Ceylon tea, leaves t.s.
7115b Paprika, ground
7116b Black pepper, ground
7117b Cocoa powder
7118c Nutmeg t.s.
7119b Mustard
7120b Ginger, ground
7121c Carrot, storage root t.s.
7122b Soya meal
7123b Corn starch
7124c Tobacco, leaves t.s.
7125d Hazelnut, t.s. stained for fat

No. 7600 Flour and Starch, Spices and Ingredients, Impurities and Adulterations

25 Microscope Slides
With depictured accompanying brochure

7601b Wheat flour
7602b Rye flour
7603b Oat meal
7604b Potato starch
7605b Rice starch
7606b Wheat bran
7607b Wheat flour adulterated with chalk
7608b Rye flour spoiled with moths
7609b Corn flour spoiled with spores of corn smut (Ustilago)
7610b Spoiled wheat flour showing corroded starch grains
7611d Wheat grain, t.s. for general study showing embryo and endosperm
7612d Wheat rust (Puccinia graminis), uredinia on wheat leaf t.s.
7613d Rye grain, t.s. for general study showing embryo and endosperm
7614d Mites from meal (Tyroglyphus farinae)
7615c Ergot (Claviceps purpurea), t.s. of sclerotium
7616c Ingredients of rye bread
7617d Bacteria from bread, stained
7618b Yeast (Saccharomyces cerevisiae), budding cells
7619c Fruit rind of lemon, t.s. shows oil glands
7620d Milk, stained for fat
7621c Almond, t.s. of endosperm
7622c Coconut, t.s. of endosperm
7623b Cacao powder
7624b Cinnamon, ground
7625b Aniseed, ground

No. 7200 Wood Sections

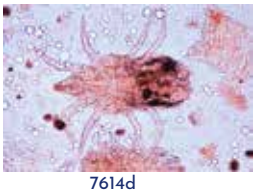
Each slide comprises three sections: transverse, radial and tangential section.
25 Microscope Slides
With depictured accompanying brochure

7201f Maple. Acer platanoides
7202f Apple. Pyrus malus
7203f Birch. Betula pendula
7204f Pear. Pyrus communis
7205f Mountain ash. Sorbus aucuparia
7206f Yew. Taxus baccata
7207f Oak. Quercus robur
7208f Alder. Alnus glutinosa
7209f Ash. Fraxinus excelsior
7210f Spruce. Picea excelsa
7211f White beech. Carpinus betulus
7212f Pine. Pinus silvestris
7213f Cherry. Prunus avium
7214f Larch. Larix decidua
7215f Lime. Tilia platyphylla
7216f Walnut. Juglans regia
7217f Poplar. Populus alba
7218f Plane. Platanus orientalis
7219f Plum. Prunus domestica
7220f Black locust. Robinia pseudacacia
7221f Chestnut. Aesculus hippocastanum
7222f Beech. Fagus silvatica
7223f Elm. Ulmus scabra
7224f Willow. Salix alba
7225f Fir. Abies alba

No. 7450 Textile Fibres and Fabric

25 Microscope Slides
With depictured accompanying brochure

7451b Angora wool
7452b Camel-hair
7453b Merino wool
7454b Mohair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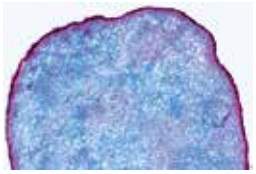
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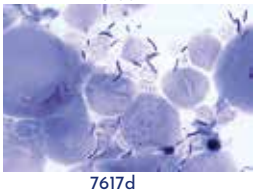
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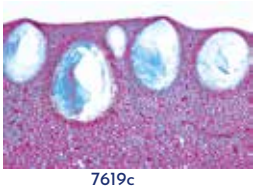
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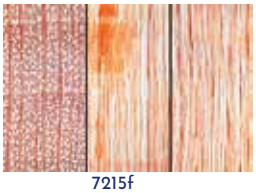
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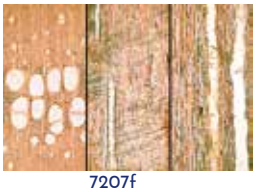
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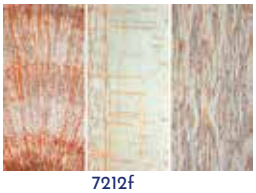
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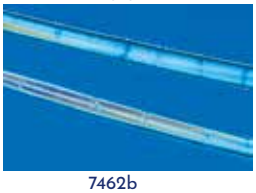
7461b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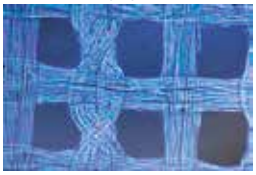
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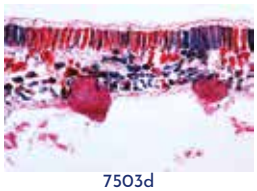
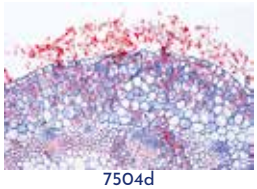
7475b


7503d

7455b European wool
7456b Australian wool
7457b Cocoon silk, raw
7458b Organsin silk
7459b Tussah silk
7460b Egyptian cotton
7461b Mercerized cotton
7462b Linen (flax)
7463b Jute
7464b Italian hemp
7465b Ramie
7466b Cellulose
7467b Cuprama rayon
7468b Casein fibre
7469b PVC fibre
7470b Acetate rayon
7471b Viscose rayon
7472b Bemberg rayon
7473b Perlon
7474b Gauze
7475b Nylon fabric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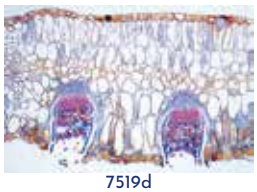
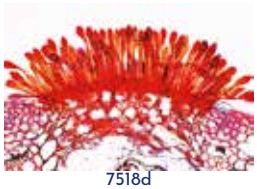
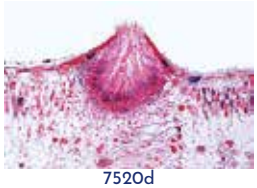

7519d

No. 7500 Agriculture (Parasitic Fungi) Basic Set

20 Microscope Slides
With depictured accompanying brochure


7518d

7501c Plasmodiophora brassicae, clubroot, host cells with spores
7502d Synchytrium endobioticum, potato black scab, infected tissue
7503d Plasmopara viticola, downy mildew of grapes, infected leaf
7504d Peronospora parasitica, downy mildew of crucifers, conidia
7505d Albugo candida (Cystopus), white rust of crucifers, conidia and sexual stages on Capsella t.s.
7506c Rhizopus or Mucor, mold, mycelium and sporangia w.m.
7507d Exoascus pruni (Taphrina), plum pockets, sec. with asci
7508d Erysiphe pannosa, rose mildew, infected leaf with conidia t.s.
7509d Uncinula necator (Oidium Tuckeri), grape mildew, t.s.
7510d Sphaerotheca mors uvae, gooseberry mildew, perithecia t.s.
7511c Claviceps purpurea, ergot, sclerotium t.s.
7512c Sclerotinia fructigena (Monilia), diseased fruit with conidia t.s.
7513c Rhytisma acerinum, black spot of maple, t.s. with sclerotia
7514c Venturia pirinum (Fusicladium), pear scab, t.s. with conidia
7515d Ustilago zeae, corn smut, t.s. of pustule on host tissue
7516c Botrytis allii, grey mold of onions. t.s.
7517d Puccinia graminis, uredinia on wheat leaf cause red rust t.s.
7518d Puccinia graminis, telia on wheat causing black rust t.s.
7519d Puccinia graminis, aecia or pycnidia on barberry leaf t.s.
7520d Gymnosporangium sabinae, pear rust, pycnidia on leaf t.s.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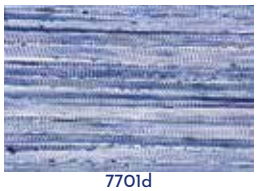
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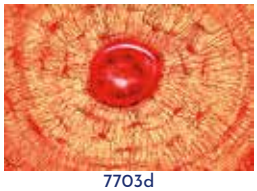
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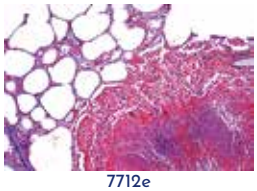
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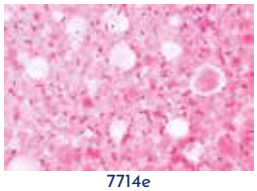
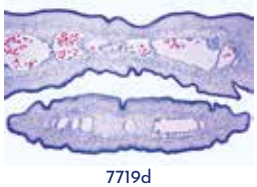
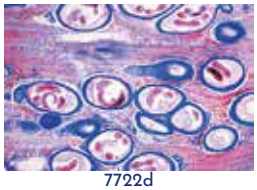

7714e

No. 7700 Tissues and Organs of Domestic Animals, Parasites and Pathogenic Agents

25 Microscope Slides
With depictured accompanying brochure

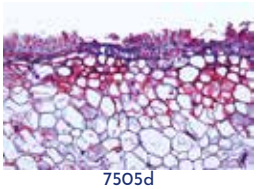
7701d Striated (skeletal) muscle of cow l.s.
7702d Tendon of cow, l.s. showing dense connective tissue
7703d Compact bone of cow t.s. stained for cells and bone canaliculi
7704c Hyaline cartilage from rib of calf t.s.
7705d Adipose tissue from pig, stained for fat
7706d Liver of pig, t.s. showing liver cells and connective tissue
7707d Duodenum of pig t.s. showing the general construction of intestine
7708d Udder (mammary gland) of cow t.s.
7709c Lung of cow t.s.
7710b Bristles of pig w.m.


7719d


7722d

7711d Skin of pig, l.s. of hair follicles
7712e Tuberculous lung of cow t.s. showing the diseased tissue
7713t Bacillus anthracis, wool sorters disease, smear stained for bacteria
7714e Bacterium erysipelatos, causing red murrain, smear stained for bacteria
7715f Trypanosoma equiperdum, causing dourine in horses, blood smear showing parasites
7716d Eimeria stiedae, coccidiosis, sec. of infected rabbit liver
7717e Dicrocoelium lanceolatum, sheep liver fluke, adult stained and w.m.
7718c Fasciola hepatica, beef liver fluke, ova w.m.
7719d Taenia, tapeworm, proglottids t.s.
7720f Echinococcus granulosus, dog tapeworm, scolices from cyst
7721d Ascaris megalocephala, roundworm of horses, adult female t.s. through midbody
7722d Trichinella spiralis, encysted larvae in muscle l.s.
7723d Sausage t.s.
7724b Paprika, ground
7725b Black pepper, ground


7506c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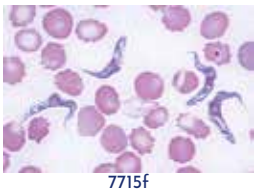
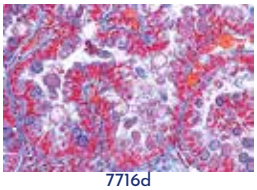

7715f

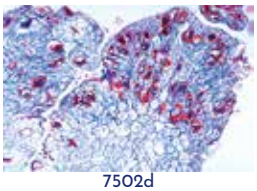
No. 7550 Agriculture, Enlarged Basic Set

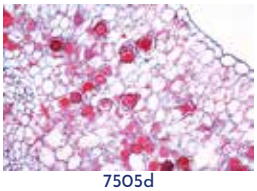
25 microscope slides
With depictured accompanying brochure


7716d

7501c Plasmodiophora brassicae, clubroot, host cells with spores
7502d Synchytrium endobioticum, potato black scab, infected tissue
7503d Plasmopara viticola, downy mildew of grapes, infected leaf
7505d Albugo candida (Cystopus), white rust of crucifers, conidia and sexual stages on Capsella t.s.
7506c Rhizopus or Mucor, mold, mycelium and sporangia w.m.
7511c Claviceps purpurea, ergot, sclerotium t.s.
7512c Sclerotinia fructigena (Monilia), diseased fruit with conidia t.s.
7513c Rhytisma acerinum, black spot of maple, t.s. with sclerotia
7514c Venturia pirinum (Fusicladium), pear scab, t.s. with conidia
7515d Ustilago zeae, corn smut, t.s. of pustule on host tissue
4575d Root of lupin with symbiotic nitrogen fixing bacteria
7517d Puccinia graminis, uredinia on wheat leaf cause red rust t.s.
7519d Puccinia graminis, aecia or pycnidia on barberry leaf t.s.
7712e Tuberculous lung of cow t.s.
4583c Earthworm (Lumbricus) t.s., causing soil improvement
7715f Trypanosoma equiperdum, causing dourine in horses, blood smear showing parasites
7716d Eimeria stiedae, coccidiosis, sec. of infected rabbit liver
7718c Fasciola hepatica, beef liver fluke, ova w.m.
7719d Taenia, tapeworm, proglottids t.s.
In339c Aphidae, plant lice w.m.
7712e Tuberculous lung of cow t.s.
7715f Trypanosoma equiperdum, causing dourine in horses, blood smear showing parasites
7716d Eimeria stiedae, coccidiosis, sec. of infected rabbit liver
7718c Fasciola hepatica, beef liver fluke, ova w.m.
7719d Taenia, tapeworm, proglottids t.s.


7718c


7502d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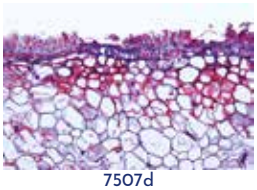
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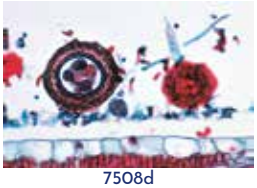
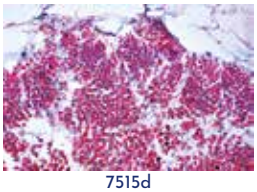
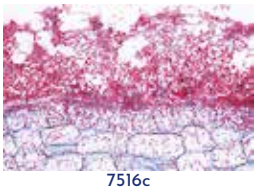

7508d

No. 7560 Agriculture, Large Comprehensive Set

66 Microscope slides
With depictured accompanying brochure

7501c Plasmodiophora brassicae, clubroot, host cells with spores
7502d Synchytrium endobioticum, potato black scab, infected tissue
7503d Plasmopara viticola, downy mildew of grapes, infected leaf
7504d Peronospora parasitica, downy mildew of crucifers, conidia


7515d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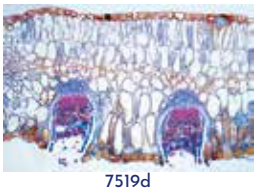
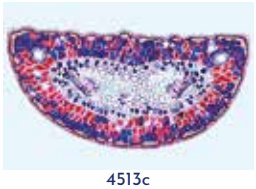

7519d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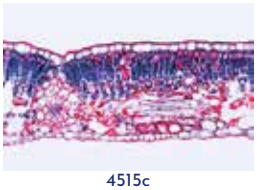
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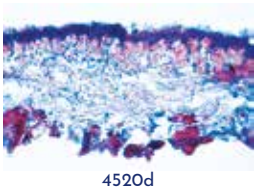
4516c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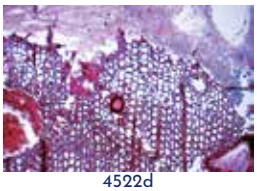
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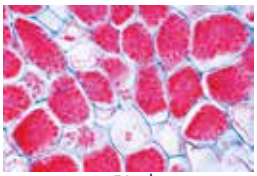
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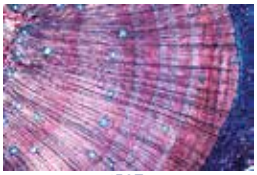
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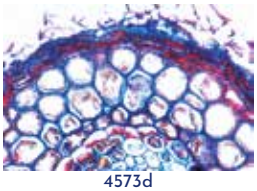
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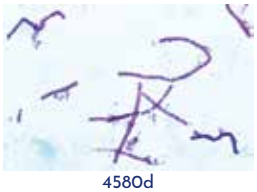

4580d


4584d

7505d Albugo candida (Cystopus), white rust of crucifers, conidia and sexual stages on Capsella t.s.
7506c Rhizopus or Mucor, mold, mycelium and sporangia w.m.
7507d Exoascus pruni (Taphrina), plum pockets, sec. with asci
7508d Erysiphe pannosa, rose mildew, t.s. of infected leaf with conidia or cleistothecia
7509d Uncinula necator (Oidium Tuckeri), grape mildew, t.s.
7510d Sphaerotheca mors uvae, gooseberry mildew, perithecia t.s.
7511c Claviceps purpurea, ergot, sclerotium t.s.
7512c Sclerotinia fructigena (Monilia), diseased fruit with conidia t.s.
7513c Rhytisma acerinum, black spot of maple, t.s. with sclerotia
7514c Venturia pirinum (Fusicladium), pear scab, t.s. with conidia
7515d Ustilago zeae, corn smut, t.s. of pustule on host tissue
7516c Botrytis allii, grey mold of onions. t.s. of infected tissue
7517d Puccinia graminis, uredinia on wheat leaf cause red rust t.s.
7518d Puccinia graminis, telia on wheat causing black rust t.s.
7519d Puccinia graminis, aecia or pycnidia on barberry leaf t.s.
7520d Gymnosporangium sabinae, pear rust, pycnidia on leaf t.s.
7712e Tuberculous lung of cow, t.s. showing diseased tissue
7713t Bacillus anthracis, wool sorters disease, smear stained for bacteria
7714e Bacterium erysipelatos, causing red murrain, smear stained for bacteria
7715f Trypanosoma equiperdum, causing dourine in horses, blood smear showing parasites
7716d Eimeria stiedae, coccidiosis, sec. of infected rabbit liver
7718c Fasciola hepatica (Distomum) , beef liver fluke, ova w.m.
7719d Taenia spec., tapeworm, mature proglottids with eggs, t.s.
7721d Ascaris megalocephala, roundworm of horses, adult female t.s. through midbody
7722d Trichinella spiralis, encysted larvae in skeletal muscle tissue l.s.
4511c Pine (Pinus), healthy leaves, t.s.
4512c Pine (Pinus) leaves damaged by acid rain, t.s.
4513c Fir (Abies), healthy leaves, t.s.
4514c Fir (Abies), stem tip damaged t.s.
4515c Beech (Fagus), healthy leaves t.s.
4516c Beech (Fagus), t.s. of leaves with destroyed epidermis and chloroplasts
4517d Rhytisma acerinum, tar spot of maples, consequence of single-crop farming
4518d Early leaf fall, caused by thawing salt
4519d Healthy lichen, indicator of clean air, t.s. of thallus showing fungus and embedded algae
4520d Damaged lichen, caused by air pollution, t.s. showing destroyed structures
4521c Healthy wood of beech, t.s.
4522d Wood destroyed by fungus
4523d Polyporus, wood rot fungus, fruiting body t.s.
4524d Root nodules of Alnus, t.s. showing symbiotic bacteria (Actinomyces)
4525d Spruce beetle (Cryphalus picea), larva t.s.
4526c Wood with normal annual rings, t.s.
4527c Wood with anomalous narrow annual rings caused by drought, t.s.
4528d Bark with larval galleries of spruce beetle, t.s.
4529d Pineapple-like gall on spruce caused by lice, t.s.
4530d Gall nut on oak caused insects, t.s.
4571d Acidophile soil bacteria, solution of heavy metals
4572d Nitrite bacteria, formatting harmful nitrogenous substances
4573d Root of beech (Fagus) with ectotrophic mycorrhiza, t.s.
4574d Root of birch (Betula) with partly endotrophic mycorrhiza, t.s.
4575d Root of lupin with symbiotic nitrogen fixing bacteria
4576d Netted venation, portion of rotted deciduous leaf w.m.
4577c Charlock (Sinapis), t.s. of stem. Green manure plant
4578d Soil bacteria (Bacillus megatherium), smear Gram steined
4579d Hyphae of root fungi, t.s.
4580d Lichen growing on trees, indicator of clean air, t.s. of apothecium
4581c Mushroom (Xerocomus), mycelium
4582c Root of willow (Salix), planting protecting against erosion
4583c Earthworm (Lumbricus) t.s., causing soil improvement
4584d Springtails (Collembola), w.m.
4585d Mite from forest soil, w.m.
4586c Constituents of humus soil
4587c Constituents of peaty soil

No. 7800 Types of Paper

25 Microscope Slides
With depictured accompanying brochure

7801b Bank paper
7802b Book paper, wood-free
7803b Mold-made paper, 100 percent rag
7804b Chromo paper containing wood pulp
7805b Esparto paper
7806b Filter paper
7807b India paper
7808b Rough-surface paper containing sawdust
7809b Kraft paper, brown
7810b Art paper
7811b Copper plate printing paper
7812b Blotting paper
7813b Standard paper No. 3, rag/pulp
7814b Grease-proof paper
7815b Sulphate kraft paper
7816b Stencil raw silk, 100 percent manila
7817b Wrapping paper
7818b Counterfeit-proof check paper
7819b Sulphite wrapping paper
7820b Book printing paper, wood-free
7821b Newsprint
7822b Wood pulp paper
7823b Cigarette paper
7824b Straw board
7825b Wood pulp board

No. 7900 Human Scalp and Hair

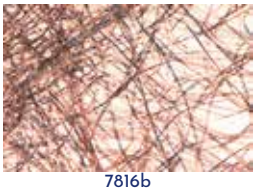
12 Microscope Slides
With depictured accompanying brochure

7901g Human scalp, vertical sec. shows l.s. of hair follicles
7902d Human scalp, horizontal sec. shows t.s. of hair follicles
7903b Natural blond and black hair
7904b Grayed hair
7905b Eyelash
7906b Hair of beard
7907b Hair from infant
7908b Artificially bleached hair
7909b Split hair tips
7910b Singed hair
7911e Eggs of louse attached to the hair, w.m.
7912g Human head louse (Pediculus capitis), w.m.

No. 7300 Drug Powders Part I

25 Microscope Slides
With depictured accompanying brochure

7301b Amylum Oryzae. Rice starch
7302b Amylum Solani. Potato starch
7303b Amylum Tritici. Wheat starch
7304b Cortex Chinae. Cinchona bark
7305b Cortex Cinnamomi. Cinnamon
7306b Crocus. Saffron
7307b Flores Caryophylli. Clove
7308b Flores Chamomillae. Camomile
7309b Folia Melissae. Melissa
7310b Folia Sennae. Senna leaves
7311b Fructus Anisi. Aniseed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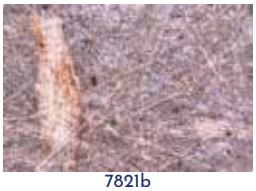
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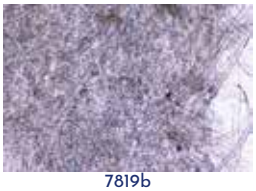
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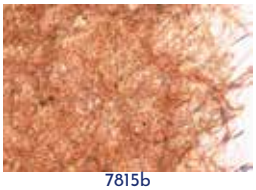
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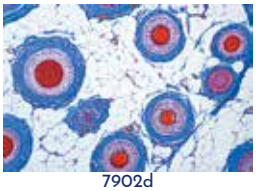
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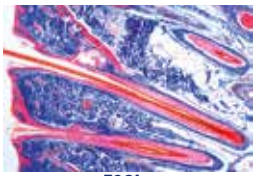
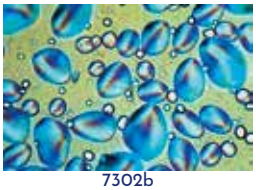

7901g


7903b


7910b


7912g


7911e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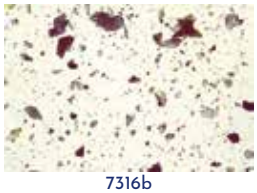
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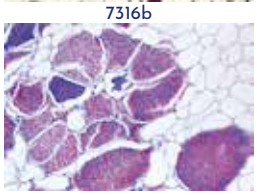
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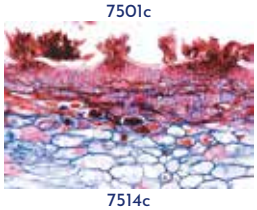
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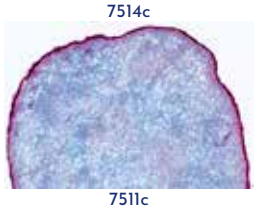
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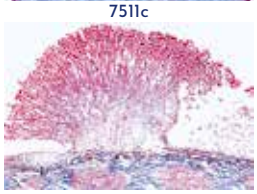
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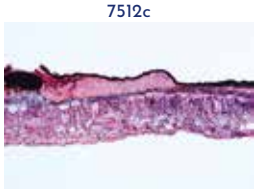
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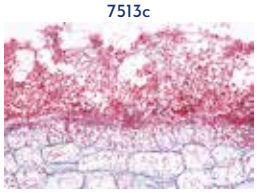
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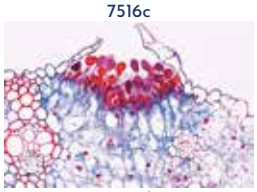
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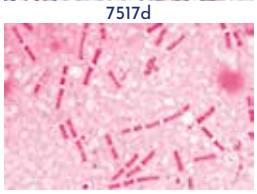

7713t


7721d


4523d

7312b Fructus Capsici. Red pepper
7313b Fructus Cardamomi. Cardamom
7314b Fructus Carvi. Caraway
7315b Fructus Foeniculi. Fennel
7316b Fructus Piperis nigri. Black pepper
7317b Radix Angelicae. Angelica
7318b Radix Ipecacuanhae. Ipecac
7319b Radix Liquiritiae. Liquorice
7320b Radix Saponariae. Saponaria
7321b Radix Valerianae. Valerian
7322b Rhizoma Rhei. Rhubarb
7323b Rhizoma Zingiberis. Ginger
7324b Semen Lini. Linseed
7325b Semen Sinapis. Mustard

Sets for Agriculture and Forestry

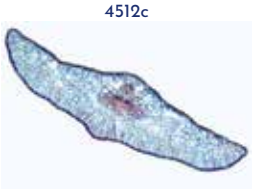
83300 Agriculture and Forestry, Part I.
Harmful fungi as the cause of plant diseases.
20 prepared microscope slides

7501c Plasmodiophora brassicae, clubroot, host cells with spores
7502d Synchytrium endobioticum, potato black scab, infected tissue
7503d Plasmopara viticola, downy mildew of grapes, infected leaf
7504d Peronospora parasitica, downy mildew of crucifers, conidia
7505d Albugo candida (Cystopus), white rust of crucifers, conidia and sexual stages on Capsella t.s.
7506c Rhizopus or Mucor, mold, mycelium and sporangia w.m.
7507d Exoascus pruni (Taphrina), plum pockets, sec. with asci
7508d Erysiphe pannosa, rose mildew, infected leaf with conidia t.s.
7509d Uncinula necator (Oidium Tuckeri), grape mildew, t.s.
7510d Sphaerotheca mors uvae, gooseberry mildew, perithecia t.s.
7511c Claviceps purpurea, ergot, sclerotium t.s.
7512c Sclerotinia fructigena (Monilia), diseased fruit with conidia t.s.
7513c Rhytisma acerinum, black spot of maple, t.s. with sclerotia
7514c Venturia pirinum (Fusicladium), pear scab, t.s. with conidia
7515d Ustilago zeae, corn smut, t.s. of pustule on host tissue
7516c Botrytis allii, grey mold of onions. t.s.
7517d Puccinia graminis, uredinia on wheat leaf cause red rust t.s.
7518d Puccinia graminis, telia on wheat causing black rust t.s.
7519d Puccinia graminis, aecia or pycnidia on barberry leaf t.s.
7520d Gymnosporangium sabinae, pear rust, pycnidia on leaf t.s.

83350 Agriculture and Forestry, Part II.
Bacteria and parasites of crops. Damage caused by environmental influences.
22 prepared microscope slides.

7712e Tuberculous lung of cow t.s.
7713t Bacillus anthracis, wool sorters disease, smear stained for bacteria
7714e Bacterium erysipelatos, causing red murrain, smear stained for bacteria
7715f Trypanosoma equiperdum, causing dourine in horses, blood smear showing parasites
7716d Eimeria stiedae, coccidiosis, sec. of infected rabbit liver
7718c Fasciola hepatica, beef liver fluke, ova w.m.
7719d Taenia, tapeworm, proglottids t.s.
7721d Ascaris megalocephala, roundworm of horses, adult female t.s. through midbody
7722d Trichinella spiralis, encysted larvae in muscle l.s.
4511c Pine (Pinus), healthy leaves, t.s.
4512c Pine (Pinus) leaves damaged by acid rain, t.s.
4513c Fir (Abies), healthy leaves, t.s.
4514c Fir (Abies), stem tip damaged t.s.
4515c Beech (Fagus), healthy leaves t.s.
4516c Beech (Fagus), t.s. of leaves with destroyed epidermis and chloroplasts
4517d Rhytisma acerinum, tar spot of maples, consequence of single-crop farming
4518d Early leaf fall, caused by thawing salt
4519d Healthy lichen, indicator of clean air
4520d Damaged lichen, caused by air pollution
4521c Healthy wood of beech, t.s.
4522d Wood destroyed by fungus
4523d Polyporus, wood rot fungus, fruiting body t.s.


4512c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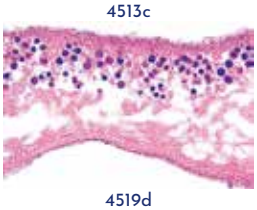
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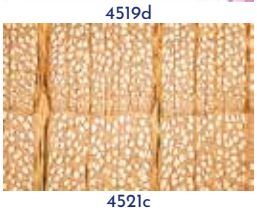
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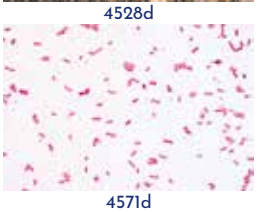
4528d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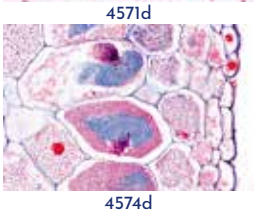
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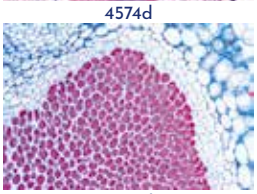
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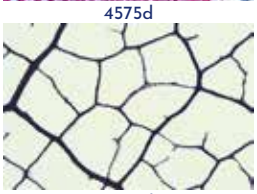
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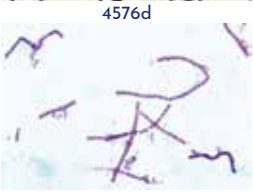
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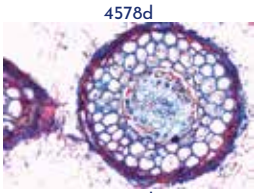

4579d

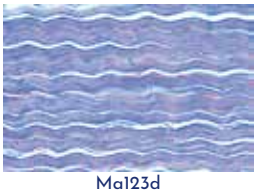
83340 Agriculture and Forestry, Part III..
Animal pests, symbiosis and soil life, 24 prepared microscope slides

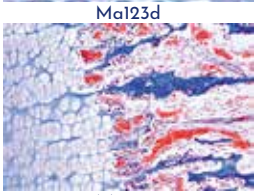
4524d Root nodules of Alnus, with symbiotic bacteria
4525d Spruce beetle (Cryphalus picea), larva t.s.
4526c Wood with normal annual rings, t.s.
4527c Wood with anomalous narrow annual rings caused by drought, t.s.
4528d Bark with larval galleries of spruce beetle, t.s.
4529d Pineapple-like gall on spruce caused by lice, t.s.
4530d Gall nut on oak caused insects, t.s.
4571d Acidophile soil bacteria, solution of heavy metals
4572d Nitrite bacteria, formatting harmful nitrogenous substances
4573d Root of beech with ectotrophic mycorrhiza, t.s.
4574d Root of birch with partly endotrophic mycorrhiza, t.s.
4575d Root of lupin with symbiotic nitrogen fixing bacteria
4576d Netted venation, portion of rotted deciduous leaf
4577c Charlock (Sinapis), t.s. of stem. Green manure plant
4578d Soil bacteria (Bacillus megatherium), smear
4579d Hyphae of root fungi, t.s.
4580d Pollen grains of different kinds of grass
4581c Mushroom (Xerocomus), mycelium
4582c Root of willow (Salix), planting protecting against erosion
4583d Earthworm (Lumbricus) t.s., causing soil improvement
4584d Springtails (Collembola), w.m.
4585d Mite from forest soil, w.m.
4586c Constituents of humus soil
4587c Constituents of peaty soil

Sets for Veterinary Medicine

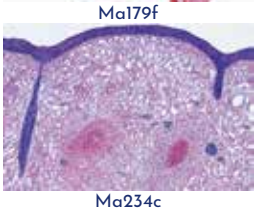
84000 Histology of domestic animals for veterinary medicine part I,
24 prepared microscope slides

Ma114c Simple columnar epithelium, in t.s. of small intestine of pig
Ma1162d Pseudostratified ciliated columnar epithelium, in t.s. of trachea
Ma123d White fibrous tissue, l.s. of tendon of cow
Ma1312d Yellow elastic cartilage, ear of rabbit or pig, t.s.
Ma138e Bone development, intracartilaginous ossification in foetal finger or toe, l.s.
Ma151d Striated (skeletal) muscle of cat l.s.
Ma156d Heart muscle of mammal, l.s. and t.s.
Ma179f Heart of mouse, entire sagittal l.s.
Ma215d Trachea of cat or rabbit, l.s.
Ma5513f Motor nerve cells, smear preparation from spinal cord of ox stained for Nissl bodies
Ma234c Spleen of rabbit, t.s. showing capsula, pulp etc.
Ma231c Lymph node of pig, t.s. routine stained
Ma253d Adrenal gland (Gl. suprarenalis) of rabbit, t.s. through cortex and medulla
Ma252d Thyroid gland of cow, sec. showing colloid


Ma123d


Ma138e


Ma179f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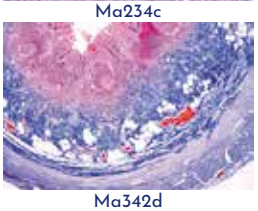
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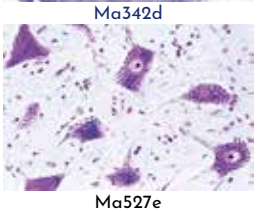
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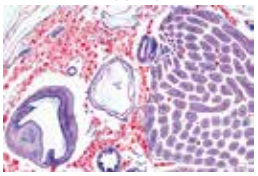
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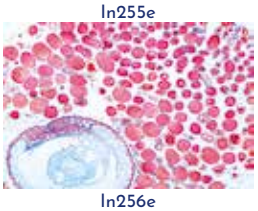
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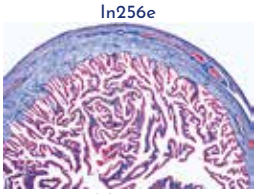
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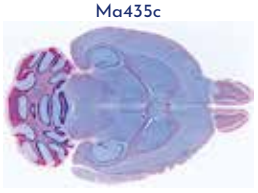
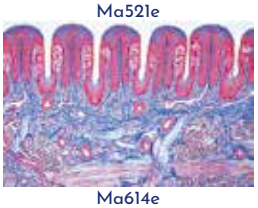

Ma521e


Ma614e

Ma239d Thymus of young calf, t.s. with Hassall bodies
Ma128c Adipose tissue of pig, section fat removed to show the cells
Ma331c Oesophagus of rabbit or dog, t.s.
Ma371d Rumen of cow, t.s.
Ma372d Reticulum of cow, t.s.
Ma373d Omasum of cow, t.s.
Ma374d Abomasum of cow, t.s.
Ma342d Vermiform appendix, rabbit t.s.
Ma346d Colon of pig, t.s. stained with muci-carmine or PAS for demonstration of mucous cells
Ma4214d Ureter of pig, t.s.

84050 Histology of domestic animals for veterinary medicine part II,
24 prepared microscope slides

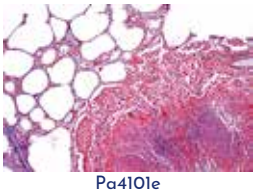
Ma423c Urethra of rabbit, t.s.
Ma431d Ovary of cat, t.s. for general study, shows primary, secondary and Graafian follicles
Ma435c Fallopian tube of pig, t.s.
Ma437d Uterus of pig, resting stage, t.s.
Ma438d Uterus of pig, pregnant stage, t.s.
Ma4634e Testis and epididymis of cat, t.s.
Ma464d Sperm smear of bull
Ma470d Penis of rabbit, t.s.
Ma521e Brain of mouse, horizontal l.s. of the complete organ
Ma515f Cerebellum, t.s. silvered to show the Purkinje cells
Ma544c Peripheral nerve of cow or pig, l.s. routine stained
Ma5294e Spinal cord of cow, t.s. stained for Nissl bodies
Ma605d Retina of pig, thin sec. special stain for details of rods and cones
Ma612d Olfactory region from nose of rabbit, t.s.
Ma614e Taste buds, t.s. of papilla foliata in tongue of rabbit shows abundant taste buds, carefully stained
Ma556e Merkel corpuscles in t.s. through snout of pig
Ma649b Hair (bristle) of pig, w.m.
Ma6405c Skin of foot, cat, vertical sec. showing stratum corneum and stratum germinativum
Ma6468d Mammary gland of cow, active t.s.
Ma703g Young mouse, sagittal l.s. through entire specimen passing the vertebral column
In122d Apis mellifica, honey bee, mouth parts of worker w.m.
In216d Apis mellifica, posterior leg with pollen basket w.m.
In255e Testis, in t.s. of abdomen of drone, Apis mellifica
In256e Ovary, in t.s. of abdomen of queen, Apis mellifica

84100 Pathological Histology for veterinary medicine,
22 prepared microscope slides

Pa4101e Miliary tuberculosis of lung
Pa4102e Anthracosis of lung
Pa4103e Croupous pneumonia
Pa4106e Chronic pneumonia
Pa4109e Necrotic (cheesy) pneumonia
Pa4111e Myeloid sarcoma of spleen
Pa4113g Malaria melanemia of spleen
Pa4115e Amyloid degeneration of spleen
Pa4116e Adiposis of heart
Pa4120e Lymphosarcoma mediastini
Pa4122e Myxoma mandibulae
Pa4127e Fibroepithelial mixed tumor of parotid gland
Pa4133e Parenchymatous and fatty degeneration of liver
Pa4134e Pigmentary cirrhosis of liver
Pa4135e Hemosiderosis of liver
Pa4137e Adenocarcinoma of colon
Pa4141e Cyanotic atrophy of liver (nutmeg liver)
Pa4143e Amyloid degeneration of liver
Pa4144e Brown atrophy of liver
Pa4146e Icterus hepatis
Pa4149e Cavernous hemangioma of liver, Haemangioma cavernosum
Pa4216t Acute nephritis

84150 Parasites, pathogenic bacteria and insect pests for veterinary medicine,
31 prepared microscope slides

Ba112d Staphylococcus aureus, pus organism, smear from culture
Ba1165f Hemolytic streptococci, blood poisoning, blood smear
Ba1263t Bacillus anthracis, smear from culture
Ba139e Bacterium erysipelatos (Erysipelothrix rhusiopathiae), smear *
Pr223f Trichomonas sp., smear with trophozoites
Pr328f Plasmodium cathemerium, avian malaria, blood smear *
Pr337f Babesia canis, blood smear shows heavy infection
Pr338h Toxoplasma gondii, causing toxoplasmosis, tissue smear with parasites
Pr339f Sarcocystis tenella in heart muscle, sec. showing Miescher's tubes
Pr330e Nosema apis, honey bee dysentery, sec. of diseased intestine
Pr335d Eimeria stiedae, causing coccidiosis in rabbit, section of liver shows schizogony and all developing stages
Pr336d Eimeria tenella, section of diseased chicken intestine *
Py211t Dicrocoelium dendriticum (D. lanceolatum), sheep liver fluke, entire mount and stained for internal structures
Py216d Fasciola hepatica, ova w.m.
Py322g Taenia pisiformis, gravid proglottids w.m.
Py3245d Taenia pisiformis, ova from faeces w.m.
Py3145f Cysticercus bovis, bladderworm of Taenia saginata, sec. through beef muscle with parasites in situ
Py328f Moniezia expansa, tapeworm of sheep, proglottids w.m.
Py3268f Dipylidium caninum, tapeworm of dogs and cats, immature proglottids w.m.
Py337f Echinococcus granulosus, cyst wall and scolices t.s.
Ne111d Ascaris megalocephala, roundworm of horses, t.s. of adult female in region of sex organs
Ne131d Ascaris lumbricoides, ova in faeces w.m.
Ne163d Trichinella spiralis, section of infected muscle with encysted larvae
Ne155d Trichuris trichiura, whip worm, ova in faeces w.m.
Ne159f Onchocerca volvulus, sec. through host tissue with tumor containing larvae (filaria)
An124d Hirudo medicinalis, medicinal leech, t.s. through the body for demonstrating general structures of a leech
Ar145g Dermanyssus gallinae, chicken mite, w.m. *
Ar1515e Varroa, parasitic mite of bees w.m.
In3341e Ctenocephalus canis, male or female specimen w.m.
In111d Musca domestica, house fly, head and mouth parts with sucking tube, w.m.
In127e Culex pipiens, head and mouth parts of female w.m.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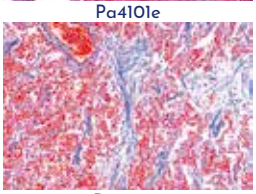
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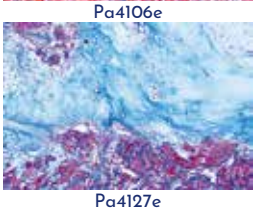
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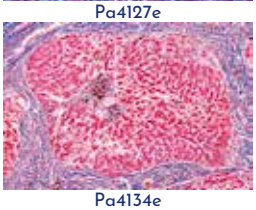
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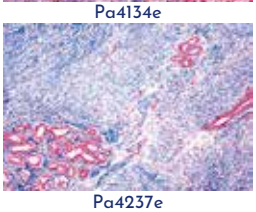
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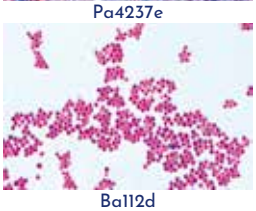
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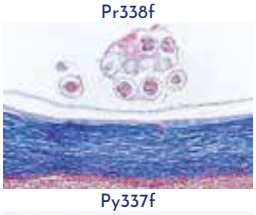
Pr330e


Pr338f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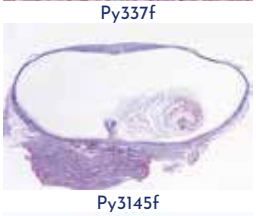
Py3145f


Ar1515e

Sets of Economic Slides Sets MICR-O-SLIDE
Each set comprises 10 selected prepared microscope slides in a solid plastic box, including textbooks (manuals) with explanatory comments and designs for each slide.
Prices and minimum quantities on request.

Zoology
59-5100 Histology of domestic animals part I (Mammalian histology I). - 10 prepared slides in box
59-5110 Histology of domestic animals part II (Mammalian histology II).- 10 prepared slides in box
59-5120 Histology of domestic animals part III (Mammalian histology III). - 10 prepared slides in box
59-5130 Fishes, frogs and amphibia under the microscope (Pisces and Amphibia). - 10 prepared slides in box
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59-5140 Protozoa and one-celled animals (Protozoa). - 10 prepared slides in box
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59-5152 Worms and crustaceans (Vermes and Crustacea). - 10 prepared slides in box. - 10 prepared slides in box
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59-5210 Roots and stems of flowering plants (Phanerogams Part I). - 10 prepared slides in box
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59-5230 Flowers and fruits of flowering plants (Phanerogams part III). - 10 prepared slides in box
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59-5250 Liverworts, mosses and ferns under the microscope (Cryptogams part II). - 10 prepared slides in box
59-5255 Bacteria - simple organisms (Cryptogams part III). - 10 prepared slides in box
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59-5270 Reproduction and propagation of plants. - 10 prepared slides in box

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59-5180 The wonderful structure of the animal cell. - 10 prepared slides in box
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59-5295 Growth and reproduction of cells. - 10 prepared slides in box

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59-5310 Insects and other arthropods under the microscope. - 10 prepared slides in box
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59-5340 Useful and damaging insects. - 10 prepared slides in box+D8226

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59-5510 Healthy human tissues part I (sections of normal human organs). - 10 prepared slides in box
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59-5850 Life in the soil. - 10 prepared slides in box
59-5860 Identifying polluted water under the microscope. - 10 prepared slides in box
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59-5900 Teaching series for elementary science (for hobby and schools). - 10 prepared slides in box
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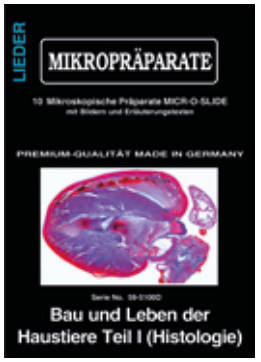

59-5100

59-5160

59-5230

59-5800

59-5870

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2100-155 **Special offer** - Matching the set of microscope slides we offer an interactive CD no. CD155 "Zoology in the Classroom – Animal Life".

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2400-151 **Special offer** - Matching the set of microscope slides we offer an interactive CD no. CD151 "Histology of Man and Mammals". New Release, with 730 images and text. Set of microscope slides plus CD in the package - special price Euro.

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79600-120 **Special offer** - **Special offer** - Matching the set of microscope slides we offer an interactive CD no. CD120 "Cytology and Molecular Biology".

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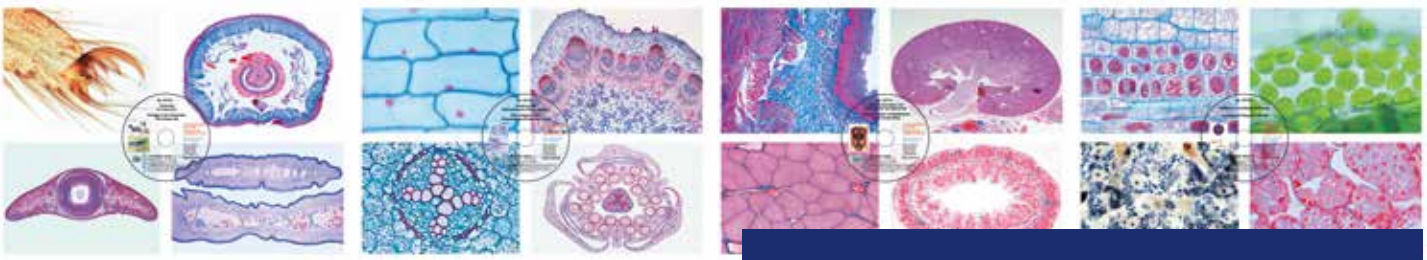


Geology: Rocks and Minerals, Ground Thin Sections

Selected rock samples are ground and polished in a complex technical process until a thickness of 20-30 µm and thus transparency is achieved. The finished thin sections are mounted on microscope slides in the special format 45 x 30 mm (cover glass 32 x 24 mm) and sealed in Canada balsam.

Any normal microscope is suitable for viewing the microscope slides. The structures, colours and refractive properties of the minerals as well as any fossils present can already be easily recognised in bright field. Subsequent observation in polarised light provides further information and completes the examination.

No. 7920 **Rocks and Minerals, Ground Thin, Basic Set no. I,**
10 Microscope Slides size 30x45 mm, without box

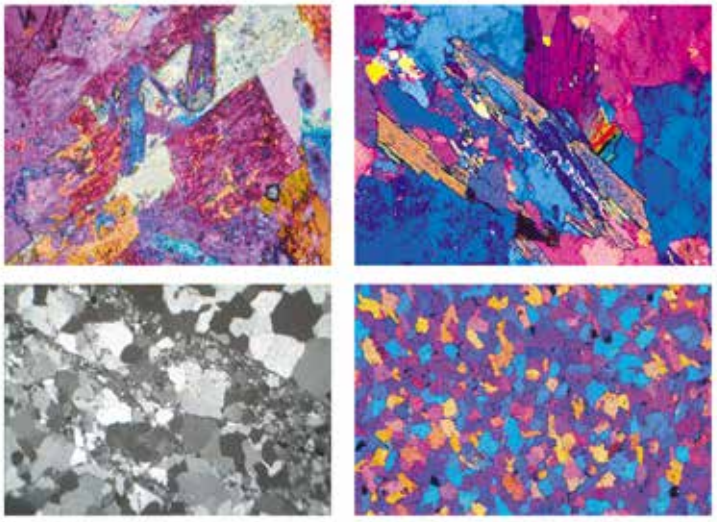
7921i	Granite
7922i	Syenite
7923i	Gabbro
7924i	Basalt
7925i	Gneiss
7926i	Micaschist
7927i	Quartzite
7928i	Marble
7929i	Sandstone
7930i	Limestone fossilized

No. 7940 **Rocks and Minerals, Ground Thin, Basic Set no. II,**
10 Microscope Slides size 30x45 mm, without box

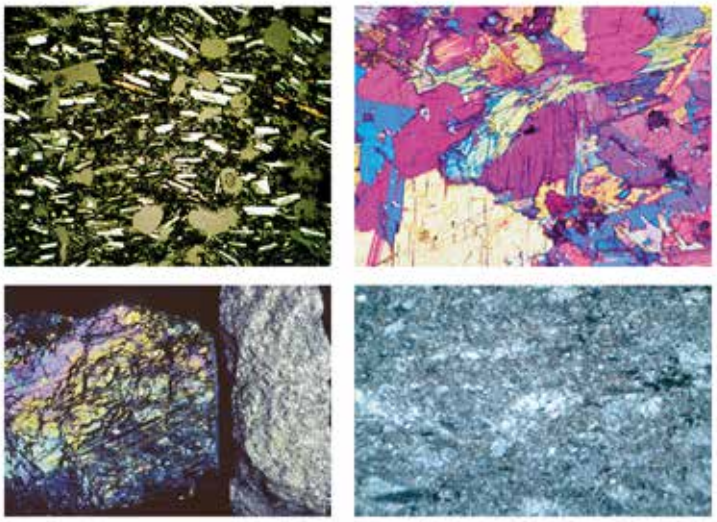
7941i	Trachy-Andesite
7942i	Trachyte
7943i	Rhyolite
7944i	Peridotite
7945i	Eclogite
7946i	Chalk
7947i	Limestone oolithic
7948i	Millstone
7949i	Coal
7950i	Schist

No. 7950 **Rocks and Minerals,Ground Thin, Igneous Rocks, Set no. II,**
31 Microscope Slides size 30x45 mm, without box

Gs098i	Altered granite
Gs082i	Andesite
Gs008i	Basalt
Gs019i	Basalt with olivin
Gs020i	Basalt with phenocryst and white feldspat
Gs116i	Picrit basalt
Gs114i	Tholeiitic basalt
Gs016i	Granodiorite
Gs014i	Pillow lava
Gs090i	Dacite
Gs003i	Diorite
Gs015i	Diorite quartzique
Gs011i	Dolerite
Gs010i	Doreite
Gs004i	Gabbro
Gs001i	Granite
Gs012i	Two-micas granite
Gs013i	Porphyry granite
Gs129i	Obsidian
Gs093i	Laurvikite
Gs050i	Microdiorite
Gs051i	Microgranite
Gs030i	Peridotite
Gs009i	Phonolite
Gs005i	Rhyolite
Gs017i	Red rhyolite
Gs002i	Syenite
Gs018i	Tephrite
Gs007i	Trachyandesite
Gs006i	Trachyte
Gs127i	Volcanic breccia



No. 7920

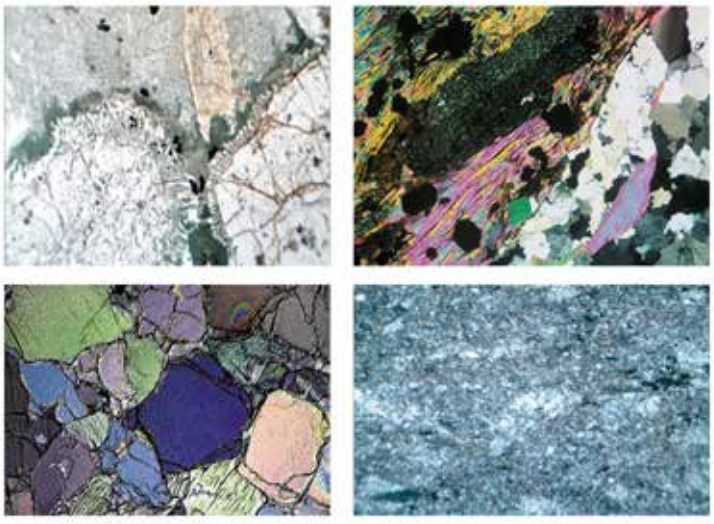


No. 7940

No. 7940

No. 7960 **Rocks and Minerals, Ground Thin, Metamorphic Rocks, Set no. IV,** 9 Microscope Slides size 30x45 mm, without box

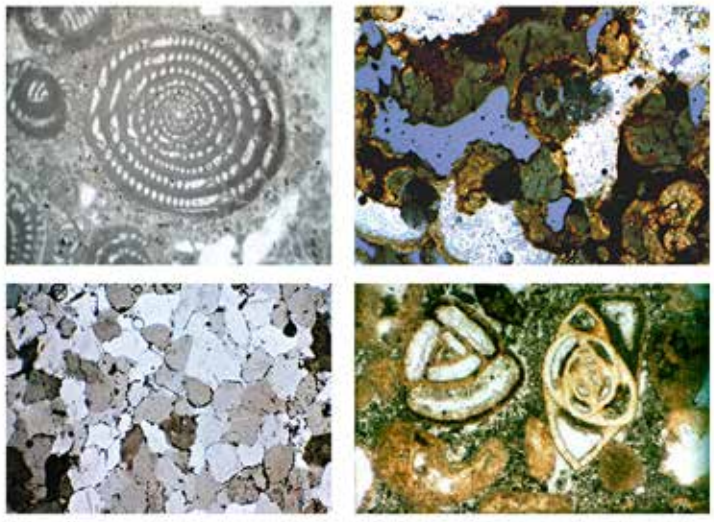
Gs027i Amphibolite
Gs043i Anatexis granite
Gs024i Eclogite with garnets
Gs112i Eclogite with coronitisation haloes
Gs126i Glaucophanite
Gs021i Gneiss
Gs029i Augen gneiss
Gs097i Gneiss with sillimanite
Gs079i Garnetite
Gs025i Granulite
Gs106i Hornstone
Gs107i Green hornstone
Gs091i Marble
Gs122i Metagabbro with hornblende
Gs124i Metagabbro with glaucophane
Gs022i Micaschist
Gs104i Ophiolite
Gs023i Micaschist with two-micas
Gs105i Slate
Gs121i Micaschist with garnets
Gs119i Micaschist with glaucophane
Gs120i Micaschist with chloritoid
Gs092i Migmatite
Gs033i Quartzite
Gs081i Schist
Gs103i Schiste with andalusite
Gs128i Serpentinsed peridotite
Gs083i Green schist
Gs026i Serpentinite



No. 7960

No. 7970 **Rocks and Minerals, Ground Thin, Sedimentary Rocks, Set no. V,**
22 Microscope Slides size 30x45 mm, without box

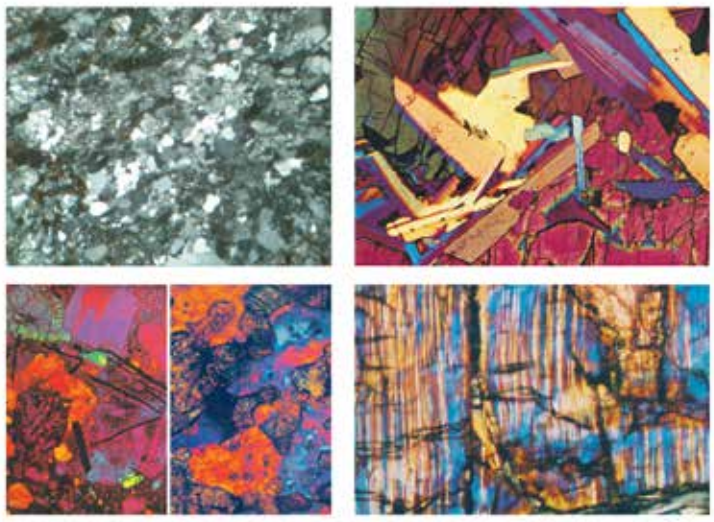
Gs032i Arkose
Gs036i Chalk
Gs085i Coal
Gs109i Gypsum
Gs039i Limestone with alveolina
Gs080i Limestone with asphalt
Gs035i Fossilized limestone
Gs040i Limestone with crinoid stem
Gs064i Millstone
Gs095i Limestone with globotruncana (maestrichtien)
Gs096i Limestone with globigerinina (paleocene)
Gs041i Limestone with miliolidae
Gs038i Limestone with nummulitidae
Gs037i Limestone with ooids
Gs101i Limestone with polyp
Gs042i Limestone with iron ooids
Gs108i Lutite
Gs105i Oil shale
Gs031i Sandstone
Gs113i Calcareous sandstone
Gs034i Bauxite
Gs110i Conglomerate



No. 7970

No. 7980 **Rocks and Minerals, Ground Thin, Sedimentary Rocks, Set no. V,** 4 Microscope Slides size 30x45 mm, without box

Gs117k Chondrite (Meteorite)
Gs118i Suévite (Impactite breccia)
Gs102i Petrified wood
Gs099i Stromatolite



No. 7980

Please order special wooden boxes for rock thin sections LMK12 and LMK50 separately. See page 61

C27 ollection of 18 MINERALS selected for demonstration, chosen for appearance and esthetic.
In wooden box (20 x 30 cm) with 18 squares.

C29 Collection of 18 FOSSILS selected for demonstration, chosen for appearance and esthetic.
In wooden box (20 x 30 cm) with 18 squares.

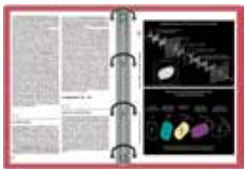
Further collections available on request.

C27

C29

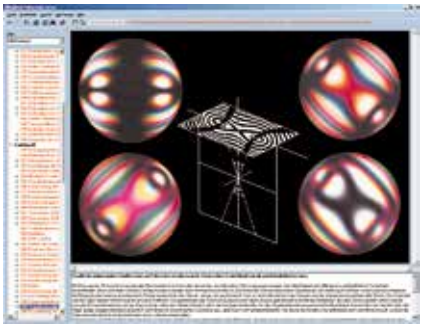
The Structur of Matter

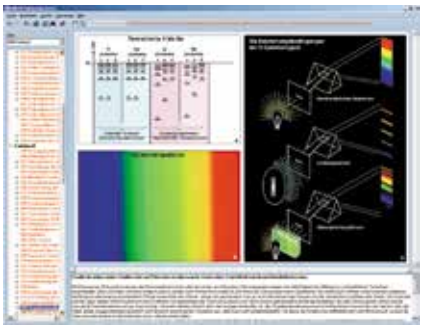
CD140 The Structure of Matter Part I: Fundamentals
The topic "The structure of matter" includes an introduction to the basics of chemistry and physics, mineralogy and petrology, crystallography and crystal optics, crystal chemistry and structural research, quantum mechanics and high-energy physics. The focus of physical research is a particle hierarchy from the atom to quarks and leptons. Even the entire universe has become a cosmic laboratory; once the particle interactions are properly understood, one will also learn to understand the cosmic history of origins.

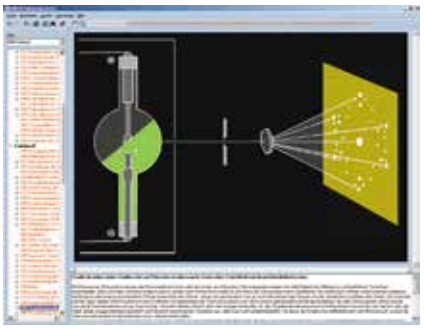


Overhead-transparent atlas with detailed explanatory texts. Drawing and worksheets as templates for printing.
N° 8240: tHE STRUCTURE OF MATTER VOLUME I.

CONTENTS:
- Part 1: Atomic structure, elementary particles, atomic nuclei and Structure of the atomic shell
- Part 2 Energy, matter, interactions
- Part 3 Substance classes, substance properties, chemical bonding.
- Part 4 Crystal symmetry, mineral properties, Structural research.





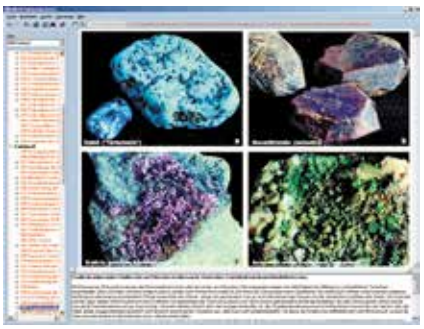


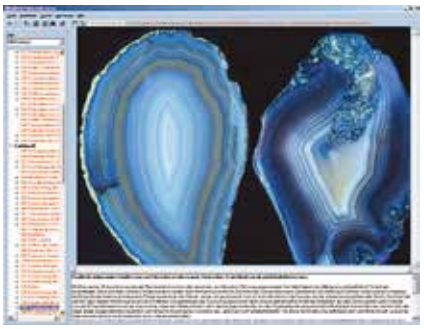
CD141: The Structure of Matter Part II: Rock and Mineral Sciences
The theme of the second CD deals with the morphology and structure of naturally occurring solids, the world of minerals and rocks, which are presented in four parts:
The mineralogy of elements and compounds, the mineralogy of silicates, the structure of rocks and a characterization of gemstones and precious stones. When selecting the examples of pictures, care was taken to ensure that only typical and frequently occurring objects were presented. The respective reproduction scale was chosen in such a way that the depicted objects, as so-called "normal scale", largely correspond to the natural appearance; Enlarged images are specially marked.

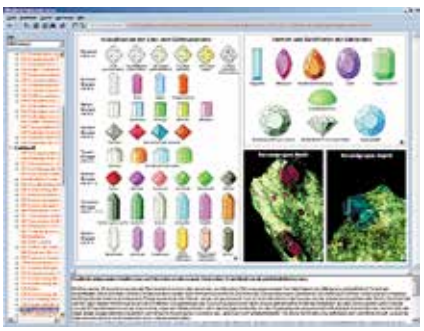
Overhead-Transparencies Atlas with accompanying book with detailed Explanatory texts. - Drawing and worksheets for printing.
N° 8241: The structure of matter Volume II

CONTENTS:
- Part 5 Morphology of Minerals Part I. Elements and Connections
- Part 6 Morphology of minerals Part II Silicates.
- Part 7 Morphology and microstructure of rocks
- Part 8 Gemstones and precious stones.

Available on request: N° 8204: Overhead-Transparente-Atlas on "Evolution and the Origin of Life" and CD-ROM N° 128: Origin of Life and Evolution







Test Slides (Diatoms, Radiolaria, Foraminifera) Type Plates, Circular Preparations*

Only on Request

Boxes and Cases for Microscope Slides

Prepared Microscope Slides can be shipped in special slide boxes only for technical reasons. These boxes are available in various types and price categories and should be ordered together with the slides.

Unless specified by the customer we supply standard type boxes of suitable size for our microscope slide sets (collections) and individual slides (K12, K25, K50, K100).

Standard boxes: Strong storage cases of best quality coated with leatherette paper and furnished with numbered serrated retainer strips.

Order No. **K12** for 12 microscope slides
Order No. **K25** for 25 microscope slides
Order No. **K50** for 50 microscope slides
Order No. **K100** for 100 microscope slides

Special-type boxes: Very strong hardwood cases, first-class workmanship, colourless varnish-finish, with brass hinges and lock, with numbered retainers to hold the slides, lining of sponged material. On request.

Plastic boxes: Solid, pile up boxes with serrated retainer strips and transparent cover.

.
Order No. **PK25** for 25 microscope slides

PB5 Plastic box for 5 slides for transport

Order No. **PB5** for 5 microscope slides

Plain economic shipping and storage boxes: cardboard-made

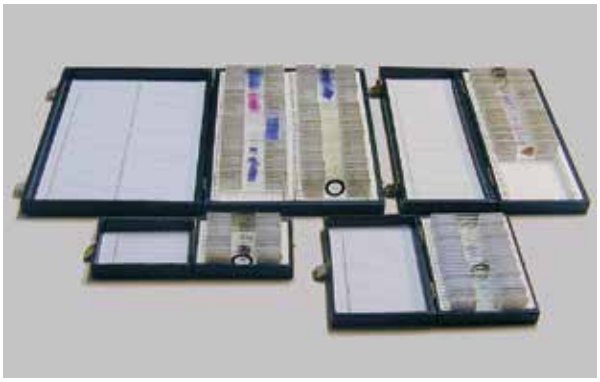
Order No. **PS50** for 50 microscope slides

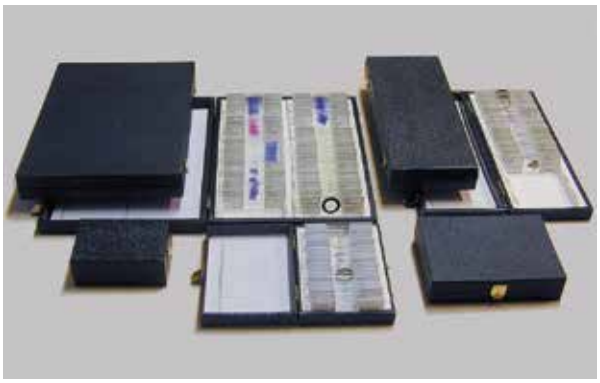
Flat display cases for Microscope Slides: constructed from strong grey cardboard with individual cut outs and cover. Model PM20V has an additional fastening.

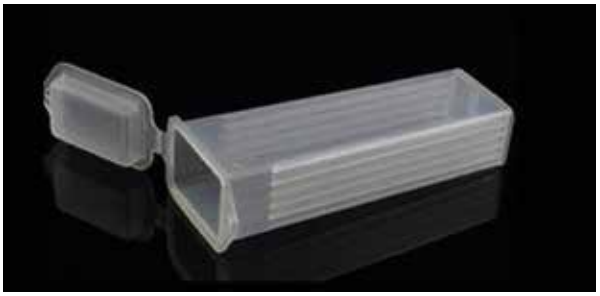
Order No. **PM1** for 1 microscope slides
Order No. **PM5** for 5 microscope slides
Order No. **PM10** for 10 microscope slides
Order No. **PM20** for 15 microscope slides
Order No. **PM20V** for 20 microscope slides

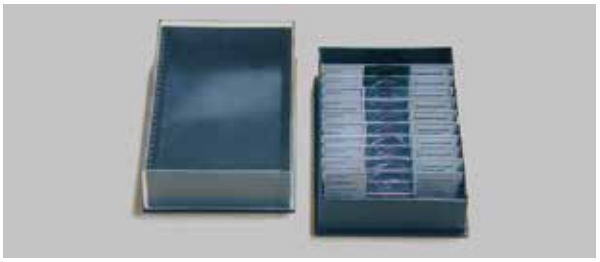
Special wooden boxes for rocks and minerals thin sections.

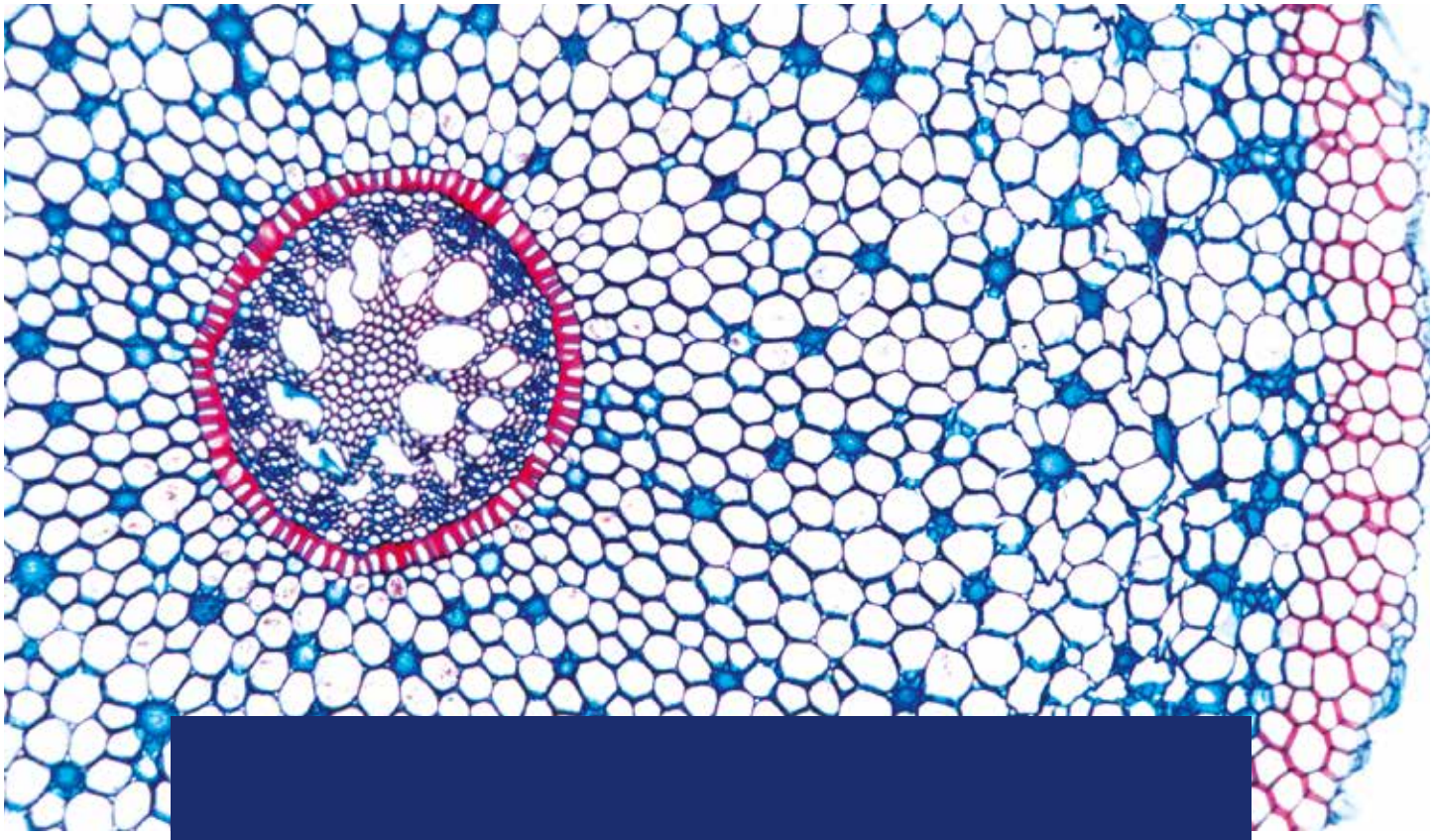
Order No. **LMK12** for up to 12 thin section
Order No. **LMK50** for up to 50 thin sections





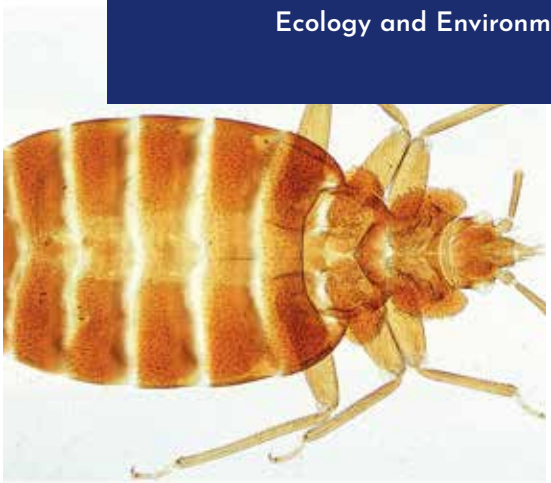






Prepared Microscope Slides in Systematic Order

Perfect learning with our prepared microscope slides in the areas: Histology and Pathology, Zoology and Parasitology, Cytology, Genetics, Embryology and Development, Bacteriology and Botany, Ecology and Environment, Geology.



Discover our Diversity on our new website + shop at www.lieder.com

The entire range of prepared microscope slides covers all relevant areas of biology.

Starting with the simplest creatures, the protozoa, our selection leads through zoology with invertebrata, insects, amphibians and birds to mammals and humans, including pathological preparations.

In botany, both flowerless plants and flowering plants are represented in large numbers. Fungi and bacteria are also widely available.

The systematic order makes it easier to find the desired preparations for those interested in making special and customised compilations. The table of contents on page 74 provides a detailed overview.

As a guide, particularly important and common preparations, or those that are particularly typical and representative for the stated purpose, have been lidentified with a dot • .

Various preparations are particularly difficult to procure and process and can therefore often only be manufactured in small quantities or with longer delivery times. This applies in particular to preparations which are marked with an asterisk * and for which we must reserve the right to deliver.

Each microscope slide is unique. We would therefore like to point out that the preparations supplied may differ from the illustrations in this catalogue due to natural variations in the starting materials and the preparation and staining methods used.

Lieder prepared microscope slides are stained with great care in our laboratories. We select the optimum coloring method for each preparation, which has been optimised in-house through decades of experience.

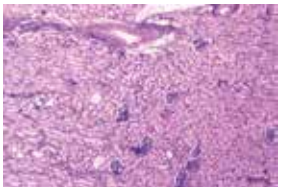
Please order additional storage boxes for your slides.

In **histology**, we use a nuclear red combination, whose components and results are similar to an azan staining.

Cell nuclei become intensely red, collagen fibres of the connective tissue blue, erythrocytes orange and keratin appears bright red.

Staining Azan: Ma338 (Duodenum)

Prepared microscope slides from the field of pathology are stained with the haematoxylin-eosin staining commonly used in human medicine. With this method, the cell nuclei take on a dark blue to violet colour, while the cytoplasm turns pink.

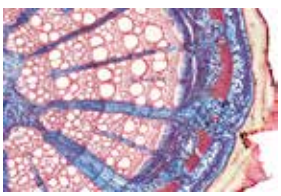


Staining H.E.: Ho411 (Kidney)

On request, we can also supply histological sections of healthy tissues in haematoxylin-eosin staining.

We also use various methods adapted to specific tissue types, such as silver impregnation of nerve tissue or Giemsa staining of blood smears.

Sections from the field of botany are stained with a combination of fuchsin, astra blue and safranin. This method produces a clear red colour in sclerified and lignified cells and a blue colour in parenchyma.



Staining Etzold-FSA: As342 (Aristolochia Stem)

We stain whole mounts of algae with the well-established alizarin-viridin method.

Staining Alizarinviridin: Ag152 (Spirogyra)

List of Contents: Prepared Microscope Slides in Systematic Order

Our microscope slides are used by individual schools, universities and scientific institutions worldwide in practical courses for biological examination and continuing education.

Our systematic arrangement allows you to customise your microscopic demonstration and teaching preparations. We are delighted to offer you preparations from the material you provide that are not shown in our catalogue. We are at your disposal for the customised compilation of your preparation sets.

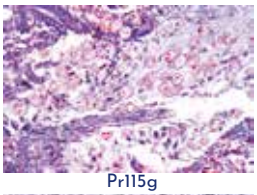
We are also pleased to advise you on all questions relating to the availability, quality and colouring of our preparations, as well as on special requests.

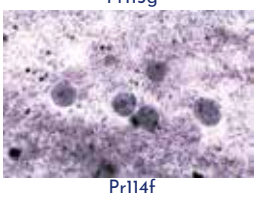
Abbreviations: **t.s.** transverse or cross section, **l.s.** longitudinal section, **w.m.** whole mount or entire specimen


Pr112e


Pr1142v


Pr1162i


Pr115g


Pr114f


Pr119d


Pr121d


Pr122d

Protozoa

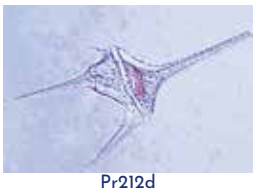
Rhizopoda (Sarcodina)

Pr112e • **Amoeba proteus,** showing nucleus, endoplasm, ectoplasm, food vacuoles, pseudopodia w.m.
Pr113f **Amoeba proteus,** section through specimens
Pr114f • **Entamoeba histolytica,** causes amebic dysentery, smear from feces
Pr1141v **Entamoeba histolytica,** causes amebic dysentery, smear showing trophozoites (asexual forms) *
Pr1142v **Entamoeba histolytica,** causes amebic dysentery, smear showing cysts *
Pr115g **Entamoeba histolytica,** section through diseased colon showing the parasites in situ
Pr116g • **Entamoeba coli,** nonpathogenic, smear from feces
Pr1161i **Entamoeba coli,** nonpathogenic, smear with trophozoites *
Pr1162i **Entamoeba coli,** smear showing cysts *
Pr1165h **Entamoeba hartmanni** trophozoites. Smear, intestinal amoeba; nonpathogenic to humans
Pr1166h **Entamoeba hartmanni** cysts. Smear
Pr1168h **Dientamoeba fragilis** trophozoites. Smear
Pr117f **Entamoeba invadens,** large specimens from culture, good for demonstration
Pr1173g **Entamoeba gingivalis,** smear with trophozoites
Pr1174h **Endolimax nana,** small human parasite, smear with trophozoites *
Pr1175h **Endolimax nana,** smear with cysts *
Pr1177h **Jodamoeba butschlii,** a commensal living in the human intestine, smear with trophozoites *
Pr1178h **Jodamoeba butschlii,** smear with uninucleate cysts *
Pr1181v **Pneumocystis carinii.** Smear from lung tissue stained to show cyst wall of parasites *
Pr1182v **Pneumocystis carinii.** Smear from lung tissue stained to show trophozoites and sporozoites *
Pr119d • **Arcella,** shelled amoeba w.m.
Pr1195s **Actinosphaerium,** a fresh water actinopode w.m. *
Pr121d • **Radiolaria,** mixed species showing different forms
Pr122d • **Foraminifera,** mixed species showing different forms
Pr1251d **Foraminifera** from Mediterranean sea, mixed recent
Pr1252d **Foraminifera,** mixed fossil, chalk
Pr124d **Foraminifera,** mixed forms from the Adriatic Sea
Pr123d • **Globigerina,** marine forms, mixed species

Flagellata (Mastigophora)

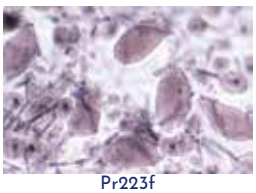
Pr211c • **Euglena viridis,** a common green flagellate with eyespot and flagellum, w.m.
Pr2112c **Euglena gracilis,** a smaller species, w.m.
Pr2113f **Euglena,** a large species specially fixed and stained to show the flagella, w.m.
Pr2114d **Phacus,** flat heart-shaped cells w.m.
Pr2115e **Trachelomonas,** a free swimming species of the Euglenophyta
Pr212c • **Ceratium hirundinella,** a fresh water dinoflagellate w.m.
Pr2121c **Ceratium,** slide showing different marine forms w.m.
Pr2123d **Peridinium,** a fresh water dinoflagellate w.m.
Pr213d • **Noctiluca miliaris,** a large marine flagellate causing the phosphorescence of the sea, w.m.
Pr225h **Chilomastix mesnili,** flagellate found in human intestine, nonpathogenic, smear with trophozoites *
Pr2252h **Chilomastix mesnili,** smear with cysts
Pr221v **Giardia lamblia intestinalis,** human parasite, smear with trophozoites *
Pr2212v **Giardia lamblia intestinalis,** smear showing cysts *
Pr223f • **Trichomonas sp.,** smear with trophozoites
Pr2232h **Trichomonas vaginalis,** smear *
Pr2233h **Trichomonas muris**, trophozoites
Pr230v • **Trypanosoma gambiense**, a blood flagellate, causing Central African sleeping disease, blood smear
Pr231f **Trypanosoma rhodesiense,** causes South African sleeping disease, blood smear with parasites
Pr232f • **Trypanosoma evansi,** causes surra in cattle, blood smear
Pr233f • **Trypanosoma brucei,** causes nagana, blood smear
Pr234f **Trypanosoma congolense,** pathogenic to domestic animals, blood smear
Pr235f • **Trypanosoma equiperdum,** dourine in horses, blood smear
Pr236f • **Trypanosoma cruzi (Schizotrypanum),** causes Chagas disease of man, blood smear showing trypanosomes
Pr237g • **Trypanosoma cruzi,** section through infected heart muscle shows Leishmania forms in tissue *
Pr2372h **Trypanosoma cruzi.** Smear from culture showing cultured forms *
Pr2373g **Trypanosoma cruzi.** Leishmania forms in sec. of mouse brain *
Pr2374g **Trypanosoma cruzi.** Leishmania forms in sec. of mouse liver *
Pr2375g **Trypanosoma cruzi.** Leishmania forms in sec. of mouse heart muscle fibres *
Pr2376g **Trypanosoma cruzi.** Leishmania forms in sec. of mouse spleen
Pr241f **Trypanosoma lewisi,** a large species living in rats and mice, blood smear with parasite, heavy infection
Pr2413g • **Trypanosoma lewisi,** blood smear, early stages of infection with division stages
Pr2414g **Trypanosoma lewisi,** blood smear, later stages of infection, large forms *


Pr211d


Pr212d


Pr213d


Pr221v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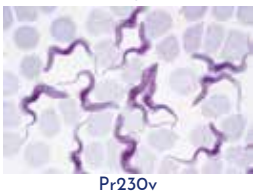
Pr2232h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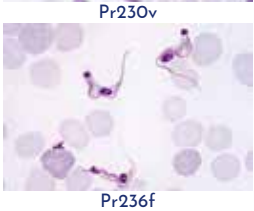
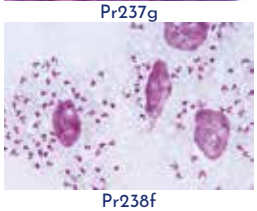
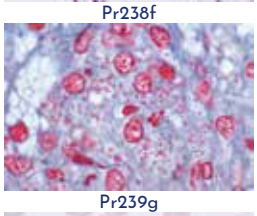

Pr236f


Pr237g


Pr238f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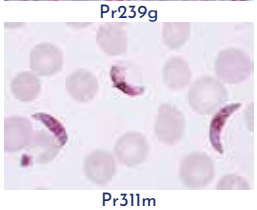
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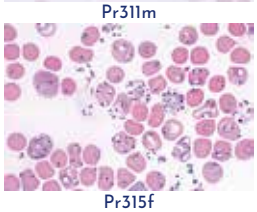
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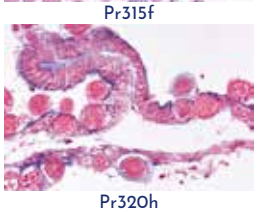
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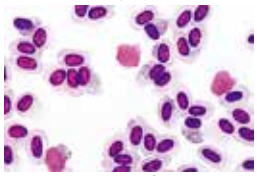
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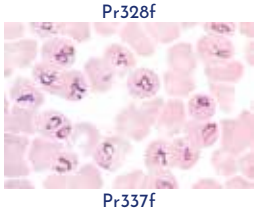

Pr337f


Pr338f


Pr330e


Pr333f

Pr238f • **Leishmania donovani,** causes Kala-Azar, smear from the infected spleen showing the typical Leishman-Donovan bodies

Pr239g • **Leishmania donovani,** section through infected spleen or liver showing the parasites within the cells

Pr2392t **Leishmania donovani,** smear from culture showing Leishman and leptomonad forms *

Pr2395h **Leishmania donovani,** promastigotes, smear from culture *

Pr2396v **Leishmania donovani,** amastigotes, smear from tissue *

Pr2397h **Leishmania mexicana,** promastigotes, smear from culture *

Pr240f **Leishmania enrietti,** section through nasal abscess from Guinea pig. Very heavy infection

Pr2405g **Crithidia fasciculata,** smear from intestine of Anopheles mosquito showing the typical crithidia forms *

Pr2378g **Termite flagellates.** w.m., showing large vegetative forms *

Pr251d • **Silicoflagellates,** various species

Sporozoa

Pr311m • **Plasmodium falciparum,** malignant tertian malaria of man, blood smear with typical ring stages

Pr3112g **Plasmodium falciparum,** blood smear with more gametocytes *

Pr312f **Plasmodium falciparum,** thick diagnostic smear *

Pr313h **Plasmodium vivax,** benign tertian malaria of man, blood smear *

Pr3132h **Plasmodium vivax,** thick diagnostic blood smear *

Pr3145h **Plasmodium malariae,** causing quartan malaria, blood smear *

Pr315f • **Plasmodium berghei,** blood smear from experimentally infected mouse. Very heavy infection shows abundant parasites in different stages of development

Pr320h **Plasmodium sp.,** section through infected mosquito stomach with oocysts containing sporozoites *

Pr321i **Plasmodium sp.,** section through the salivary gland of infected mosquito with sporozoites *

Pr322h **Plasmodium sp.,** exoerythrocytic stages in sec. of brain *

Pr323h **Plasmodium sp.,** exoerythrocytic stages in sec. of liver *

Pr3235g **Malaria melanemia in human spleen,** sec. showing pigment granules in endothelium and Kupffer's cells

Pr326f **Plasmodium praecox,** avian malaria, blood smear

Pr327f • **Plasmodium gallinaceum (Proteosoma),** fowl malaria, blood smear from chicken *

Pr328f **Plasmodium cathemerium,** avian malaria, blood smear *

Pr3285s **Plasmodium circumflexum,** smear from lung or brain of bird showing exoerythrocytic schizogony *

Pr3287s **Leukocytozoon,** smear from fowl blood with parasites *

Pr329s • **Haemoproteus columbae,** pigeon malaria, blood smear *

Pr3293t **Haemogregarina,** smear from frog blood with parasites *

Pr337f • **Babesia canis,** blood smear shows heavy infection

Pr338h • **Toxoplasma gondii,** causing toxoplasmosis, tissue smear with parasites

Pr3381f • **Toxoplasma gondii,** section of the brain showing cysts with parasites *

Pr330e • **Nosema apis,** honey bee dysentery, sec. of diseased intestine

Pr331d • **Monocystis lumbrici,** in smear from earthworm seminal vesicle

Pr332d **Monocystis lumbrici,** section with parasites in situ

Pr333f • **Gregarina,** in smear from mealworm (Tenebrio) intestine

Pr334d **Gregarina,** in section from mealworm intestine, parasites in situ

Pr335d • **Eimeria stiedae,** causing coccidiosis in rabbit, section of liver shows schizogony and all developing stages

Pr3352d **Eimeria stiedae,** coccidiosis, smear from faeces

Pr336d **Eimeria tenella,** section of diseased chicken intestine *

Pr339f • **Sarcocystis tenella,** section of muscle showing the parasites in Miescher's tubes

Pr3392f **Sarcocystis tenella** in heart muscle, sec.

Pr3365s **Myxosoma,** parasite on fish gill, sec. *

Ciliata (Infusoria)

Pr411d • **Paramecium,** macro- and micronuclei stained. The typical slide for general study of this common ciliate

Pr412e **Paramecium,** food vacuoles and nuclei doubly stained

Pr413e **Paramecium,** pellicle stained after Bresslau

Pr414e **Paramecium,** silver stained to show the silver line or neuroformative system

Pr415e **Paramecium,** specially prepared and stained to show the trichocysts

Pr416f • **Paramecium,** in conjugation, nuclei stained *

Pr417g • **Paramecium,** in fission, nuclei stained *

Pr418e **Paramecium,** section through many individuals, triply stained

Pr419f **Paramecium,** stained with Feulgen reaction

Pr4194e **Paramecium multimicronucleatum,** w.m. nuclei stained. this species contains several micronuclei

Pr4195e **Paramecium aurelia,** w.m. nuclei stained. This species containing one macronucleus and two micronuclei

Pr4196e **Paramecium bursaria,** w.m. and nuclei stained, showing symbiotic zoochlorellae in endoplasm

Pr422e • **Vorticella,** a common stalked ciliate w.m.

Pr4222e **Vorticella,** a marine species, coloniate ciliate

Pr421d • **Stylonychia,** a common ciliate w.m.

Pr430e • **Colpidium,** a common holotrich ciliate

Pr427f **Spirostomum ambiguum,** a ciliate with very large nucleus

Pr428g **Stentor,** a trumpet-shaped large ciliate *

Pr429e • **Euplotes,** a common marine ciliate

Pr4306f **Bursaria truncatella,** a large fresh water ciliate *

Pr4309e **Blepharisma,** a large ciliate with pigment granules *

Pr4305e **Didinium nasutum,** a small ciliate parasite on Paramecium *

Pr423f **Dendrocometes paradoxus,** suctorial infusoria on the gills of Gammarus *

Pr424f **Trichodina domerguei,** parasite living on fish gills *

Pr4307e • **Ephelota,** a stalked marine suctorian *

Pr4311e **Suctoria,** marine species

Pr425f **Opalina ranarum,** smear from frog intestine

Pr426e • **Opalina ranarum,** in section through frog intestine

Pr4265v **Balantidium coli,** human parasite, smear with trophozoites *

Pr4266v **Balantidium coli,** smear with cysts *

Pr4267t **Balantidium coli,** in sec. of human intestine *

Pr433f **Ciliates from the rumen of cow,** different species

Pr435h **Ciliates,** specially prepared and stained to show the cilia

Pr440f • **Mixed protozoa,** many different forms are found on this slide

Mesozoa

Me111f **Dicyema,** simple animal with body and sexual cells, from smear of Sepia *

Porifera - Sponges

Po111d • **Sycon,** a small marine sponge of the sycon type, t.s. through the body

Po112f • **Sycon,** near med. long. sec. through body and osculum

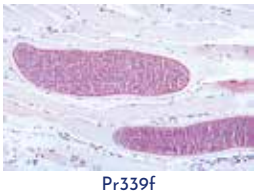
Po113d **Sycon,** tangential long. sec.

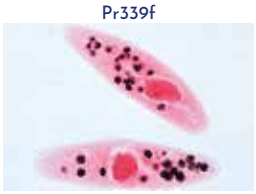
Po114d **Sycon,** thick t.s. with calcareous spicules in situ

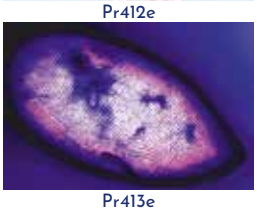
Po115b • **Sycon,** spicules isolated, w.m.

Po116f **Sycon,** sec. showing stages of development *

Po1165e **Sycon,** l.s. and t.s. on one slide


Pr339f


Pr412e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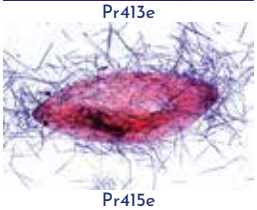
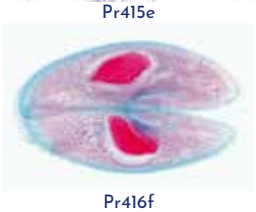
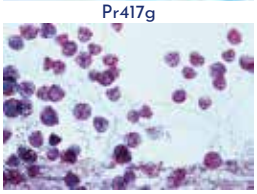

Pr415e

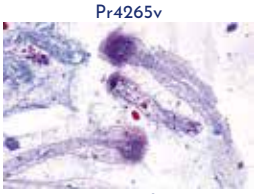

Pr416f

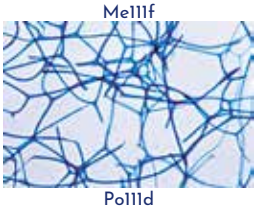

Pr417g

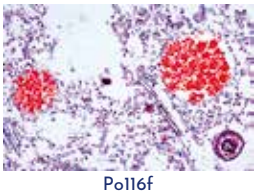

Pr422e

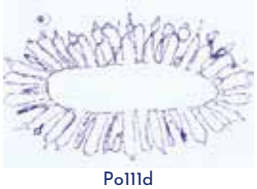

Pr425f


Pr4265v


Me111f


Po111d


Po116f


Po111d

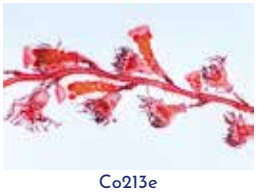

Po140c

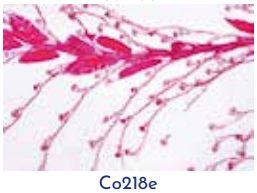

Co112e

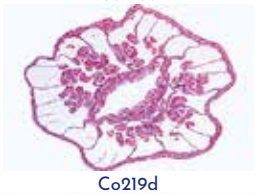

Co113d

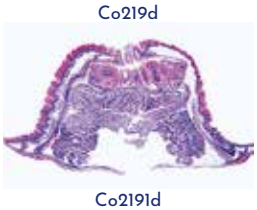

Co211e


Co212e


Co213e


Co218e


Co219d


Co2191d

Po117d **Grantia,** a marine sponge of the sycon type, t.s. through the body
Po118f **Grantia,** near median long. sec. through body and osculum
Po119d **Grantia,** tangential long. sec.
Po1192e **Grantia**. t.s. and l.s. on one slide
Po1193d **Grantia**, calcareous spicules, isolated and w.m.
Po1194e **Grantia**, thick t.s. with calcareous spicules in situ
Po121d • **Spongilla,** fresh water sponge, t.s. showing choanocytes, incurrent and excurrent channels
Po122d • **Spongilla,** gemmulae (winter bodies) w.m.
Po123b **Spongilla,** siliceous spicules isolated and w.m.
Po125e • **Leucosolenia,** a simple marine sponge of the ascon type, stained and w.m.
Po126d **Leucosolenia,** t.s. through the body
Po128c **Euspongia,** a commercial sponge, macerated skeleton shows horny fibres, w.m.
Po129d **Euspongia,** typical t.s. through the body
Po140c **Sponge spicules,** strewn slide of mixed species w.m.

Coelenterata

Co111e • **Hydra**, extended specimen carefully stained for general body study, w.m. showing all details
Co112g • **Hydra** with bud, w.m. *
Co1121f **Hydra** with bud, l.s.
Co113d • **Hydra**, t.s. through the body in different levels showing ectoderm with nematocysts, supporting lamella and entoderm
Co114d • **Hydra**, l.s. through body and tentacles
Co1141g **Hydra**, median l.s. through basal disc, gastro-vascular cavity, hypostome and tentacles *
Co1143e **Hydra**, t.s. and l.s. on one slide
Co115e **Hydra** with male gonad (testis), t.s.
Co1151f **Hydra** with male gonad (testis), w.m. *
Co116f **Hydra** with female gonad (ovary), t.s.
Co1161g **Hydra** with female gonad (ovary), w.m. *
Co1165s **Hydra**, t.s. of male and female gonads on one slide
Co117d **Hydra**, isolated cells w.m. showing the different cell types, nematocysts
Co118f **Hydra** with food in the digestive cavity, w.m. *
Co119d **Hydra** with food in the digestive cavity, t.s. through body
Co1195f **Hydra**, plain and budding, two specimens w.m.
Co211d • **Obelia hydroid,** colony of polyps with hydrants and gonothecae, w.m. for general study
Co212g • **Obelia medusa,** small jellyfish, w.m. for general study
Co230g **Obelia,** sec. through budding medusae in different stages *
Co213d **Plumularia setaceae,** colony of polyps w.m.
Co214d • **Tubularia larynx,** colony of polyps, w.m. or l.s.
Co233f **Tubularia larynx,** actinula larva w.m.
Co215d **Sertularia cupressina,** colony of polyps w.m.
Co216d • **Campanularia johnstoni,** colony of polyps w.m.
Co235d **Hydractinia,** colony of polyps w.m.
Co220d **Coryne sarsi,** colony of polyps showing budding and developing medusae, w.m. *
Co217e **Jellyfish,** section through the margin of umbrella shows statocysts
Co2175g **Aurelia,** jellyfish, planula larva w.m..
Co2176g **Aurelia,** scyphistoma w.m. *
Co2177g **Aurelia,** scyphistoma in strobilation, l.s.
Co218g • **Aurelia,** ephyra w.m. *
Co219d • **Actinia (Metridium),** sea anemone, t.s. through entire young specimen
Co2191d • **Actinia (Metridium),** sea anemone, l.s. through entire young specimen
Co2193e **Actinia,** t.s. and l.s. on one slide
Co222d **Anemonia,** sea anemone, sec. through the tentacles shows nematocysts and zoochlorellae
Co225e • **Alcyonium digitatum,** leathery coral, t.s. of colony
Co2252e **Alcyonium,** coral, w.m. of colony
Co226c • **Lime bodies of different corals,** w.m.

Plathelminthes

Turbellaria – Turbellarians

Py111f • **Planaria,** selected specimen stained for general study, of the body, flat w.m.
Py1115g **Planaria,** selected specimen specially stained to show the digestive tract and its branches and diverticula, w.m. *
Py112c **Planaria,** t.s. through the body for general study
Py113c • **Planaria,** t.s. through the body in region of pharynx
Py114e **Planaria,** section selected to show the ocelli
Py115f **Planaria,** t.s. through three regions: anterior end, region of pharynx and region of gonads
Py1162e **Planaria,** sagittal l.s. for general structures
Py117f **Planaria,** median l.s. through entire specimen

Trematodes – Flukes

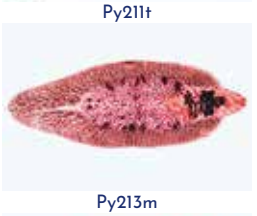
Py211t • **Dicrocoelium lanceolatum** (D. dendriticum), sheep liver fluke, entire mount and stained for internal structures
Py212d **Dicrocoelium lanceolatum,** t.s. of the body
Py2121d **Dicrocoelium lanceolatum,** ova w.m.
Py213m • **Fasciola hepatica (Distomum hepaticum),** beef liver fluke, selected specimen flat mount and carefully stained
Py214c • **Fasciola hepatica,** t.s. through the body
Py2142d **Fasciola hepatica,** t.s. through two different body regions
Py215e **Fasciola hepatica,** near median l.s. through adult specimen
Py2152d **Fasciola hepatica,** l.s. through two different body regions
Py216d • **Fasciola hepatica,** ova w.m.
Py217h • **Fasciola hepatica,** miracidia (free living larvae) w.m. *
Py2172i **Fasciola hepatica,** redia w.m. *
Py2173i **Fasciola hepatica,** cercaria w.m. *
Py2174i **Fasciola hepatica,** metacercaria w.m. *
Py219f • **Fasciola hepatica,** redia and cercaria in sec. through infected snail liver
Py220e **Fasciola hepatica,** horizontal l.s. through entire specimen
Py2201e **Fasciola hepatica,** horizontal l.s. through entire specimen specially fixed and stained to show the excretory system
Py2202e **Fasciola hepatica in bile ducts of liver,** t.s.
Py2205u **Fasciolopsis buski,** large intestinal fluke, flat mount *
Py2206e **Fasciolopsis buski,** ova w.m.
Py2207u **Fasciolopsis buski,** miracidia w.m. *
Py2208u **Fasciolopsis buski,** redia w.m. *
Py2209u **Fasciolopsis buski,** cercaria w.m. *
Py221h • **Schistosoma mansoni,** causing bilharziosis, adult male w.m.
Py222h • **Schistosoma mansoni,** adult female w.m.
Py223i **Schistosoma mansoni,** adult male and female in copula, w.m. and carefully stained for general study
Py224e **Schistosoma mansoni,** t.s. of adult male and female
Py225h **Schistosoma mansoni,** miracidia w.m. *
Py226h **Schistosoma mansoni,** cercaria with bifurcate tail w.m. *
Py227g • **Schistosoma mansoni,** section through infected snail liver showing cercaria
Py228f **Schistosoma mansoni,** section through snail liver not infected, for comparison
Py229g • **Schistosoma mansoni,** ova in section of liver or intestine *
Py230i • **Schistosoma mansoni,** ova in faeces w.m.
Py231e • **Schistosoma haematobium,** ova from urine sediment w.m.
Py2331h **Schistosoma haematobium,** adult male w.m.
Py2341h **Schistosoma haematobium,** adult male w.m.
Py232i **Schistosoma japonicum,** ova from faeces, w.m. *
Py2335h **Schistosoma japonicum,** adult male and female in copula w.m.
Py233h **Schistosoma japonicum,** adult male w.m. *
Py234h **Schistosoma japonicum,** adult female w.m. *
Py2345u **Schistosoma japonicum,** miracidia w.m. *
Py2347v **Schistosoma japonicum,** cercariae w.m. *
Py247i **Clonorchis sinensis,** Chinese liver fluke, w.m. of adult *
Py2472d **Clonorchis sinensis,** t.s. through the body
Py248s **Clonorchis sinensis,** sec. of human liver with parasitic worms in the bile ducts *
Py2483h **Clonorchis sinensis,** metacercaria w.m. *
Py249e **Clonorchis sinensis,** ova w.m.


Py111f

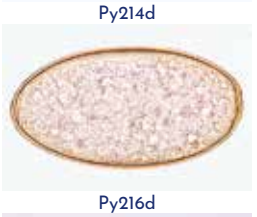

Py113d

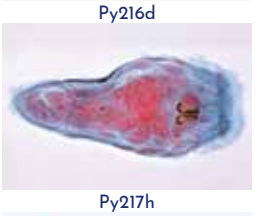

Py114e


Py211t

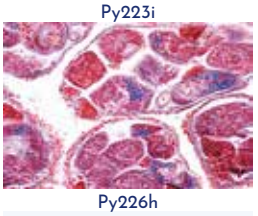

Py213m

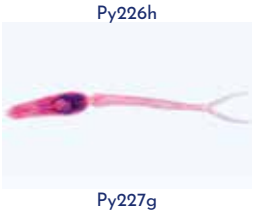

Py214d

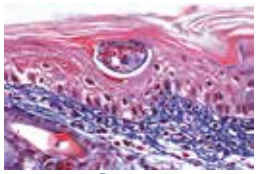

Py216d


Py217h


Py223i

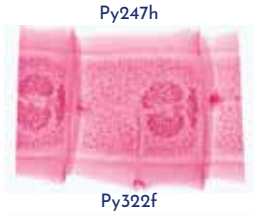

Py226h


Py227g


Py229g


Py224e


Py247h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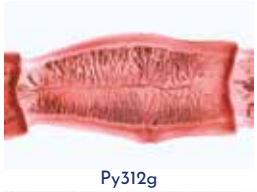
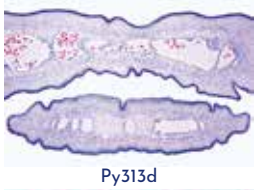
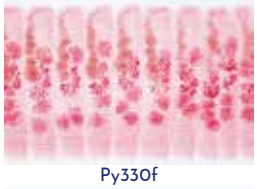
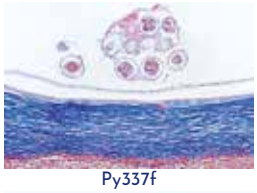

Py312g

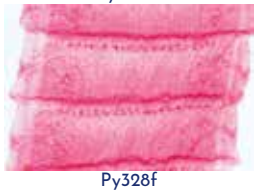

Py313d


Py330f


Py335h


Py337f


Py3272t


Py328f

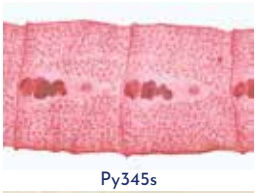
Py245i **Opisthorchis felineus,** cat liver fluke, w.m. of adult *
Py251t **Heterophyes heterophyes,** fluke parasite in human intestine, w.m. of adult specimen *
Py253h **Echinostoma revolutum,** occuring in mammals, adult w.m. *
Py254e **Echinostoma revolutum,** ova w.m.
Py255h **Echinoparyphium recurvatum,** occuring in poultry, w.m. of adult specimen
Py261e **Paragonimus,** lung fluke, ova w.m. *
Py2614i **Paragonimus,** miracidia w.m. *
Py2615i **Paragonimus,** rediae w.m. *
Py2616i **Paragonimus,** metacercariae w.m. *
Py270t **Metagonimus,** w.m., a small intestinal fluke which infests man and animals.
Py271f **Prosthogonimus macrorchis,** eggs, w.m.
Py273t **Eurytrema pancreaticum** w.m., parasite of cattle and pig *
Py236g **Leucochloridium macrostomum**, parasite of birds, section through snail tentacle with sporocyts containing cercaria
Py2553h **Hypoderaeum conoideum**, an echinostome occuring in ducks, w.m.

Cestodes – Tapeworms

Py321f • **Taenia pisiformis (Taenia serrata),** tapeworm of dogs, immature proglottids w.m.
Py322g • **Taenia pisiformis,** mature proglottids w.m.
Py323f • **Taenia pisiformis,** gravid proglottids w.m.
Py3235d **Taenia pisiformis,** t.s. through proglottids
Py324i • **Taenia pisiformis,** scolex w.m. *
Py3243k **Taenia pisiformis,** composite slide with whole mounts of scolex, immature, mature and gravid proglottids *
Py3245d • **Taenia pisiformis,** ova from faeces w.m.
Py325f • **Cysticercus pisiformis,** bladderworm of Taenia pisiformis, section
Py3251t **Cysticercus pisiformis,** w.m. of complete bladderworm *
Py311f • **Taenia saginata,** tapeworm, proglottids w.m. *
Py312g **Taenia saginata,** selected mature proglottids w.m. *
Py313d • **Taenia saginata,** t.s. of proglottids in different stages, the standard slide for general study
Py3131h **Taenia saginata, scolex** w.m.
Py314g • **Taenia saginata,** ova in faeces w.m.
Py3145f • **Cysticercus bovis,** bladderworm of Taenia saginata, sec. through beef muscle with parasites in situ
Py3146t **Cysticercus bovis,** w.m. of bladderworm *
Py315d **Taenia solium,** human tapeworm, proglottids t.s.
Py3153t **Taenia solium,** scolex w.m. *
Py3154d **Taenia solium,** ova in faeces w.m.
Py3156f **Cysticercus cellulosae,** bladderworm of Taenia solium, section through pork muscle with parasites in situ
Py3157t **Cysticercus cellulosae,** w.m. of complete bladderworm *
Py3268f **Dipylidium caninum,** tapeworm of dogs and cats, immature proglottids w.m.
Py327f • **Dipylidium caninum,** mature proglottids w.m.
Py3271f **Dipylidium caninum,** gravid proglottids w.m.
Py3272t • **Dipylidium caninum,** w.m. of scolex with immature proglottids
Py3273k **Dipylidium caninum,** composite slide with whole mounts of scolex, immature, mature and gravid proglottids *
Py3275e • **Dipylidium caninum,** egg balls with 5 to 20 ova, w.m.
Py328f • **Moniezia expansa,** tapeworm of sheep, proglottids w.m.
Py3282t • **Moniezia expansa,** scolex with immature proglottids w.m.
Py3283k **Moniezia expansa,** composite slide with whole mounts of scolex, immature, mature and gravid proglottids *
Py329e **Taenia hydatigena,** tapeworm of dogs and predaceous animals, proglottids t.s.
Py3293f **Cysticercus tenuicollis,** bladderworm of T. hydatigena, sec. of scolex
Py330f • **Hymenolepis nana,** dwarf tapeworm of rats, proglottids w.m.
Py331g • **Hymenolepis nana,** ova from faeces w.m.
Py3341g **Hymenolepis diminuta,** w.m. of mature and gravid proglottids
Py3342e **Hymenolepis diminuta,** ova w.m.
Py3343g **Hymenolepis diminuta,** cysticercoid. W.m., larval stage

Py332i **Hymenolepis fraterna,** w.m. of entire tapeworm with scolex, immature, mature and gravid proglottids *
Py335i • **Echinococcus granulosus,** tapeworm of dogs, w.m. of complete tapeworm with scolex and proglottids. Selected and carefully stained specimens *
Py336f • **Echinococcus granulosus,** scolices from cyst, w.m.
Py337f • **Echinococcus granulosus,** cyst wall and scolices t.s.
Py338e **Echinococcus granulosus,** sterile cyst t.s.
Py339e **Echinococcus granulosus,** ova in faeces of dog w.m.
Py3392f **Echinococcus multilocularis,** cyst with scolices t.s.
Py344i **Diphyllobothrium latum,** tapeworm of fishes, scolex and immature proglottids w.m. *
Py345s **Diphyllobothrium latum,** mature proglottids w.m. *
Py346e **Diphyllobothrium latum,** t.s. of mature proglottids
Py347e **Diphyllobothrium latum,** ova w.m.
Py348v **Diphyllobothrium erinacei (mansoni),** dog and cat tapeworm, w.m., scolex and proglottids
Py349g **Diphyllobothrium erinacei.** W.m., mature proglottids
Py350e **Diphyllobothrium erinacei,** ova w.m.
Py352e **Taenia multiceps (Multiceps serialis),** dog tapeworm, sec. of bladderworm stage (Coenurus cerebralis) shows several scolices *
Py354g **Cysticercus fasciolarias**. sec. of rat liver with cyst of Taenia taeniaeformis.


Py327f


Py345s


Py331d


Py3342

Nemathelminthes - Roundworms

Ne111d • **Ascaris megalocephala,** roundworm of horses, t.s. of adult female in region of sex organs
Ne112d • **Ascaris megalocephala,** t.s. of adult male in region of sex organs
Ne113d **Ascaris megalocephala,** t.s. in region of oesophagus showing the triradiate lumen
Ne121f • **Ascaris megalocephala embryology.** Sec. of uteri showing entrance and modification of sperm in ova
Ne122f • **Ascaris megalocephala embryology.** Sec. of uteri showing maturation stages (meiosis). Polar bodies can be seen.
Ne123f • **Ascaris megalocephala embryology.** Sec. of uteri showing ova with male and female pronuclei
Ne124f • **Ascaris megalocephala embryology.** Sec. of uteri showing early cleavage stages (mitosis)
Ne125f • **Ascaris megalocephala embryology.** Sec. of uteri showing later cleavage stages (mitosis)
Ne129d • **Ascaris lumbricoides,** roundworm of man, t.s. of adult female in region of gonads
Ne130d • **Ascaris lumbricoides,** t.s. of adult male in region of gonads
Ne1305e • **Ascaris lumbricoides,** t.s. of male and female in region of gonads
Ne1306d • **Ascaris lumbricoides,** t.s. in region of oesophagus
Ne131d • **Ascaris lumbricoides,** ova in faeces w.m.
Ne1312d **Ascaris lumbricoides,** infertile ova w.m.
Ne132e **Ascaris lumbricoides,** isolated muscle cells w.m.
Ne1323f **Ascaris lumbricoides,** larvae in sec. of pig lung
Ne235g **Toxocara,** roundworm of dogs, ova in faeces w.m.
Ne128f **Rhabditis,** a nematode living in earthworms, w.m. of ova showing cleavage stages
Ne135i • **Enterobius vermicularis (Oxyuris),** pin worm, w.m. of an adult specimen (male or female, our selection)
Ne1351g **Enterobius vermicularis,** w.m. of adult male *
Ne1352i **Enterobius vermicularis,** w.m. of adult female
Ne136g • **Enterobius vermicularis,** ova from faeces w.m.
Ne1362g **Enterobius vermicularis,** sec. through human appendix with parasites in situ
Ne137e **Strongyloides,** intestinal parasite worm, w.m.
Ne1373g • **Strongyloides,** filariform larvae w.m. (infective larvae) *
Ne1374g **Strongyloides,** sec. through host intestine with parasites
Ne1377g **Strongylus sp.,** lung worm, infected lung, sec.
Ne1378g **Strongylus sp.,** isolated larvae from faeces

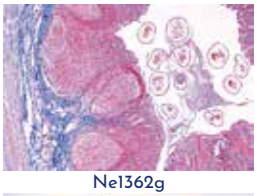

Ne113d


Ne1305e


Ne129d


Ne1352f


Ne136c


Ne1362g


Ne144h


Ne1512v

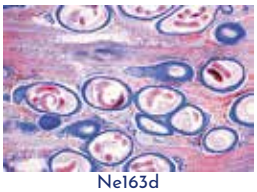

Ne145e


Ne143h

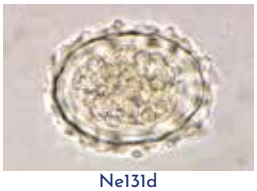

Ne1445k


Ne146e

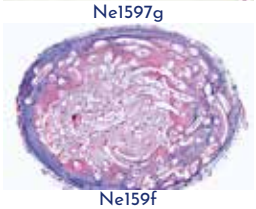

Ne164e


Ne163d


Ne155d


Ne131d


Ne1597g


Ne159f

Ne1392i • **Ancylostoma caninum,** dog hookworm, adult male w.m.
Ne1393i • **Ancylostoma caninum,** adult female w.m.
Ne1394u **Ancylostoma caninum,** adult male and female, two w.m. per slide *
Ne1395i **Ancylostoma caninum,** male and female in copula w.m. *
Ne1396e • **Ancylostoma caninum,** ova w.m.
Ne1397t **Ancylostoma caninum,** rhabditiform larvae w.m. *
Ne1398t **Ancylostoma caninum,** filariform larva w.m. *
Ne143h • **Ancylostoma duodenale,** hookworm of man, adult male w.m. *
Ne144h • **Ancylostoma duodenale,** adult female w.m. *
Ne1445k **Ancylostoma duodenale,** w.m. of adult male and female per slide *
Ne145e **Ancylostoma duodenale,** t.s. of male and female
Ne146e • **Ancylostoma duodenale,** ova w.m.
Ne147h **Ancylostoma duodenale,** rhabditiform larvae w.m. *
Ne1472h **Ancylostoma duodenale,** filariform larva w.m. *
Ne1491g **Ancylostoma braziliense,** South American hookworm, adult male w.m. *
Ne1492g **Ancylostoma braziliense,** adult female w.m. *
Ne1512v **Necator americanus,** adult male w.m. *
Ne1513v **Necator americanus,** adult female w.m. *
Ne1514f **Necator americanus,** eggs w.m.
Ne1515h **Necator americanus,** rhabditiform larva w.m. *
Ne1516h **Necator americanus,** filariform larvae. w.m. *
Ne152h **Heterakis spumosa,** intestinal parasite of rat, w.m. of male or female
Ne153f **Heterakis papillosa,** intestinal parasite of chicken, w.m. of male or female *
Ne163d • **Trichinella spiralis,** section of infected muscle with encysted larvae
Ne164e • **Trichinella spiralis,** w.m. of muscle piece with encysted larvae
Ne1642e **Trichinella spiralis,** calcified larva in muscles, w.m.
Ne1643f **Trichinella spiralis,** migrating in muscles, l.s.
Ne161t **Trichinella spiralis,** adult male from intestine, w.m. *
Ne162t **Trichinella spiralis,** adult female from intestine, w.m. *
Ne165g **Trichinella spiralis,** adults in section of infected intestine *
Ne154h **Trichuris trichiura,** whip worm, w.m. of adult male or female *
Ne155d • **Trichuris trichiura,** ova in faeces w.m.
Ne1551f **Trichuris trichiura,** sec. of infected colon showing the parasitic worms in situ
Ne156g **Trichostrongylus,** intestinal parasite, w.m. of adult male or female *
Ne231f **Oesophagostomum radiatum,** roundworm of cattle, w.m. of adult specimen *
Ne232f **Oesophagostomum columbianum,** roundworm of sheep, w.m. of adult specimen *
Ne234f **Haemonchus contortus,** stomach worm of cattle, w.m. of adult specimen
Ne158f • **Litomosoides carinii,** microfilaria, many specimen w.m.
Ne1585s **Dirofilaria immitis,** heartworm, smear of blood of dog with parasitic larvae
Ne1587k **Dipetalonema perstans,** smear of human blood with microfilariae
Ne1597g **Microfilaria,** smear from bird lung with parasites w.m. *
Ne159f • **Onchocerca volvulus,** sec. through host tissue with tumor containing larvae (filaria)
Ne1592h **Onchocerca volvulus,** w.m. of microfilaria from smear of tumor *
Ne138d • **Anguillula aceti,** vinegar eels, many stages of development in one slide, w.m.
Ne221d **Gordius,** a parasitic nematode living in insects, t.s. through the body
Ne222f **Gordius,** t.s. of infected insect showing the parasites in situ
Ne250d **Nemertinea,** non-parasitic marine species, t.s. in the region of proboscis
Ne170g • **Mixed ova** in faecal material. Slide containing eggs of parasitic worms of different species i.e. Ascaris, Ancylostoma, Trichuris, Taenia, Enterobius, Schistosoma etc. *

Acanthocephala

At101e **Macracanthorhynchus hirudinaceus,** from pig, sec. of head embedded in intestine *
At103e **Macracanthorhynchus hirudinaceus,** ova w.m.

Annelida - Annelids - Diverse

An118e • **Nereis,** marine polychaete worm, w.m. of parapodium
An119d **Nereis,** t.s. of head for general study
An120f **Nereis,** t.s. of head showing brain and eye
An121d • **Nereis,** typical t.s. through the body for general study
An127d **Arenicola,** lugworm, t.s. through the body
An128f **Sabella,** a sessile marine polychaete, t.s. through the body in different levels
An130f **Magelona,** marine polychaete, larva w.m.
An122d • **Tubifex,** a fresh water oligochaete, w.m. of adult worm
An1264f **Trochophora-Larva,** w.m.
An1265g **Trochophora-Larva in metamorphosis,** w.m.
An124d • **Hirudo medicinalis,** medicinal leech, t.s. through the body for demonstrating general structures of a leech
An1240d **Hirudo medicinalis,** oral sucker, t.s.
An1241d **Hirudo medicinalis,** anterior end with ventral sucker, l.s.
An1242f **Hirudo medicinalis,** anterior end l.s. showing eye
An1243d **Hirudo medicinalis,** posterior end with large suctorial disc, l.s.
An123d **Haemopis sanguisuga,** horse leech, t.s. of the body
An1244f • **Leech,** small entire specimen stained w.m. *
An131c • **Lumbricus terrestris,** earthworm, t.s. of body back of the clitellum. The Standard slide for general body structure, showing intestine, nephridia, typhlosole, etc. triply stained.
An132e **Lumbricus,** t.s. selected to show setae
An133c • **Lumbricus,** sagittal l.s. through three or more typical segments back of clitellum
An134c **Lumbricus,** region of mouth, t.s.
An135e **Lumbricus,** region of the cerebral ganglia, t.s.
An1352g **Lumbricus,** anterior end sagittal l.s. showing the cerebral and sub-pharyngeal ganglia
An136f **Lumbricus,** frontal l.s. through ventral nerve cord
An1365d **Lumbricus,** region of pharynx, t.s.
An137c **Lumbricus,** region of oesophagus t.s.
An1375d **Lumbricus,** region of hearts t.s.
An138c • **Lumbricus,** seminal vesicle t.s.
An1385d **Lumbricus,** seminal receptacle t.s.
An139e **Lumbricus,** sperm funnels t.s.
An140e **Lumbricus,** ovary with developing eggs t.s. *
An141f **Lumbricus,** testis t.s. *
An1415d • **Lumbricus,** crop t.s.
An142d **Lumbricus,** gizzard t.s.
An143c • **Lumbricus,** clitellum t.s.
An1435e **Lumbricus,** section selected to show nephridiopore
An1436h **Lumbricus,** nephridium dissected and w.m. *
An1437e **Lumbricus,** showing funnel of nephridia, t.s.
An144e • **Lumbricus,** anterior end including gonads, sagittal l.s.
An145g **Lumbricus,** anterior end, near median sagittal l.s. with ventral nerve cord, oesophagus etc. *
An147e **Lumbricus,** 1st – 9th segment, sagittal l.s., mouth and oesophagus
An148e **Lumbricus,** 9th – 16th segment, sagittal l.s., sex organs
An149e **Lumbricus,** 16th – 23rd segment, sagittal l.s., crop and gizzard
An150d **Lumbricus,** blood smear
An151d **Lumbricus,** sperm smear
An1261d **Lineus sp.,** nemertine, proboscis t.s.
An1262d **Lineus sp.,** of middle region of body t.s.
An125d • **Sagitta,** arrow worm, entire specimen w.m.
An1252e **Sagitta,** l.s. of specimen


An121d


An118e


An124d


An1240d

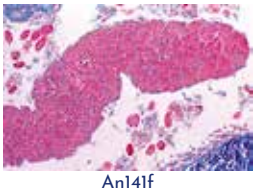

An131d

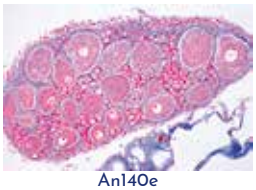

An132e


An147e


An148e


An149e


An141f


An140e


On111f


Ro212d

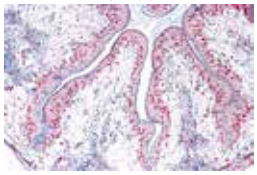

Ro214e

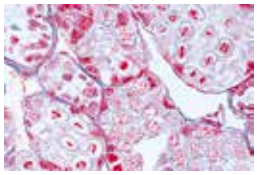

Cr113c

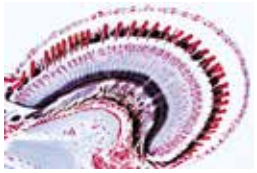

Cr115d


Cr128e


Cr116e


Cr134c


Cr139e


Cr131e


Cr133d

Onychophora

On111f **Peripatus,** connecting link between annelida and arthropoda, t.s. anterior region with leg *
On112f **Peripatus,** region of gonads t.s. *
On113f **Peripatus,** region of head t.s. *
On114g **Peripatus,** anterior end sagittal l.s. *
On115g **Peripatus,** middle part of the body, sagittal l.s. *

Rotatoria and Bryozoa – Rotifers and Moss Animals

Ro111d • **Rotatoria,** rotifers, strewn slide of mixed species w.m.
Ro211e • **Plumatella,** moss animals, w.m. or section
Ro212d • **Plumatella,** isolated statoblasts w.m.
Ro213e • **Flustra foliacea,** a marine moss animal, section of colony
Ro215e **Flustrella hispida,** moss animal (sea-mat), section of colony
Ro214e • **Membraniphora,** marine moss animal (sea-mat), section of colony
Ro217e **Bugula,** moss animal, part of colony w.m.
Ro218e **Pectinatella,** moss animal, part of colony w.m.

Crustacea Crustaceas

Cr111c • **Daphnia,** water flea, w.m.
Cr112c **Daphnia,** ephippia, w.m.
Cr1123c **Daphnia,** w.m. showing winter and summer eggs
Cr113c • **Cyclops,** fresh water copepods, w.m.
Cr114c • **Cyclops,** nauplius larva w.m.
Cr120c • **Small crustaceans,** mixed species of fresh water plankton strewn slide w.m.
Cr119d **Artemia salina,** brine shrimp, various developing stages on each slide, w.m.
Cr115d • **Balanus balanoides,** common barnacle, nauplius larva w.m.
Cr122d **Bosmina,** small crustacean w.m.
Cr126d **Bythotrephes,** a cladoceran w.m.
Cr128e **Caprella,** an amphipod w.m.
Cr117e • **Carcinus maenas,** crab, zoea larva w.m. *
Cr118e • **Carcinus maenas,** megalopa larva w.m. *
Cr124d **Cypris of Cirrepedia,** cocoon stage, stained and w.m.
Cr116e **Gammarus,** fresh water amphipod, entire specimen w.m.
Cr160f **Shrimp,** entire small specimen w.m.
Cr161d • **Shrimp,** t.s. of small specimen for general body structures
Cr168d • **Lepas anatifera,** barnacle, w.m. of catching leg
Cr169e **Lepidurus apus,** branchipode, w.m.
Cr125d **Leptodora,** a large cladoceran w.m.
Cr167f **Lingula,** brachiopode, t.s.
Cr163e **Mysis,** shrimp from the Arctic ocean, w.m.
Cr123d **Podon and Evadne,** selected from marine plankton w.m.
Cr150f **Statocyst of prawn,** organ of equilibration with sensory hairs and statolith
Cr135d • **Astacus,** crayfish, striated muscle l.s., ideal for the demonstration of striation showing large structures
Cr132c • **Astacus,** gills t.s.
Cr142c **Astacus,** stomach t.s.
Cr134c • **Astacus,** intestine t.s.
Cr137c • **Astacus,** liver t.s.
Cr136c **Astacus,** green gland t.s.
Cr138d • **Astacus,** ovary t.s. showing developing eggs in various stages
Cr139e • **Astacus,** testis t.s. with spermatogenesis
Cr1391g **Astacus,** testis t.s. specially selected for demonstration of meiosis and mitosis, carefully stained *
Cr144c **Astacus,** sperm duct t.s.
Cr131e **Astacus,** eye sagittal l.s. *
Cr141f **Astacus,** cerebral ganglion t.s. *
Cr133d **Astacus,** antenna (decalcified) t.s.
Cr143e **Astacus,** pincers (decalcified) t.s.
Cr140d **Astacus,** blood smear
Cr1445e **Astacus,** t.s. of thoracic region of small specimen
Cr1446e **Astacus,** t.s. of abdominal region of small specimen
Cr1447f **Astacus,** near median sagittal l.s. of small specimen
Cr165s **Argulus foliaceus,** fish louse w.m. *

Arachnida Chelicerates

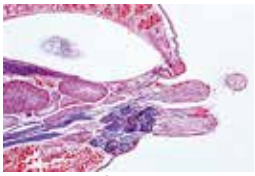
Ar111e • **Spider,** entire young specimen, w.m.
Ar112e • **Spider,** leg with comb, w.m.
Ar113e • **Spider,** spinneret w.m.
Ar114e **Araneus,** cross spider, spinneret w.m.
Ar123e **Spider,** mouth parts of male w.m.
Ar124e **Spider,** mouth parts of female w.m.
Ar120f **Spider,** epigyne of adult female w.m. *
Ar125d **Spider,** sagittal l.s. of abdomen for general study
Ar126e **Spider,** sagittal l.s. of abdomen showing spinneret and spinning glands
Ar127e • **Spider,** sagittal l.s. of abdomen showing the book or trachea lung
Ar1272f • **Spider,** sagittal l.s. of abdomen with epigyne and ovary
Ar1273g • **Spider,** sagittal l.s. of abdomen showing l.s. of the dorsal vessel
Ar128f **Spider,** t.s. of cephalothorax showing the central nervous system
Ar1281f **Spider,** cephalothorax with central nervous system l.s.
Ar129g **Salticus,** spider, sec. of cephalothorax showing the telescope eyes *
Ar130b **Spider,** portion of cobweb w.m.
Ar171d **Opilio sp.,** shepherd spider, sagittal l.s. of the body
Ar172e **Opilio sp.,** mouth parts w.m.
Ar131c • **Scorpion,** t.s. through young specimen
Ar132d **Scorpion,** sagittal l.s. through young specimen
Ar133e • **Scorpion,** section selected to show the poison gland
Ar134e **Scorpion,** section selected to show the book lung
Ar138g **Scorpion,** entire young specimen w.m. *
Ar1545g **Amblyomma americanum,** lone star tick, w.m. *
Ar141t **Argas persicus,** fowl tick, w.m. of adult specimen *
Ar142f **Argas,** six-legged larva w.m.
Ar154s **Boophilus annulatus,** cattle tick, the vector of Texas fever, w.m. *
Ar156h **Dermacentor andersoni,** Rocky Mountain wood tick, the vector of spotted fever, w.m. *
Ar157e **Dermacentor andersoni,** ova w.m. *
Ar158f **Dermacentor andersoni,** larva w.m. *
Ar155h **Dermacentor variabilis,** American dock tick, w.m. *
Ar146h • **Ixodes sp.,** tick, w.m. of adult specimen *
Ar147e **Ixodes sp.,** larva w.m.
Ar144g **Ornithodorus,** tick, carrier of relapsing fever, w.m. adult *
Ar1442g **Ornithodorus,** six-legged larva w.m. *
Ar159t • **Rhipicephalus sanguineus,** brown dog tick, w.m. *
Ar153e • **Demodex folliculorum,** section through the skin with the parasites in situ
Ar145d • **Dermanyssus gallinae,** chicken mite, w.m. *
Ar1513d **Hydrachna,** mite of fresh water, w.m.
Ar1512d **Photia,** beetle mite, w.m.
Ar148e • **Sarcoptes scabiei (Acarus siro),** in section of diseased skin
Ar149f **Sarcoptes scabiei,** w.m. of selected adult specimen *
Ar1517g **Syringophilus,** parasitic mite of poultry, w.m.
Ar150c • **Tyroglyphus farinae,** mite from meal, w.m.
Ar151c **Tyrolichus,** cheese mite w.m.
Ar1515e • **Acarapis woody,** Varroa, parasitic mite of bees w.m.
Ar161g **Pseudoscorpion,** w.m. of young entire specimen *
Ar180s **Limulus,** swordtail, trilobite larva w.m., the trilobite shaped larva is of interest for studies in phylogeny *

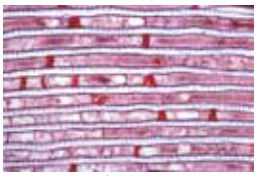

Cr150f

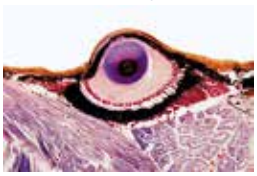

Cr115d


Ar111e


Ar124e


Ar126e

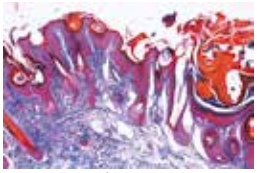

Ar127e


Ar129g


Ar133e


Ar141t


Ar147e


Ar148e


My115f


My213f

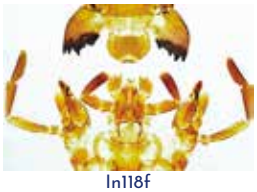

My111d


In111d


In112e


In1213d


In122d


In118f


In115f


In120e


In127e

Myriapoda
Myriapods

My111d **Scolopendra,** large centipede, t.s. of body segment
My112e **Scolopendra,** head with poison glands t.s.
My115f **Lithobius,** head with poison fangs, w.m. *
My117e **Lithobius,** centipede, segment w.m.
My118e **Lithobius,** head, t.s.
My119d **Lithobius,** midbody, t.s.
My211d **Julus,** a millipede, t.s. through the body
My212e **Julus,** diplosegment with two pairs of legs, w.m.
My213f **Julus,** head with mouth parts (gnathochilarium) w.m. *
My218d **Glomeris,** sagittal l.s. of entire specimen *
My220g **Diplopode,** sagittal l.s. through young specimen showing the zone of proliferation (anamorphose) *
My230d **Symphyla,** entire specimen w.m. *

Insecta - Insects

I. Microscopic anatomy and histology

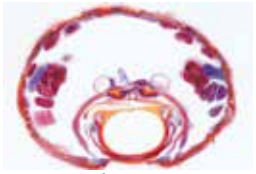
Head and mouth parts, whole mounts

In111d • **Musca domestica,** house fly, head and mouth parts with sucking tube, w.m.
In112e • **Pieris sp.,** butterfly, head and mouth parts with proboscis w.m.
In1123d **Pieris sp.,** mouth parts of caterpillar (larva) w.m.
In121d **Bombyx mori,** silk moth, chewing mouth parts of adult w.m.
In1213d • **Bombyx mori,** silkworm, mouth parts of caterpillar (larva) w.m.
In122d • **Apis mellifica,** honey bee, mouth parts of worker w.m.
In123e **Apis mellifica,** rudimentary mouth parts of drone w.m.
In114e **Vespa vulgaris,** wasp, biting mouth parts of a carnivore, w.m.
In118f • **Periplaneta or Blatta,** cockroach, biting mouth parts of a herbivore, dissected and w.m.
In115f • **Carabus,** beetle, mouth parts dissected and w.m. *
In116f **Melolontha,** cockchafer, mouth parts dissected and w.m.
In113e **Gomphocerus,** grasshopper, mouth parts w.m.
In1132g **Gomphocerus,** grasshopper, mouth parts dissected and w.m.
In119d • **Formica sp.,** ant, head and mouth parts w.m.
In1193e **Leptinotarsa,** Colorado beetle, w.m. of chewing mouth parts
In131e **Curculionidae sp.,** weevil, head and mouth parts w.m.
In117e • **Pyrrhocoris,** bug, piercing sucking mouth parts w.m.
In120e **Stomoxys calcitrans,** stable fly, piercing sucking mouth parts
In1201e **Tabanus bovinus,** gadfly, piercing sucking mouth parts w.m. *
In1205h **Haematobia**, piercing sucking mouth parts w.m.
In1234d **Volucella,** Diptera, piercing sucking mouth parts w.m.
In124g • **Anopheles,** malaria mosquito, head and mouth parts of male w.m.
In125g • **Anopheles,** head and mouth parts of female w.m.
In126e • **Culex pipiens,** mosquito, head and mouth parts of male w.m.
In127e • **Culex pipiens,** head and mouth parts of female w.m.
In128h **Culex pipiens,** mouth parts of female, dissected and w.m. *
In130f **Odonata sp.,** dragonfly, mouth parts of larva w.m. *
In132e **Lymantria**, gipsy, mouth parts of larva w.m.
In1322f **Diving beetle**, head of larva w.m. Extraintestinal digestion *
In1323e **Simulium**, head of larva w.m. shows filtering mouth parts

Head and mouth parts, sections

In273e **Carausius**, sagittal l.s. of head with brain and mouth parts
In274e **Apis mellifica,** honey bee, sagittal l.s. of head with brain and mouth parts
In141e **Musca domestica,** house fly, mouth parts, t.s. through sucking tube
In148e **Apis mellifica,** honey bee, mouth parts of worker t.s.
In143e **Pieris brassicae,** butterfly. mouth parts t.s.
In149g **Culex pipiens,** mosquito, mouth parts of female t.s. with mandibles, labrum, maxillae, labium, hypopharynx
In142e **Tabanus bovinus,** gadfly, mouth parts t.s.
In144e **Hemiptera spec.,** bug, mouth parts t.s.
In145g **Aphaniptera spec.,** flea, piercing mouth parts t.s. *


In274e


In149g

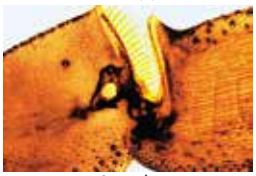
Antennae

In213d • **Pieris,** butterfly, clubbed antenna w.m.
In206d • **Carabus,** ground beetle, filiform antenna w.m.
In203d • **Periplaneta or Blatta,** cockroach, setaceous antenna w.m.
In204d **Tenebrio molitor,** meal beetle, moniliform antenna w.m.
In214e • **Bombyx mori,** silk moth, feathered antenna w.m.
In208d **Chironomus,** gnat, feathered antenna of male w.m.
In205d **Elateridae sp.,** click beetle, serrate antenna w.m. *
In207d **Curculionidae sp.,** weevil, geniculate antenna w.m. *
In209d **Brachycera sp.,** fly, antenna as speed indicator w.m. *
In211b • **Melolontha,** cockchafer, laminate antenna with sensory organs
In212d • **Apis mellifica,** honey bee, antenna with sensory organs w.m.
In2125d **Musca domestica,** house fly, antenna w.m.
In2142e **Antennae** of butterfly (clubbed) and of moth (feathered) w.m.
In2146u **Insect antenna types,** composite slide of five kinds of antennae for comparison w.m.


In211d


In214e


In206b


In216b

Legs

In217d • **Musca domestica,** house fly, leg with pulvilli w.m.
In219d • **Pieris brassicae,** butterfly, walking leg w.m.
In220d **Melolontha,** cockchafer or other species, digging leg w.m.
In215d • **Apis mellifica,** honey bee, anterior leg with eye brush w.m.
In2152d **Apis mellifica,** middle leg w.m.
In216d • **Apis mellifica,** posterior leg with pollen basket w.m.
In2161d **Apis mellifica,** posterior leg of drone w.m.
In2162s **Apis mellifica,** composite slide of anterior, middle and posterior leg of worker, w.m.
In218d • **Bombyx mori,** silkworm, abdominal foot of caterpillar
In223d **Gomphocerus,** grasshopper, stridulary organ w.m. of leg
In224d **Ensifera sp.,** locust or cricket, anterior leg with tympanal organ w.m. *
In225d **Mantis religiosa,** praying mantis, grasping leg of larva w.m. *
In226d **Diving beetle or water bug,** swimming leg w.m.


In220d

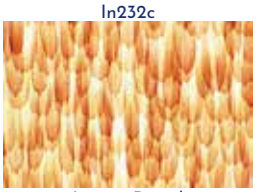

In215d

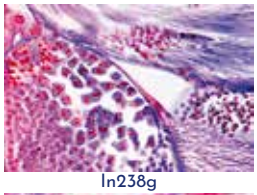
Wings

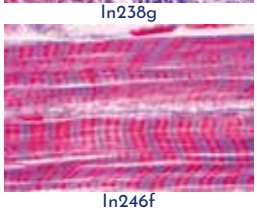
In235c • **Musca domestica,** house fly, wing w.m.
In2351d **Musca domestica,** house fly, wing and haltere w.m.
In231d • **Apis mellifica,** honey bee, anterior and posterior wings w.m.
In234c • **Culex pipiens,** common mosquito, wing w.m.
In2342c **Anopheles,** malaria mosquito, wing w.m.
In228c **Chrysopa perla,** wing of neuroptera w.m. *
In227c **Zygoptera sp.,** damselfly, wings w.m.
In229e **Periplaneta,** cockroach, upper chitinous and lower membranous wings w.m.
In2292e **Gomphocerus,** grasshopper, w.m. of upper and lower wing
In2352e **Forficula,** earwig, w.m. of upper and lower wing
In230d **Ensifera sp.,** locust or cricket, wing with stridulary organ w.m. *
In232c • **Pieris brassicae,** butterfly, portion of wing showing arrangement of scales w.m.


In235b


In232c

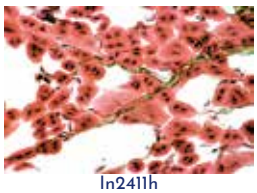

In232c Detail


In238g

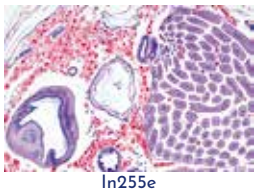

In246f

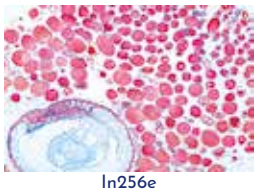

In241b


In242d


In2411h

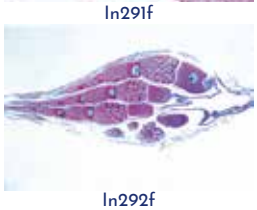

In281d


In255e


In256e


In290f


In291f


In292f

In233c **Pieris brassicae,** butterfly, isolated scales w.m.
In2332e **Butterfly,** Brasilian species (Morpho sp.), w.m. of wing portion showing scales opaque
In2334d **Lepisma,** silverfish, w.m. of scales from body

Cytology

In238g • **Spermatogenesis with meiotic and mitotic stages**, sec. of testis of Carausius, grasshopper, carefully stained
In245h • **Giant chromosomes**, smear from salivary gland of Chironomus, carefully fixed and stained *
In2451e **Giant chromosomes** in section through the salivary glands of the Chironomus larva
In246f **Striated muscles** of insect, fibres isolated and stained to show the striations w.m.
In247e • **Striated muscles** of insect, sections through insect thorax with t.s. and l.s. of muscle showing the striations

Organs of metabolism

In241c • **Trachea** from insect, w.m. showing tracheal rings
In242d • **Spiracle** from insect (stigma), w.m.
In248d • **Tracheal gills,** w.m. of Cloeon sp., May fly nymph
In298d **Tracheal gills of larva,** w.m. of Odonata sp., dragonfly
In285d **Rectum** of larva, respiratory organ, t.s. of Odonata sp., dragonfly
In2852d **Air tubes** of pupa of Culex, mosquito, w.m.
In2411h **Trachea in insect intestine**, specially prepared and stained with cupric sulphide to show the finest branchings *
In289e **Blood smear** with different kinds of blood cells, Carausius
In254d • **Abdomen of worker** with intestine, Apis mellifica, t.s.
In270d • **Abdomen with internal organs**, t.s. of Carausius, walking stick
In263d **Abdomen**, t.s. Culex pipiens
In266d **Abdomen**, t.s. of Drosophila, fruit fly
In281d **Gizzard**, t.s. of Carabus, ground beetle
In2813e **Opened gizzard**, w.m. Locusta, grasshopper
In239e • **Gizzard with chitinous teeth**, w.m. of Periplaneta, cockroach
In282d **Chyle** and middle intestine with Malpighian tubules, l.s. of Periplaneta (Blatta)
In284d • **Rectum with ampulli**, t.s. of Periplaneta
In287g **Fat body** stained with osmic acid, sec. of Periplaneta, cockroach
In288d **Fat body** with crystals of uric acid, sec. of Periplaneta, cockroach
In283d **Appendages of chyle and Malpighian tubules,** thin t.s. for finer detail

Reproductive system

In255e • **Testis**, in t.s. of abdomen of drone, Apis mellifica
In256e • **Ovary**, in t.s. of abdomen of queen, Apis mellifica
In236e **Ovary**, in t.s. of Melolontha, cockchafer
In2365e **Ovary**, in t.s. of abdomen of Carausius, walking stick
In2367g **Aedeagus** of beetle w.m., male copulating organ
In290f **Ovary** of insect showing panoistic egg tubules, l.s.
In291f **Ovary** of insect showing telotrophic egg tubules, l.s.
In292f **Ovary** of insect showing polytrophic egg tubules, l.s.
In299e **Ovipositor** of locust or cricket t.s.
In2912e **Incomplete metamorphosis** of insects: larva
In2913e **Incomplete metamorphosis** of insects: imago (adult)
In2914d **Complete metamorphosis** of insects: larva
In2915d **Complete metamorphosis** of insects: pupa
In2916d **Complete metamorphosis** of insects: imago (adult)

Sense organs and nervous system

In243c **Cornea,** isolated from eye of house fly, w.m. showing facets
In2434c • **Cornea,** isolated from eye of honey bee, w.m. showing facets
In251e • **Compound eye,** t.s. through head of worker (Apis mellifica), showing the structure of the typical insect eyes and brain. Ommatidia are seen.
In252f **Compound eye,** t.s. through head showing the large eyes of drone (Apis mellifica)
In253f **Compound eye,** t.s. through head of queen (Apis mellifica)
In249d **Ocelli** of Apis mellifica, honey bee, w.m.
In2492e **Ocelli** of an insect, l.s.
In275e **Compound eye,** t.s. through head of Apis mellifica, tangential section showing t.s. of ommatidia
In261e **Head with eyes and brain,** t.s. of Culex pipiens, mosquito
In265e **Head with eyes and brain,** t.s. of Drosophila, fruit fly
In2675e **Compound eye ,** t.s. of Musca domestica, fly
In276f **Head and eyes,** t.s. of Cloeon or Baetis, May fly
In2765f **Head and eyes**, t.s. of Melolontha, cockchafer
In271e **Brain,** frontal l.s. of Carausius or Gryllus
In272e **Brain,** frontal l.s. of Vespa vulgaris, wasp
In277h **Pars intercerebralis** with neurosecretory cells specially stained, Carausius, walking stick, section of brain *
In278h **Corpora cardiaca,** organs for storing neurosecretes, Carausius, section through brain *
In2781h **Corpora allata,** neuroendocrine glands, Carausius, section *
In2784f **Sensory organs** in the antenna of an insect, t.s. for finer detail
In279k **Johnston's organ,** l.s. through insect auditory organ *
In294f **Luminous organ,** sec. of Phausis, glowworm
In295e **Tympanal organ,** sec. of Cicada sp. *
In2833f **Insect larva** with non-centralized nervous system, sagittal l.s. *
In2834f **Insect** with low centralized nervous system, sagittal l.s. *
In2835f **Insect** with high centralized nervous system, sagittal l.s. *

Miscellaneous

In244d • **Sting and poison sac** of honey bee, w.m.
In260c • **Wax plate** of worker of Apis mellifica, w.m.
In237d • **Silk spinning glands** and other organs, t.s. of caterpillar of Bombyx mori, silkworm
In2943d **Forceps of male** of Forficula, earwig, w.m.
In258d • **Larva** of Apis mellifica, sagittal l.s.
In259e • **Pupa** of Apis mellifica, sagittal l.s.
In262d **Thorax** of Culex pipiens, t.s.
In267f • **Entire insect,** sagittal l.s. of Drosophila, fruit fly, showing all structures for general study
In2993e **Parasitical larvae of microgaster**, in t.s. of infested caterpillar

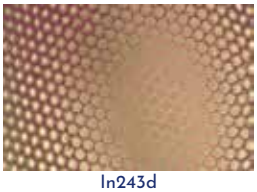
II. Whole mounts of entire insects

Apterygota and Ephemeroidea

In348d • **Collembola**, spring tail, adult w.m.
In3985d • **Podura,** spring tail, adult w.m.
In3986d **Thysanura sp.,** bristle tail, adult w.m.
In353e • **Caenis,** May fly, adult w.m.
In354e **Caenis,** subimago w.m.
In355d **Caenis,** larva w.m.

Diptera

In321g • **Culex pipiens,** common mosquito, adult male w.m.
In322g • **Culex pipiens,** adult female w.m.
In323d • **Culex pipiens,** pupa w.m.
In324d • **Culex pipiens,** larva w.m.
In3242d • **Culex pipiens,** ova w.m.
In316g • **Anopheles,** malaria mosquito, adult male w.m.
In317g • **Anopheles,** adult female w.m.
In318f • **Anopheles,** pupa w.m.
In319f • **Anopheles,** larva w.m.
In3192e • **Anopheles,** ova w.m.
In320g **Anopheles and Culex pipiens,** both the larvae on same slide for comparison, w.m.


In243d


In251e


In2765f


In279k


In2492e


In295e


In244d

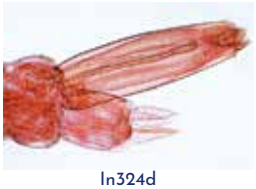

In260c


In267f

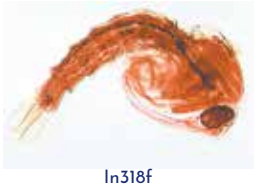

In3986d


In353e


In322g


In324d


In321g Detail


In318f


In343e


n334e


In315d


In3252f


In327e


In326g


In328f

In311d • **Drosophila,** fruit fly, adult male w.m.
In312d • **Drosophila,** adult female w.m.
In313d **Drosophila,** larva w.m.
In314d **Drosophila,** pupa w.m.
In387e **Chironomus,** gnat, w.m. of adult
In340d • **Chironomus,** gnat, larva w.m.
In341d **Corethra,** gnat, larva w.m.
In389f **Aedes,** mosquito, adult male w.m.
In390f **Aedes,** adult female w.m.
In391e **Aedes,** pupa w.m.
In392e **Aedes,** larva w.m.
In393e **Aedes,** ova w.m.
In397e **Musca domestica,** house fly, larva w.m.
In398d **Musca domestica,** ova w.m.
In394f **Phlebotomus,** carrier of Leishmaniosis, male mosquito w.m. *
In395f **Phlebotomus,** female mosquito w.m. *
In3956f **Culicoides,** w.m., a small vicious biter
In3957f **Gasterophilus intestinalis,** horse bot fly, eggs attached to hair
In3294f **Lipoptena,** deer ked, w.m. *

Aphaniptera

In3341e • **Ctenocephalus canis,** male or female specimen w.m.
In333e **Ctenocephalus canis,** dog flea, adult male w.m.
In334e **Ctenocephalus canis,** adult female w.m.
In3365h **Pulex irritans,** human flea, adult male w.m. *
In3366h **Pulex irritans,** adult female w.m. *
In335g **Xenopsylla cheopis,** rat flea, the carrier of bubonic plague, adult male w.m.
In336g **Xenopsylla cheopis,** adult female w.m.
In337e **Nosopsyllus fasciatus,** rat flea, adult w.m.
In343e **Ceratophyllus gallinulae,** chicken flea, w.m. of adult

Blattoidea and Hymenoptera

In365g **Mantis religiosa,** praying mantis, larva w.m. *
In367f **Isoptera sp.,** termite, w.m. of worker *
In368f **Isoptera sp.,** termite, w.m. of soldier
In315d • **Lasius,** ant, worker w.m.
In3151e **Lasius,** winged male w.m.
In3152d **Lasius,** winged female w.m.
In385e **Chalcididae,** w.m. of adult *

Anoplura and Mallophaga

In325g • **Pediculus humanus,** louse, adult male or female w.m.
In3252g **Pediculus humanus capitis,** human head louse, adult w.m.
In3254f **Pediculus humanus capitis,** nymph w.m.
In3255e **Pediculus humanus capitis,** ova w.m.
In3256g **Pediculus humanus corporis,** human body louse, adult w.m.
In3258f **Pediculus humanus corporis,** nymph w.m.
In3259e **Pediculus humanus corporis,** ova w.m.
In326g **Phthirus pubis,** human crab louse, adult w.m. *
In3262s **Phthirus pubis,** ova w.m.
In327e • **Louse eggs attached to the hair,** w.m. *
In328f • **Haematopinus suis,** pig louse, adult w.m. *
In3282e **Haematopinus suis,** ova w.m.
In3284f **Haematopinus eurysternus,** cattle louse, adult w.m. *
In329f **Haematopinus piliferus,** dog louse, adult w.m. *
In3271g **Bovicola,** cattle louse, w.m. *
In3275f **Trichodectes canis,** dog louse, w.m. *
In3272f • **Lipeurus variabilis,** wing feather louse, w.m. *
In3273f **Lipeurus caponis,** wing louse, w.m. *
In3274f • **Menopon gallinae,** bird parasite, w.m. *
In3276f **Melophagus ovinus,** wingless ectoparasite on sheep, w.m. *
In381e **Phthiraptera,** lice from rat, different species w.m. *

Heteroptera and Homoptera

In330g • **Cimex lectularius,** bed bug, adult w.m.
In374d **Naucoridae sp.,** water bug, w.m. of small adult
In375d **Capsidae sp.,** plant bug, w.m. of adult
In339c • **Aphidae sp.,** plant lice, w.m. of several per slide
In3394e **Phylloxera sp.,** vine louse, w.m.
In377d **Psylla,** plant flea, w.m. of adult

Diverse orders

In338d **Lepidoptera sp.,** butterfly, young caterpillar w.m.
In356d **Nemura sp.,** stone fly, adult w.m.
In357d **Nemura sp.,** larva w.m.
In361g **Embia sp.,** adult w.m. *
In362e **Forficula auricularia,** earwig, adult w.m.
In371d **Thysanoptera,** thrips, w.m. of adult

Mollusca - Mollusks

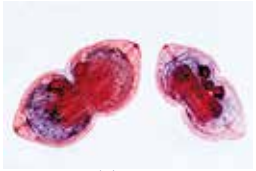
Mo111e • **Chiton,** a primitive mollusk, t.s. through the body
Mo112e **Chiton,** sagittal l.s. through the entire specimen
Mo116e • **Mya arenaria,** clam, t.s. of entire young specimen
Mo117d **Mya arenaria,** liver t.s.
Mo119d • **Mya arenaria,** t.s. and l.s. of gills showing well developed ciliated epithelium
Mo120d **Mya arenaria,** t.s. of intestine and gonads
Mo121d **Mya arenaria,** adductor muscle of shell, l.s.
Mo122d **Mya arenaria,** siphonal tube t.s.
Mo123f **Mya arenaria,** mussel, filtering stomach t.s. *
Mo191d **Anodonta,** mussel, small specimen, complete t.s.
Mo192d **Anodonta,** gills w.m.
Mo193d **Anodonta,** gills l.s.
Mo194d **Anodonta,** intestinal region t.s.
Mo195d **Anodonta,** liver t.s.
Mo196d **Anodonta,** glochidia (larvae) w.m.
Mo1131e **Mussel embryology** (Lamellibranchiata, Bivalvia or Pelecypoda). Unfertilized and fertilized ova w.m. *
Mo1133e **Mussel embryology.** Zygote, two- and four-cell embryos w.m. *
Mo1135s **Mussel embryology.** Early zygote through late cleavage. Polar bodies, polar lobes and spiral cleavage
Mo1137e **Mussel embryology.** Blastula w.m. *
Mo1138e **Mussel embryology.** Gastrula w.m. *
Mo1139f **Mussel embryology.** Trochophore larva w.m. *
Mo1141s **Mussel embryology.** Veliger larvae developing, early and later stages w.m. *
Mo1143e **Mussel embryology.** Adult veliger larva w.m. *
Mo115e • **Mussel embryology.** Glochidia larva w.m.
Mo123e **Pisidium,** a small fresh water mussel, section with embryos
Mo131e • **Pecten,** clam, lens eye in section of mantle margin
Mo185f **Haliotis,** marine snail, l.s. of a simple pinhole camera eye *
Mo187e **Patella,** cup-shell. simple eye, l.s.
Mo211f **Patella,** trochophora larva w.m. *
Mo212e **Crepidula,** marine snail, veliger larva w.m. *
Mo125f • **Alloteuthis,** cuttlefish, entire young specimen stained and w.m. *
Mo130e **Alloteuthis,** cuttlefish, abdomen of young specimen, t.s.
Mo1301f • **Alloteuthis,** cuttlefish, entire young specimen, l.s. for general study
Mo126e **Alloteuthis,** cuttlefish, eye l.s.
Mo127d **Alloteuthis,** cuttlefish, tentacles t.s.
Mo1275f **Alloteuthis,** cuttlefish, gill heart and ink sac, l.s.
Mo128d **Alloteuthis,** cuttlefish, fin t.s.
Mo129d **Alloteuthis,** cuttlefish, tail t.s.
Mo141c • **Sepia officinalis,** cuttlefish, skin with chromatophores, w.m. of piece
Mo142c **Sepia officinalis,** skin with chromatophores, horizontal section
Mo143f **Sepia officinalis,** sec. through the ganglion showing giant nerve fibres
Mo132d • **Octopus,** cuttlefish, section through sucking tube


In330g


In356d


Mo111e


Mo119e


Mo115e


Mo131e


Mo185f

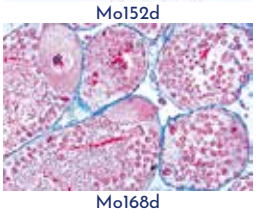

Mo187e


Mo125f

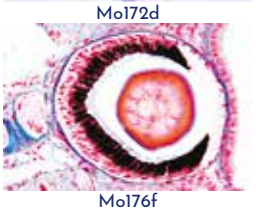

Mo1301f


Mo132d


Mo152d


Mo168d


Mo172d


Mo176f


Ec111f


Ec114e


Ec113d


Ec117d


Ec202d


Ec203g


Ec204g

Mo151d • **Snail,** typical t.s. of small specimen for general study
Mo1515e **Snail,** typical l.s. of small specimen for general study
Mo152d • **Snail,** sagittal l.s. through the head showing the radula in situ
Mo153e **Snail,** radula isolated and w.m.
Mo161c • **Helix pomatia,** snail, foot sagittal l.s.
Mo162c **Helix pomatia,** snail, mantle margin sagittal l.s.
Mo163c **Helix pomatia,** snail, esophagus t.s.
Mo164c • **Helix pomatia,** stomach and digestive glands t.s.
Mo165c **Helix pomatia,** intestine t.s.
Mo166c • **Helix pomatia,** liver t.s.
Mo167d **Helix pomatia,** albumen gland t.s.
Mo168d • **Helix pomatia,** hermaphrodite gland (ovotestis), with ova and spermatozoa, t.s.
Mo169d **Helix pomatia,** spermoviduct t.s.
Mo170d **Helix pomatia,** crystalline style and glands, t.s.
Mo171c **Helix pomatia,** penis t.s.
Mo172c **Helix pomatia,** flagellum t.s.
Mo173d • **Helix pomatia,** kidney and heart during the summer, t.s.
Mo174d **Helix pomatia,** kidney and heart during the winter, t.s.
Mo175c • **Helix pomatia,** lung t.s.
Mo176f • **Helix pomatia,** antenna with highly developed lens eye l.s.

Echinodermata - Echinoderms

Ec111f • **Asterias,** starfish, young entire specimen, stained and w.m. *
Ec113d • **Asterias,** arm t.s., digestive gland and tube feet are shown for general study of all details
Ec114e **Asterias,** horizontal l.s. of entire young specimen
Ec115e **Asterias,** sagittal l.s. of entire young specimen
Ec117d • **Asterias,** pedicellaria w.m.
Ec251d **Starfish embryology** (Asterias), ovary t.s. showing large ova in different developing stages
Ec252d **Starfish embryology,** testis t.s. with developing sperm
Ec254e **Starfish embryology,** sperm smear w.m.
Ec116e • **Asterias,** bipinnaria larva w.m. *
Ec1162f **Asterias,** brachiolaria larva w.m. *
Ec101h **Asterina gibbosa,** small starfish, entire specimen carefully stained and w.m. for general study
Ec102e **Asterina gibbosa,** stages of development w.m.
Ec103e **Asterina gibbosa,** horizontal l.s. of small specimen showing gonads
Ec131d **Ophiura,** serpent star, arm t.s.
Ec132d **Ophiura,** base of arm showing bursa and gonads, t.s.
Ec133d **Ophiura,** horizontal l.s. of disc
Ec137f **Ophiura,** ophiopluteus larva w.m. *
Ec118d • **Echinus,** sea urchin, sagittal l.s. of entire young specimen
Ec1183d **Echinus,** sea urchin, radial sec. of entire young specimen
Ec1184d **Echinus,** pedicellaria, w.m.
Ec1186f **Echinus,** sea urchin, t.s. of spine, ground thin or section *
Ec121e **Asterioidea sp.,** larva in the stage of metamorphosis w.m. *
Ec141d **Cucumaria,** sea cucumber, t.s. of small specimen showing the typical structures
Ec145e **Holothurioidea sp.,** microsclerites w.m.
Ec147f **Holothurioidea sp.,** larva w.m. *
Ec201g • **Sea urchin embryology** (Psammechinus miliaris), unfertilized ova w.m.
Ec202g • **Sea urchin embryology,** fertilized ova w.m.
Ec203g • **Sea urchin embryology,** two cell stage w.m.
Ec204g • **Sea urchin embryology,** four cell stage w.m.
Ec205g • **Sea urchin embryology,** eight cell stage w.m.
Ec206d • **Sea urchin embryology,** sixteen cell stage w.m.
Ec207g • **Sea urchin embryology,** thirty two cell stage w.m.
Ec208d • **Sea urchin embryology,** morula w.m.
Ec209g • **Sea urchin embryology,** blastula w.m.
Ec210g • **Sea urchin embryology,** beginning gastrulation w.m.
Ec211g • **Sea urchin embryology,** progressive gastrulation w.m.
Ec212g • **Sea urchin embryology,** pluteus larva w.m.
Ec213e **Sea urchin embryology,** strewn slide of various stages w.m.
Ec255e **Starfish embryology,** germinal vesicle stage w.m.
Ec256e **Starfish embryology,** unfertilized ova w.m.
Ec257e **Starfish embryology,** fertilized ova w.m., zygote with polar bodies
Ec258e **Starfish embryology,** two cell stage w.m.
Ec259e **Starfish embryology,** four cell stage w.m.
Ec260e **Starfish embryology,** eight cell stage w.m.
Ec261e **Starfish embryology,** sixteen cell stage w.m.
Ec263e **Starfish embryology,** thirty-two cell stage w.m.
Ec264e **Starfish embryology,** sixty-four cell stage or morula, w.m.
Ec267e **Starfish embryology,** early and late blastula w.m.
Ec268e **Starfish embryology,** early and late gastrula w.m.
Ec271f **Starfish embryology,** early bipinnaria larva w.m.
Ec272f **Starfish embryology,** late bipinnaria larva w.m.
Ec276s **Starfish embryology,** brachiolaria larva w.m.
Ec278s **Starfish embryology,** young starfish w.m.

Enteropneusta

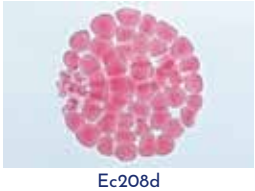
Ep111g **Balanoglossus,** acorn worm, sagittal section of proto- and mesosoma *
Ep114f **Balanoglossus,** region of gills, t.s. *
Ep115f **Balanoglossus,** region of gonads, t.s. *
Ep116f **Balanoglossus,** region of liver, t.s. *
Ep117f **Balanoglossus,** abdominal region, t.s. *
Ep130f **Balanoglossus,** tornaria larva w.m. *

Tunicata - Ascidians

Tu105g **Ascidia,** sea squirt, swimming tadpole w.m. *
Tu106g **Ascidia,** sea squirt, stage of early metamorphosis w.m. *
Tu107g **Ascidia,** sea squirt, stage of late metamorphosis w.m. *
Tu111d **Ascidia,** sea squirt, adult specimen, t.s. in region of gills
Tu112d **Ascidia,** sea squirt, adult specimen, t.s. in region of stomach
Tu121e **Ascidia,** t.s. of mantle to show animal cellulose
Tu114e **Clavellina,** tunicate, l.s. of a small specimen
Tu1142d **Clavellina,** t.s. of gill – intestine region
Tu1143d **Clavellina,** t.s. of stomach – intestine region
Tu116f **Botryllus schlosseri,** tunicate colony, w.m.
Tu117d **Botryllus,** a synascidian, t.s. of colony
Tu118e **Botryllus,** thin l.s. for fine detail
Tu119e **Botryllus,** thick l.s. for general structures
Tu211f **Salpa,** asexual form w.m. *
Tu212f **Salpa,** sexual form w.m. *
Tu131e **Kowalewskaia** or Oikopleura (class Appendicularia), w.m.
Tu214f **Phoronis,** Actinotrocha-larva, w.m.

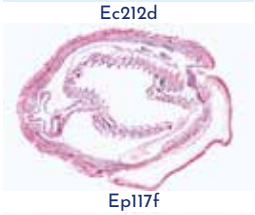
Acrania -Cephalacordates

Ac101t • **Branchiostoma** lanceolatum (Amphioxus), w.m. of entire specimen for general body structure, carefully stained
Ac103d • **Branchiostoma,** typical t.s. for general study, shows gills, liver and gonads, the standard slide
Ac105d • **Branchiostoma,** t.s. selected to show male gonads
Ac106d • **Branchiostoma,** t.s. selected to show female gonads
Ac107d **Branchiostoma,** mouth region t.s.
Ac108d **Branchiostoma,** anterior pharynx showing gills and notochord t.s.
Ac109d **Branchiostoma,** posterior pharynx showing liver t.s.
Ac110d • **Branchiostoma,** region of intestine t.s.
Ac111d **Branchiostoma,** region of tail t.s.
Ac113d **Branchiostoma,** sagittal l.s. of the body
Ac1135e **Branchiostoma,** frontal section through the spinal cord
Ac1142d **Branchiostoma,** t.s. showing light-sensitive pigment cells
Ac1143f **Branchiostoma,** head region, median l.s.
Ac115f **Branchiostoma,** young larva w.m. *
Ac117s **Branchiostoma** composite slide, showing t.s. through the regions of mouth, pharynx, intestine, and tail

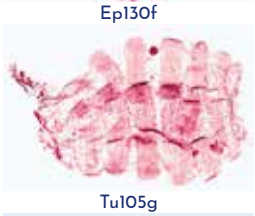

Ec208d

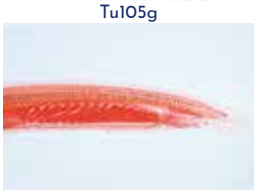

Ec210d


Ec212d


Ep117f


Ep130f


Tu105g


Ac101t


Ac103d


Ac108d


Ac109d


Ac110d

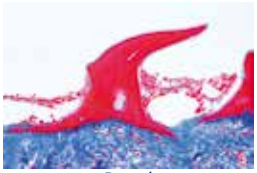

Ac1142d

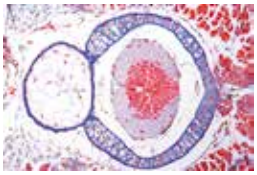

Ac1143f


Pi121d


Pi122d

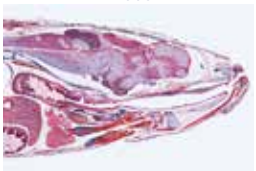

Pi111f


Pi115d


Pi117e


Pi132e


Pi135d


Pi1325f


Pi160c

Ac151g **Branchiostoma embryology,** unfertilized ova w.m. *
Ac156k **Branchiostoma embryology,** two to sixteen cell stages, w.m. *
Ac159g **Branchiostoma embryology,** thirty-two and sixty-four cells w.m. *
Ac162g **Branchiostoma embryology,** blastula stage w.m. *
Ac164g **Branchiostoma embryology,** gastrula stage w.m. *
Ac166g **Branchiostoma embryology,** early larva w.m. *
Ac168g **Branchiostoma embryology,** late larva w.m. *

Pisces - Fishes

Cyclostomata – Yawless fishes

Pi1271h **Ammocoetes,** lamprey, larva small specimen w.m. *
Pi1273f **Ammocoetes,** region of head t.s.
Pi1274f **Ammocoetes,** region of pharynx t.s.
Pi1275f **Ammocoetes,** region of abdomen t.s.
Pi1276f **Ammocoetes,** region of tail t.s.
Pi120d **Petromyzon,** lamprey, head t.s.
Pi121d • **Petromyzon,** region of gills t.s.
Pi122d • **Petromyzon,** region of abdomen t.s.
Pi123c **Petromyzon,** region of tail t.s.
Pi124g **Petromyzon,** region of head and gills, horizontal l.s. *
Pi1252f **Petromyzon,** chorda l.s.
Pi1253f **Petromyzon,** chorda t.s.
Pi1254c **Petromyzon,** intestine, t.s.
Pi1255d **Petromyzon,** region of mouth t.s.
Pi1256c **Petromyzon,** kidney t.s.
Pi1257d **Petromyzon,** ovary t.s.
Pi1258f **Petromyzon,** brain t.s.
Pi1259d **Petromyzon,** chorda and spinal cord, t.s.

Selachii – Cartilaginous fishes

Pi109g **Scyllium,** dogfish, horizontal l.s. through region of head and gills of entire young specimen *
Pi1095f • **Scyllium,** region of head, t.s.
Pi110f **Scyllium,** gill arch t.s.
Pi111f • **Scyllium,** dogfish, t.s. in region of thorax and gills of entire young specimen
Pi112f • **Scyllium,** dogfish, t.s. in region of abdomen, with spiral intestine and liver
Pi113d **Scyllium,** t.s. of fin
Pi114d **Scyllium,** t.s. in region of tail
Pi115d • **Scyllium,** skin with placoid scales, vertical l.s.
Pi1152f **Scyllium,** skin with placoid scales, w.m.
Pi1153f **Scyllium,** yaw with developing tooth t.s.
Pi1154f **Scyllium,** brain l.s.
Pi1155f **Scyllium,** olfactory epithelium, t.s.
Pi1156f **Scyllium,** lateral line organ t.s.
Pi116d **Scyllium,** cartilage t.s.
Pi117e • **Scyllium,** vertebral column with spinal cord and notochord, t.s.
Pi118g **Scyllium,** heart sagittal l.s. *
Pi119g **Scyllium,** brain sagittal l.s. *
Pi169e **Torpedo marmorata,** electric ray, t.s. of electric organ

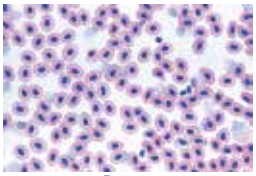
Teleostei – Bony fishes

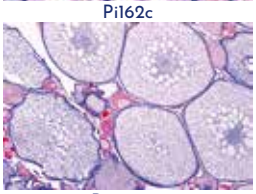
Pi130g **Fresh water fish** (small specimen), entire sagittal l.s.
Pi131d **Fresh water fish,** mouth region t.s.
Pi132e • **Fresh water fish,** head and eyes t.s.
Pi1325f • **Fresh water fish,** head with brain sagittal l.s
Pi133d • **Fresh water fish,** region of gills t.s.
Pi134d • **Fresh water fish,** region of heart t.s.
Pi135d **Fresh water fish,** abdominal region showing kidney, liver and intestine t.s.
Pi136d • **Fresh water fish,** region of gonads t.s.
Pi137c **Fresh water fish,** region of tail t.s.
Pi138f **Fresh water fish,** horizontal l.s. through head and gills
Pi139f **Fresh water fish,** retina adapted to darkness, t.s. of head
Pi1392f **Fresh water fish,** retina adapted to brightness, t.s. of head
Pi140e **Fresh water fish,** sec. of eye showing horizontal section of the retina
Pi141f **Fresh water fish,** heart sagittal l.s.

Pi160c • **Cyprinus,** gills t.s.
Pi157d **Cyprinus,** heart l.s.
Pi162c • **Cyprinus,** blood smear
Pi164d **Cyprinus,** pronephros (head kidney) t.s.
Pi155c • **Cyprinus,** stomach t.s.
Pi154c • **Cyprinus,** small intestine t.s.
Pi151c **Cyprinus,** carp, liver t.s.
Pi156c **Cyprinus,** pancreas t.s.
Pi158c **Cyprinus,** air bladder t.s.
Pi159c **Cyprinus,** kidney t.s.
Pi153c • **Cyprinus,** ovary t.s.
Pi152c • **Cyprinus,** testis t.s.
Pi161d **Cyprinus,** brain t.s.
Pi163c • **Cyprinus,** skin vertical l.s.
Pi165d • **Cyprinus,** barb (tactile organ) t.s.
Pi1652f **Cyprinus,** t.s. of lateral line organ. The organ of balance *
Pi1661d **Trutta (Salmo),** trout, heart l.s.
Pi1662c **Trutta,** gills t.s.
Pi1663c **Trutta,** kidney t.s.
Pi1664d **Trutta,** testis t.s.
Pi1665e **Trutta,** brain l.s., routine stained
Pi1666f **Trutta,** brain l.s., silvered
Pi1667f **Trutta,** brain, t.s. of 3 regions (Bulbi olfactorii, Tectum opticum, Cerebellum)
Pi1668d **Trutta,** vertebral column and spinal cord, t.s.
Pi1671c **Gasterosteus,** stickleback, gills w.m.
Pi1672e **Gasterosteus,** eye, radial l.s.
Pi1674c **Gadus,** codfish, brain t.s.
Pi180d **Pleuronectes,** flounder, skin with chromatophores w.m.
Pi181e **Syngnathus or Hippocampus,** sea horse, t.s. showing the aglomerulous kidney
Pi182d **Fish,** t.s. of jaw showing teeth
Pi183f **Poecilia**, fish, organ of equilibration with macula t.s.
Pi1265d **Anguilla,** eel, young specimen t.s.
Pi171b • **Cycloid scales** w.m.
Pi172b • **Ctenoid scales** w.m.
Pi173b • **Placoid scales** w.m.
Pi174e **Ganoid (rhomboid) scales** w.m. *
Pi175f **Fish scales** composite slide, shows cycloid, ctenoid and placoid scales on one slide, w.m.

Amphibia,- Amphibians

Am1021d **Amphiuma,** Congo eel, blood smear
Am1022d **Amphiuma,** heart t.s.
Am1023d **Amphiuma,** artery t.s.
Am1025d **Amphiuma,** lung t.s.
Am1027d **Amphiuma,** oesophagus t.s.
Am1028d **Amphiuma.** stomach t.s.
Am1029d **Amphiuma,** small intestine t.s.
Am1031d **Amphiuma,** large intestine t.s.
Am1033d **Amphiuma,** liver t.s.
Am1034d **Amphiuma,** spleen t.s.
Am1036d **Amphiuma,** ovary t.s.
Am1037d **Amphiuma,** oviduct t.s.
Am1039d **Amphiuma,** testis t.s.
Am1041d **Amphiuma,** urinary bladder t.s.
Am1043d **Amphiuma,** skin vertical l.s.
Am121e • **Salamandra** larva, serial sections from selected material to show mitotic stages in the skin and in other organs
Am111e **Salamandra** larva, head with eyes t.s.
Am112d • **Salamandra** larva, region of external gills t.s.
Am113d **Salamandra** larva, region of thorax and legs t.s.
Am114d **Salamandra** larva, region of abdomen t.s.
Am115c **Salamandra** larva, region of tail t.s.
Am141d • **Salamandra,** t.s. of liver for demonstration of typical animal cells with nuclei, cytoplasm and cell membranes
Am146e • **Salamandra,** testis t.s., usually many meiotic and mitotic stages can be observed
Am131d • **Salamandra,** skin with poison glands, vertical l.s.
Am132c **Salamandra,** lung t.s.
Am133c **Salamandra,** blood smear
Am142c **Salamandra,** kidney t.s.
Am143c **Salamandra,** stomach t.s.
Am144c **Salamandra,** small intestine t.s.
Am145d **Salamandra,** thyroid gland t.s. *
Am147d **Salamandra,** ovary t.s.
Am148d **Salamandra,** tail t.s.
Am151e **Triturus,** molge, eye of adult, radial l.s.
Am152e **Triturus,** eye of larva, radial l.s.
Am153e **Necturus**, axolotl, gills t.s.
Am201d • **Rana,** frog, epidermis flat mount for squamous epithelium w.m.


Pi162c

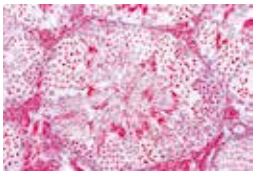

Pi153c

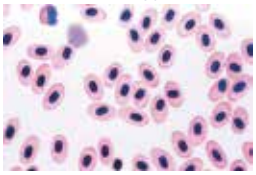

Pi165d

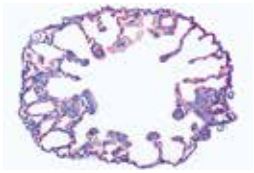

Pi172c

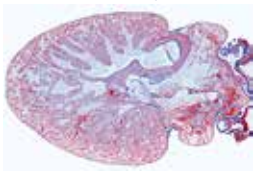

Am111e

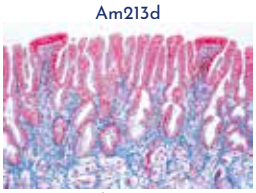

Am147d


Am146e


Am133c


Am212c


Am213d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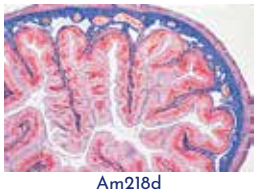
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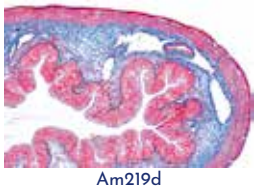
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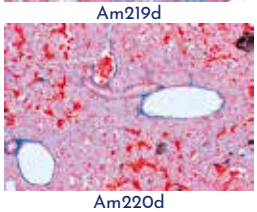
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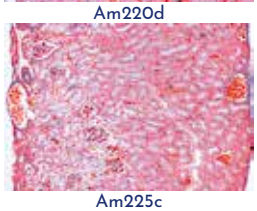
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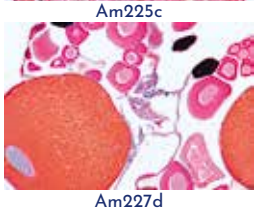
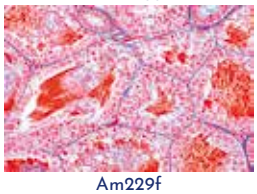

Am227d


Am228d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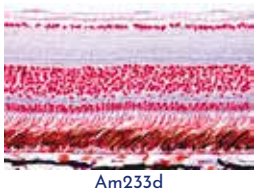
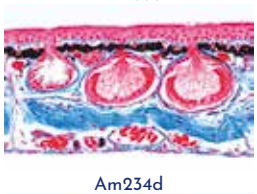
Am232d


Am233d


Am234d


Re213c

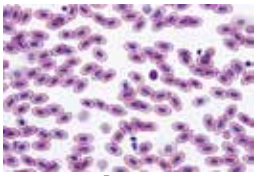
Am2012c **Rana,** squamous epithelium, w.m. of isolated cells
Am2013c **Rana,** columnar epithelium, w.m. of isolated cells
Am202d • **Rana,** roof of mouth with ciliated epithelium, t.s.
Am2021c **Rana,** ciliated epithelium, w.m. of isolated cells
Am203d **Rana,** compact bone decalcified, t.s.
Am204d **Rana,** head of femur t.s. showing bone and hyaline cartilage
Am205d • **Rana,** hyaline cartilage of sternum t.s.
Am206d • **Rana,** striated (skeletal) muscle, l.s.
Am207d **Rana,** striated muscle t.s.
Am208d **Rana,** striated muscle, isolated fibres w.m.
Am2083c **Rana,** heart muscle, isolated fibres w.m.
Am209g • **Rana,** nerve fibres isolated, fixed and stained with osmic acid to show Ranvier's nodes w.m.
Am210d **Rana,** adipose tissue t.s.
Am211d **Rana,** leg t.s. shows artery, vein, bone, nerve
Am212c • **Rana,** lung t.s., simple baglike lung with large central cavity
Am2123e • **Rana,** contracted and expanded lung, two t.s. on same slide
Am213d • **Rana,** heart l.s., showing l.s. and t.s. of heart muscle
Am214c • **Rana,** blood smear
Am215c • **Rana,** tongue t.s., with papillae, glands, muscles
Am2155f **Rana,** head with mouth cavity and tongue l.s.
Am216c **Rana,** oesophagus t.s., showing ciliated epithelium
Am217c • **Rana,** stomach t.s., mucous membrane with gastric glands
Am218c • **Rana,** small intestine t.s., showing villi
Am219c **Rana,** large intestine (colon), t.s. with goblet cells
Am220c • **Rana,** liver t.s., liver parenchyme and bile ducts
Am221c **Rana,** pancreas t.s. with islets of Langerhans
Am222c **Rana,** gall bladder t.s.
Am223c • **Rana,** spleen t.s., lymphatic tissue
Am224e **Rana,** thyroid gland with colloid t.s.
Am225c • **Rana,** kidney t.s. showing Malpighian corpuscles and tubules
Am2252c **Rana,** kidney l.s.
Am226c **Rana,** urinary bladder t.s., smooth muscles
Am235d **Rana,** ureter t.s.
Am227d • **Rana,** ovary with developing eggs t.s.
Am228c **Rana,** fallopian tube t.s.
Am229f • **Rana,** testis showing spermatogenesis t.s.
Am2292d **Rana,** sperm smear
Am2295d • **Rana,** peripheral nerve t.s.
Am230c • **Rana,** anterior part of brain t.s.
Am2305e **Rana,** t.s. of brain in three different regions
Am231f **Rana,** complete brain sagittal l.s.
Am2312f **Rana,** complete brain sagittal l.s., silver stained
Am232d • **Rana.** spinal cord t.s., of white and grey matter
Am233d • **Rana,** posterior part of eyeball with retina, sagittal l.s.
Am2331g **Rana,** entire eyeball sagittal l.s. for general structures *
Am234c • **Rana,** skin with skin glands, vertical l.s.
Am2343f **Rana,** skin, w.m. showing injected vessels and chromatophores
Am251f **Rana,** small specimen, t.s. region of mouth
Am252f **Rana,** small specimen, t.s. through head
Am253f **Rana,** small specimen, t.s. region of thorax
Am254f **Rana,** small specimen. t.s. region of abdomen
Am261e • **Rana larva,** tadpole, head and eyes t.s.
Am262d • **Rana larva,** tadpole, thorax with gills t.s.
Am2622d • **Rana larva,** tadpole, region of lungs t.s.
Am263d • **Rana larva,** tadpole, abdomen t.s.
Am265d • **Rana larva,** tadpole, skin with pigment cells, w.m.
Am270g **Rana larva,** l.s. of 5 tadpoles of different age
Am291g **Rana embryology:** frog, early cleavage t.s.
Am292g **Rana embryology:** frog, blastula t.s.
Am293g **Rana embryology:** frog, gastrula t.s.
Am294g **Rana embryology:** frog, neurula t.s.
Am295f **Rana embryology:** frog, young larva t.s.

Reptilia – Reptiles

Re121d **Ophidia sp.,** snake, skin with scales flat mount w.m.
Re122d **Ophidia sp.,** snake, skin with scales vertical l.s.
Re151c **Tropidonotus,** snake, striated muscles l.s.
Re153c **Tropidonotus,** trachea t.s.
Re154c **Tropidonotus,** lung t.s.
Re152c **Tropidonotus,** intestine and testis, t.s.
Re158c **Tropidonotus,** uterus t.s.
Re155d **Tropidonotus,** brain t.s.
Re157h **Tropidonotus,** motor nerve endings (end plates) in striated muscle of snake, w.m.
Re156h **Tropidonotus,** Jacobson's organ (vomeronasal organ), head of snake, t.s. *
Re161d **Anguis,** slow-worm, t.s. of embryo and placenta
Re240f **Tarentola,** gecko, l.s. of toe adapted for climbing
Re211c • **Lacerta,** lizard, blood smear
Re212d **Lacerta,** trachea t.s.
Re213c • **Lacerta,** lung t.s.
Re214c **Lacerta,** kidney t.s.
Re215c **Lacerta,** testis t.s. showing spermatogenesis
Re216c • **Lacerta,** intestine t.s.
Re217c **Lacerta,** liver t.s.
Re2173d **Lacerta,** heart l.s.
Re218d **Lacerta,** ovary t.s.
Re219d **Lacerta,** adrenal gland t.s.
Re220d **Lacerta,** t.s. of jaw showing changing of teeth
Re221d **Lacerta,** brain t.s.
Re231d • **Lacerta,** skin with scales vertical l.s.
Re235f **Lacerta,** small specimen, sagittal l.s. of the head
Re237h **Lacerta,** small specimen, sagittal l.s. of the head showing the parietal or pineal eye *
Re236e **Lacerta,** small specimen, t.s. of the head
Re251c **Testudo,** turtle, blood smear
Re252c **Testudo,** heart t.s.
Re254c **Testudo,** lung t.s.
Re256c **Testudo,** oesophagus t.s.
Re258c **Testudo,** stomach t.s.
Re259c **Testudo,** small intestine t.s.
Re260c **Testudo,** large intestine t.s.
Re262c **Testudo,** liver t.s.
Re264d **Testudo,** thyroid gland t.s.
Re266d **Testudo,** ovary t.s.
Re267d **Testudo,** oviduct t.s.
Re268d **Testudo,** testis t.s.
Re270c **Testudo,** urinary bladder t.s.
Re272c **Testudo,** striated (skeletal) muscle l.s.
Re273c **Testudo,** striated (skeletal) muscle t.s.

Aves – Birds

Av132b • **Gallus,** wing or vane feather w.m.
Av131b • **Gallus,** down feather w.m.
Av165b **Humming bird,** down feather w.m.
Av133b • **Gallus,** plume feather (filoplume) w.m.
Av134c **Gallus,** wing and down feather on one slide w.m.
Av1345d **Bird feather composite** slide: wing feather, down feather and filoplume on same slide w.m.
Av103c **Squamous epithelium,** mucous membrane of duck, t.s.
Av161e • **Herbst corpuscles,** t.s. of beak of duck
Av162e **Woodpecker,** tongue, t.s. showing touch corpuscles
Av150e **Singing bird,** syrinx l.s.
Av152c **Crop** of pigeon (Columba), t.s.
Av156e **Falco,** falcon, horizontal sec. of the retina
Av101g **Head of newly hatched bird,** sagittal l.s.
Av102f **Head of newly hatched bird,** t.s. through region of eyes
Av111c • **Gallus domesticus,** chicken, blood smear
Av118c **Gallus,** heart muscle l.s.
Av112c • **Gallus,** lung t.s. showing parabronchii
Av1123c **Gallus,** trachea t.s.
Av128c **Gallus,** spleen t.s.
Av129d **Gallus,** thymus gland t.s.
Av138d **Gallus,** adrenal gland t.s.
Av130d **Gallus,** bursa fabricii t.s.
Av121d • **Gallus,** tongue with thick cornified layer t.s.
Av113c **Gallus,** oesophagus t.s.
Av114c • **Gallus,** glandular stomach t.s.
Av127d • **Gallus,** gizzard t.s. showing thick cornified layer
Av115c • **Gallus,** small intestine t.s.
Av136c **Gallus,** blind gut t.s.
Av116c • **Gallus,** liver t.s.
Av122d **Gallus,** pancreas t.s.
Av117c • **Gallus,** kidney t.s.
Av137c **Gallus,** mesonephric duct t.s.
Av119d • **Gallus,** ovary with developing eggs t.s.
Av120d • **Gallus,** testis showing spermatogenesis t.s.
Av123d • **Gallus,** brain t.s.
Av1245c • **Gallus,** cerebellum, t.s. routine stained
Av1247f **Gallus,** cerebellum, t.s. silvered
Av139d **Gallus,** anterior part of eye with eyelid and nictitating membrane sagittal l.s.
Av140e • **Gallus,** posterior part of eye with retina and pecten, sagittal l.s.

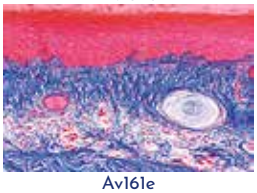

Re211c

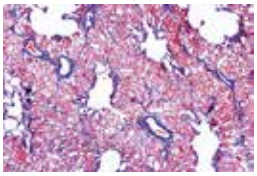

Re156h


Re237h


Re231d


Av132c


Av161e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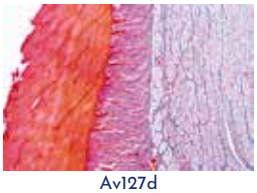
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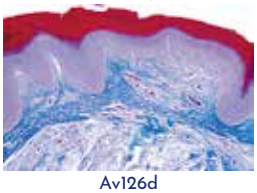
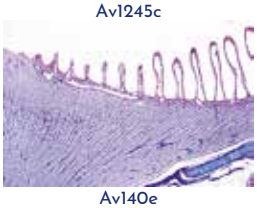
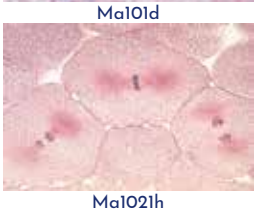

Av126d


Av1245c


Av140e


Av124d


Ma101d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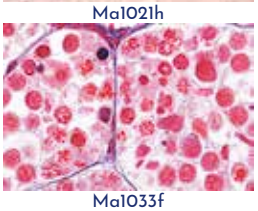
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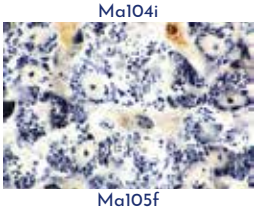
Ma104i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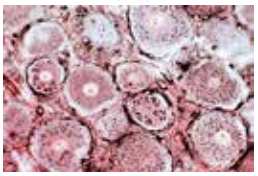
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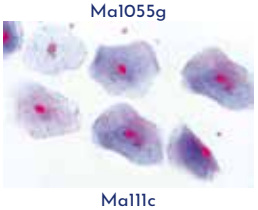

Ma111c


Ma114c


Ma116d


Ma117e

Av155e **Gallus,** chicken, horizontal sec. of the retina
Av135c **Gallus,** cockscomb t.s.
Av124d • **Gallus,** skin with developing feathers, horizontal l.s.
Av125d • **Gallus,** skin with developing feathers, vertical l.s.
Av126d • **Gallus,** unfeathered skin of foot, vertical l.s.
Av211f **Gallus embryology:** chicken embryo, 36 hour t.s.
Av212f **Gallus embryology:** chicken embryo, 48 hour t.s.
Av213f **Gallus embryology:** chicken embryo, 72 hour t.s.

Histology of Mammalia

Cytology

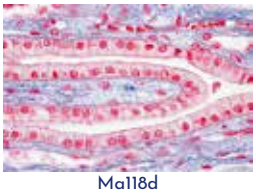
Ma101d • **Simple animal cells** in sec. of salamander liver showing nuclei, cell membranes and cytoplasm. For general study of the animal cell
Ma102f **Mitotic stages** in sec. through red bone marrow of mammal
Ma1023f **Mitotic stages** in smear of red bone marrow of mammal
Ma1021h **Mitotic stages** in sec. of whitefish blastula showing spindles *
Ma1033f • **Meiotic (maturation) stages** in sec. through testis of salamander, selected material showing large structures *
Ma103f • **Meiotic (maturation) stages** in testis of mouse, sec. iron hematoxyline stained after Heidenhain
Ma1031f **Meiotic (maturation) stages** in smear from testis of mouse, specially stained after Feulgen *
Ma104i • **Human chromosomes** in smear from culture of blood, male *
Ma1041i • **Human chromosomes** in smear from culture of blood, female *
Ma1045f • **Barr bodies** (human sex chromatin) in smear from female squamous epithelium *
Ma105f • **Mitochondria** in thin sec. of kidney or liver, specially prepared and stained
Ma1055g • **Golgi apparatus** in sec. of spinal ganglion or other organ *
Ma1058e • **Pigment cells** in skin
Ma1061t • **Storage of glycogen** in liver cells, sec. stained with carmine after Best or PAS reaction
Ma1063e **Storage of fat** in cells of costal cartilage, sec. stained with Sudan
Ma1065f **Secretion of fat** in mammary gland, section Osmic acid stained
Ma1067f • **Phagocytosis** in Kupffer's star cells of the liver, sec. of mammalian liver injected with trypan blue

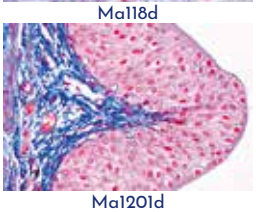
Epithelial tissues

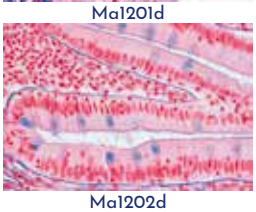
Ma111c • **Squamous epithelium,** isolated cells from human mouth, smear
Ma1113d **Simple squamous epithelium,** in sec. through the cornea from the eye
Ma112c • **Stratified, non-cornified squamous epithelium,** in section through buccal gum
Ma1121c **Stratified, non-cornified squamous epithelium,** in section through vagina of rabbit
Ma1124d • **Stratified, non-cornified squamous epithelium,** in section of oesophagus
Ma1125d **Stratified, non-cornified squamous epithelium,** t.s. pig vagina
Ma1127d **Stratified, cornified squamous epithelium,** in vertical l.s. of human body skin
Ma113d • **Columnar epithelium,** isolated cells from intestine w.m.
Ma114c • **Simple columnar epithelium,** in t.s. of small intestine
Ma1142e **Simple columnar epithelium,** in t.s. of human gall bladder
Ma1145d • **Pseudostratified columnar epithelium,** in sec. through epididymis
Ma115d • **Ciliated epithelium,** isolated cells from trachea w.m.
Ma116d **Simple ciliated columnar epithelium,** in t.s. of oviduct
Ma1162d • **Pseudostratified ciliated columnar epithelium,** in t.s. of trachea
Ma117e **Endothelium,** endothelial cells of small blood vessels in mesenterium, silver stained and w.m.
Ma118d • **Cuboidal epithelium,** in sec. of kidney papilla
Ma1182e **Cuboidal epithelium,** in sec. of human thyroid gland
Ma120e **Transitional epithelium,** two section of urinary bladders showing contracted and extended epithelia
Ma1201d • **Transitional epithelium,** in sec. of urinary bladder of sheep
Ma1202d **Goblet cells** in sec. of colon, stained with muci-carmine
Ma1203e **Mucous glands** from human intestine, colouring of goblet cells, PAS-HE
Ma1204d **Holocrine glands**, sebaceous glands from human skin, l.s.
Ma1205c **Apocrine glands**, lacteal glands of sheep, sec.
Ma1206e **Eccrine glands**, salivary gland, human, sec.
Ma1207d **Sweat glands** in human skin, t.s.

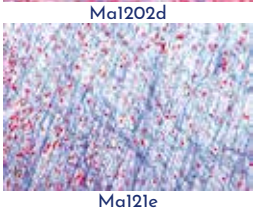
Connective and supporting tissues

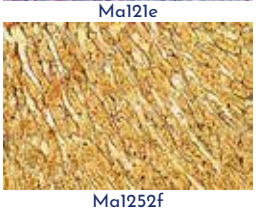
Ma121e • **Areolar connective tissue,** w.m. and stained for fibres and cells
Ma122d **White fibrous tissue,** isolated fibres from tendon
Ma123d • **White fibrous tissue,** l.s. of tendon
Ma1231d **White fibrous tissue,** t.s. of tendon
Ma1234f **Mast cells** in the Omentum majus of rat, specially stained with toluidine blue and paracarmine
Ma124d **Yellow elastic fibrous tissue,** l.s. of Ligamentum nuchae
Ma1242e • **Yellow elastic fibrous tissue,** t.s. of Ligamentum nuchae
Ma1244d **Elastic tissue,** fibres teased and w.m.
Ma125d **Reticular tissue** t.s.
Ma1252f **Reticular fibres,** human spleen, t.s. silvered
Ma126d • **Embryonic connective tissue** t.s.
Ma127d • **Mucous tissue,** t.s. of navel string (umbilical cord)
Ma1275f **Mucous tissue,** t.s. of navel string specially stained for Wharton's jelly
Ma1278d **Vesicular tissue,** cellular connective tissue with no intercellular substance, sec. through notochord of dogfish
Ma128c • **Adipose tissue,** section fat removed to show the cells
Ma129e • **Adipose tissue,** section showing fat in situ stained by sudan
Ma1292e **Adipose tissue,** section or w.m. with fat in situ stained by osmic acid
Ma1294c **Brown adipose tissue** of monkey, sec.
Ma130c • **Hyaline cartilage,** t.s.
Ma1302c **Hyaline cartilage** of cat, t.s.
Ma1305d **Fetal hyaline cartilage**, t.s.
Ma131d • **Yellow elastic cartilage,** section specially stained for elastic fibres
Ma1312d **Yellow elastic cartilage,** ear of rabbit or pig, t.s.
Ma132d • **White fibrous cartilage,** section
Ma1323f **Fibrous cartilage,** human intervertebral disc, sec.
Ma135d • **Compact bone,** t.s. specially prepared to show the cells and canaliculi
Ma136d • **Compact bone,** l.s. specially prepared to show the cells and canaliculi
Ma1365d • **Cancellous (spongy) bone,** t.s.
Ma1367g **Compact bone,** non-decalcified, t.s. ground thin and mounted *
Ma137e **Compact bone and hyaline cartilage** t.s., two sections on one slide
Ma138e • **Bone development,** intracartilaginous ossification in foetal finger or toe, l.s.
Ma139e • **Bone development,** intermembranous ossification in foetal head (cranial bone), vertical l.s.
Ma140d • **Yellow bone marrow** t.s.
Ma141e **Joint of finger** or toe, sagittal l.s.
Ma142e **Foetal knee joint**, l.s. showing ossification of tendons *


Ma118d


Ma1201d


Ma1202d


Ma121e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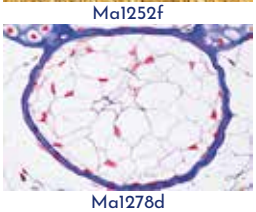
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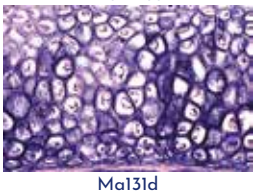
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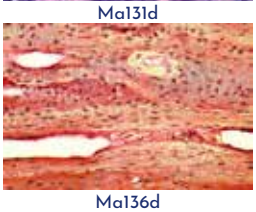
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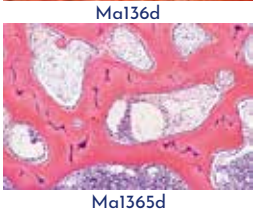
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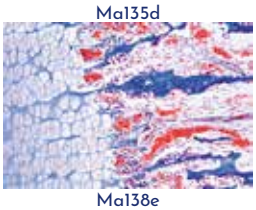
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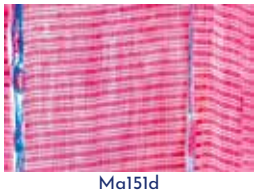
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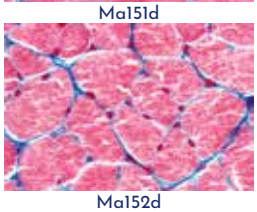
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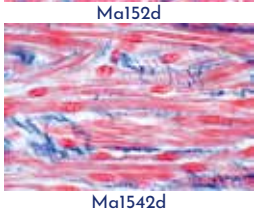
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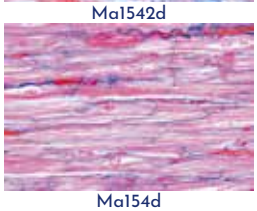
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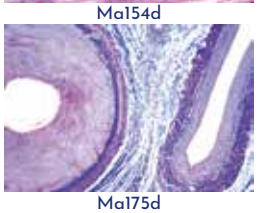
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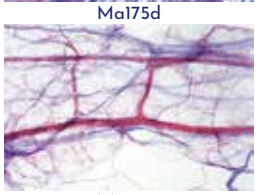
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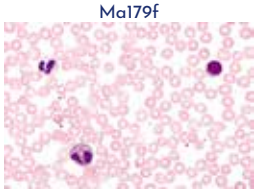
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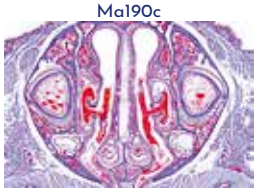

Ma211e


Ma212e


Ma216c

Muscle tissues

Ma151d • **Striated (skeletal) muscle** l.s.
Ma152d **Striated (skeletal) muscle** t.s.
Ma153d • **Striated (skeletal) muscle,** teased preparation showing isolated fibres w.m.
Ma1535f **Striated (skeletal) muscle,** l.s. specially stained for myofibrils *
Ma1537f **Striated (skeletal) muscle,** thin l.s. specially stained to show details of the striations
Ma154d • **Smooth (involuntary) muscle,** l.s. and t.s.
Ma1542d **Smooth (involuntary) muscle,** l.s. only
Ma155d • **Smooth (involuntary) muscle,** teased preparation showing isolated fibres w.m.
Ma1555f **Smooth (involuntary) muscle,** sec. specially stained for myofibrils *
Ma156d • **Heart muscle,** l.s. and t.s.
Ma158e • **Heart muscle,** teased preparation shows isolated fibres w.m.
Ma157e **Heart muscle,** l.s. and t.s. specially stained for intercalated discs
Ma159e **Heart muscle,** specially stained to show the Purkinje fibres *
Ma160d **Muscle-tendon junction,** l.s.
Ma165f **Muscle types,** composite slide with l.s. of striated, smooth and heart muscles

Circulatory system

Ma171d **Artery** of rabbit, t.s. routine stained
Ma172d • **Artery** of rabbit, t.s. stained for elastic fibres
Ma1725f **Artery** of rabbit, t.s. specially stained for myofibrils *
Ma173d **Vein** of rabbit, t.s. routine stained
Ma174d • **Vein** of rabbit, t.s. stained for elastic fibres
Ma182e **Valve of the vein** of rabbit, l.s. or w.m. *
Ma175d **Artery and vein** of smaller size in one slide, guinea pig, t.s.
Ma1752d **Artery, vein and capillary,** guinea pig, t.s.
Ma1753e **Artery, vein and nerve,** guinea pig, t.s.
Ma176d • **Aorta** of rabbit, t.s. routine stained
Ma1762d **Aorta** of rabbit, t.s. stained for elastic fibres
Ma178e • **Small blood vessels** in mesenterium of rabbit, w.m.
Ma179f • **Heart** of mouse, entire sagittal l.s.
Ma180d **Heart** of mouse, t.s.
Ma181f **Pinna of the ear** of rabbit, sec. injected to show anastomosis of blood vessels
Ma190c • **Human blood smear**, Giemsa stain
Ma1902c **Human blood smear,** Wright's stain
Ma195c **Rabbit blood smear,** Giemsa stain
Ma196c **Cat blood smear,** Giemsa stain
Ma1963c **Camel blood smear,** elliptical erythrocytes
Ma1965c **Rat blood smear,** Giemsa stain
Ma197c • **Frog blood smear,** nucleated erythrocytes
Ma1973c **Amphiuma blood smear,** very large erythrocytes

Respiratory system

Ma211e • **Nasal region** of small mammal (mouse or rat), t.s. showing respiratory and olfactory epithelium, bone etc.
Ma212e **Larynx** of mouse, sagittal l.s.
Ma213e **Larynx** of mouse, frontal l.s.
Ma214d **Trachea** of cat or rabbit, t.s. with ciliated epithelium, cartilage etc.
Ma215d • **Trachea** of cat or rabbit, l.s.
Ma2155e **Bronchus** of cat or dog, t.s.
Ma216c • **Lung** of cat, t.s. routine stained for all details
Ma217d **Lung** of cat, t.s. stained for elastic fibres
Ma218e **Lung** of cat, t.s. silver stained
Ma2183f **Lung** of cat, sec. showing injected blood vessels
Ma220d **Lung** of cat, thick section showing arrangement of alveoli
Ma2185c **Lung** of rat, t.s.
Ma219d **Lung** from human fetus, t.s. shows developing tissues
Ma222d **Trachea and oesophagus** of rabbit, t.s.
Ma225e • **Lung cancer**, human, carcinoma, sec.
Ma226h **Lung pathology**, composite slide: normal human lung, lung with carbon particles, emphysema, and lung cancer, four sections

Lymphatic system

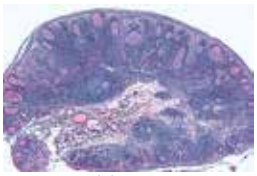
Ma231c • **Lymph node** of pig, t.s. routine stained
Ma232f **Lymph node** of pig, t.s. shows reticular tissue only (cells removed) *
Ma2323c **Lymph node** of cat, t.s. routine stained
Ma2325g **Lymphatic vessel**, w.m. from mesentery, with valve *
Ma233e • **Tonsil**, human, t.s.
Ma234c • **Spleen** of rabbit, t.s. showing capsula, pulp etc.
Ma235f **Spleen** of rabbit, t.s. injected to show the blood vessels
Ma2353c **Spleen** of guinea pig, t.s.
Ma236d • **Red bone marrow** of cow, thin sec. quadruple stained
Ma237d **Red bone marrow** of cow, smear specially stained
Ma2375f **Red bone marrow**, smear showing normoblasts *
Ma238f **Thymus** from human child, t.s. with Hassall bodies
Ma239d • **Thymus** of young cat, t.s. with Hassall bodies
Ma240d **Thymus** gland of cow, sec.

Endocrine glands

Ma252d • **Thyroid gland** of cow, sec. showing colloid
Ma2523d **Thyroid gland** of cat, sec.
Ma2525e **Trachea with thyroid gland** of rat, t.s.
Ma270f **Thyroid gland**, sec. showing insufficiency of the gland *
Ma271f **Thyroid gland**, sec. showing over-activity of the gland *
Ma262g **Parathyroid gland** of pig or cat, t.s.
Ma263g **Parathyroid and thyroid** gland of mammal, t.s.
Ma274f **Carotid body** of pig, sec.
Ma253d • **Adrenal gland (Gl. suprarenalis)** of rabbit, t.s. through cortex and medulla
Ma2534f **Adrenal gland** of rabbit, t.s. silver stained to show nerve fibres in the medulla
Ma2535d **Adrenal gland** of cat, t.s.
Ma254f • **Islets of Langerhans** in t.s. of pancreas from cat, specially stained for cellular detail
Ma2543d **Pancreas** with islets of Langerhans of cat, t.s. routine stained
Ma255h • **Pituitary gland (hypophysis),** sag. l.s. of complete organ from cow or pig showing adeno- and neurohypophysis
Ma259h **Pituitary gland,** t.s. of infundibulum specially stained to show neurosecretes *
Ma258g **Pituitary gland**, thin t.s. of glandular portion stained for fine cellular detail
Ma257e • **Pineal body (Epiphysis)** of cow or pig, t.s. routione stained
Ma2572d **Pineal body (Epiphysis)** of sheep, t.s.
Ma2574d **Leydig's cells** in testis of mouse, t.s. special stained

Digestive system

Ma310c • **Lip** of mouse, sagittal l.s.
Ma311d • **Tooth** human, t.s. of crown
Ma312d **Tooth** human, t.s. of root
Ma313f **Tooth** human, entire l.s.
Ma314e **Gum with root of tooth** from guinea pig, sagittal l.s.
Ma3142e **Gum with root of tooth** from guinea pig, t.s.
Ma315e • **Tooth development** of mammal, early stage l.s.
Ma316e • **Tooth development** of mammal, medium stage l.s.
Ma317e • **Tooth development** of mammal, , later stage l.s.
Ma321c **Tongue** of mouse, entire sagittal l.s.
Ma322c **Tongue** of mouse, t.s.
Ma323d • **Tongue** of cat, papilla with thick cornified layer, l.s.
Ma326c • **Soft palate** of rabbit, t.s.
Ma327c **Hard palate** of rabbit, t.s.
Ma331c • **Esophagus** of cat or dog, t.s.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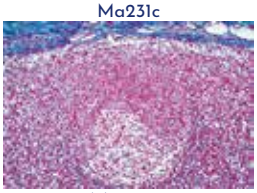
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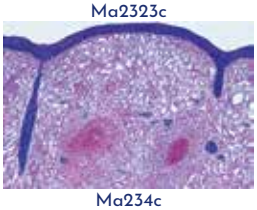
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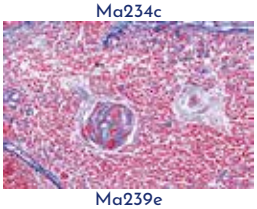
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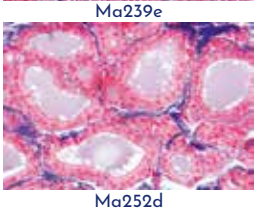
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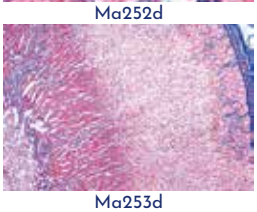
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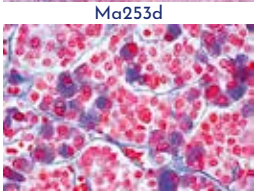
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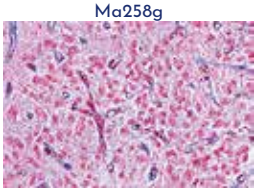
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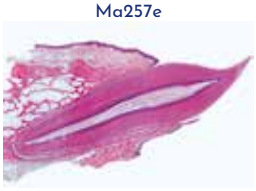
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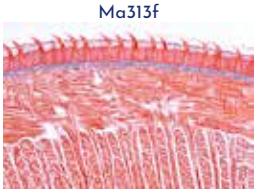
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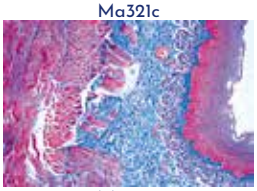
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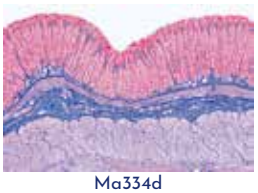
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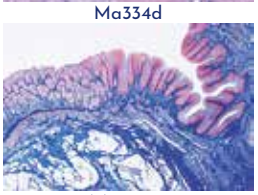
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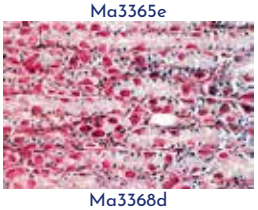
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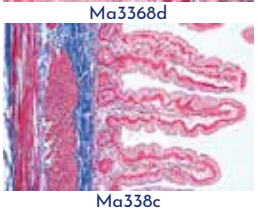
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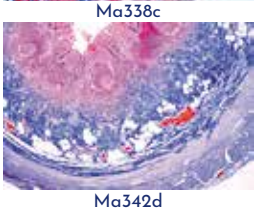
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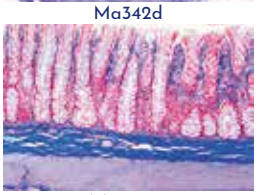
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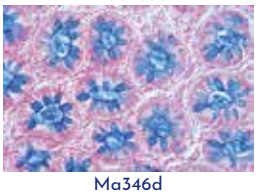
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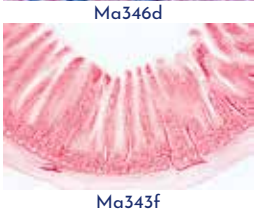
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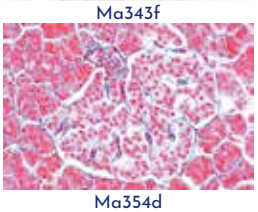
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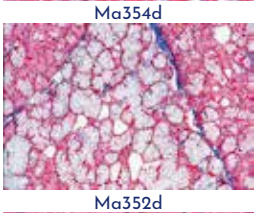
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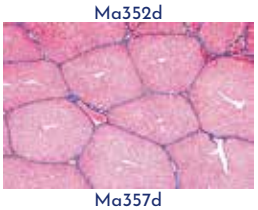

Ma357d

Ma3315c **Esophagus** of cat or dog, l.s.
Ma3316c **Esophagus** of sheep, l.s.
Ma3318e **Esophagus – stomach** junction of cat, l.s.
Ma333d • **Stomach** of cat, cardiac region t.s. quadruple stained
Ma334d • **Stomach** of cat, fundic region t.s. quadruple stained
Ma335d • **Stomach** of cat, pyloric region t.s. quadruple stained
Ma3352s **Stomach**, composite slide of three regions: cardiac, fundic and pyloric t.s.
Ma3361f **Stomach**, sec. through gastric glands specially stained for different cell types
Ma332f **Stomach** of cat, injected to show the blood vessels, t.s.
Ma336f **Stomach** of rat, sagittal l.s. through the complete organ
Ma3368d **Stomach** of pig, cardia t.s.
Ma3365e **Stomach – duodenum** junction of cat, l.s.
Ma337c • **Duodenum** of cat or dog, t.s. showing Brunner's glands
Ma3371d **Duodenum** of monkey, sec. showing glands of Lieberkühn
Ma3373e **Duodenum**, mucous glands, section special stained with PAS-HE
Ma338c • **Jejunum** of cat or dog, t.s.
Ma3383e **Jejunum**, mucous glands, section special stained with PAS-HE
Ma339c **Ileum** of cat or dog, t.s. showing Peyer's patches
Ma3393e **Ileum**, mucous glands, sec. special stained with PAS-HE
Ma3395s **Small intestine**, composite slide of three regions: duodenum, ileum and jejunum t.s.
Ma343f • **Small intestine** of dog, injected to show the blood vessels and capillary network t.s.
Ma340d **Small intestine** of rat, t.s.
Ma3403c **Small intestine** of cat, t.s.
Ma3405d **Small intestine** of horse, t.s.
Ma341d • **Vermiform appendix**, human t.s.
Ma342d **Vermiform appendix**, rabbit t.s.
Ma344c • **Caecum (blind gut)** of rabbit, t.s.
Ma345c **Colon (large intestine)** of pig, t.s.
Ma346d • **Colon**, t.s. stained with muci-carmine or PAS for demonstration of mucous cells
Ma3463c **Colon** of cat, t.s.
Ma3465e **Ileocecal junction** of cat, l.s.
Ma347c **Rectum** of cat or rabbit, t.s.
Ma3472e **Anal canal** and rectum of cat, l.s.
Ma3474d **Anal gland** of dog t.s.
Ma351d • **Parotid gland** of cat, t.s. of a pure serous gland
Ma352d • **Submaxillary gland** of cat, t.s. of a mixed serous and mucous gland
Ma353d • **Sublingual gland** of cat, t.s. of a pure mucous gland
Ma3535f **Salivary glands**, composite slide: parotid, sublingual and submaxillary gland, t.s.
Ma354d • **Pancreas** of pig, t.s. showing islets of Langerhans
Ma3542d **Pancreas** of cat, sec. stained with Heidenhain's iron-hematoxline
Ma3543f **Pancreas** of cat, sec. showing injected vessels
Ma357d • **Liver** of pig, t.s. showing well developed connective tissue
Ma356d **Liver** of cat, t.s.
Ma3562f **Liver** of cat, thick section showing injected vessels
Ma3564f **Liver** of dog, thick section showing injected vessels
Ma358d **Liver** from mouse embryo, t.s. showing origin of blood cells
Ma359f • **Liver**, t.s. specially stained for Kupffer's stellate cells
Ma360e • **Liver**, t.s. stained for glycogen
Ma361f **Liver**, thin sec. stained for mitochondria
Ma3613f **Liver**, t.s. special preparation to show the bile ducts *
Ma3614f **Liver**, sec. silver stained to show the reticular fibres
Ma362c **Bile duct (Ductus choledochus)** of rabbit, t.s.
Ma363d • **Gall bladder** of rabbit, t.s.
Ma3634c **Gall bladder** of sheep, t.s.
Ma371d **Rumen** of cow, t.s.
Ma372d **Reticulum** of cow, t.s.
Ma373d **Omasum** of cow, t.s.
Ma374d **Abomasum** of cow, t.s.

Excretory system

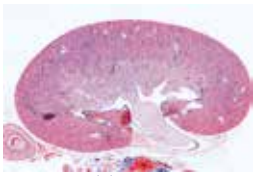
Ma411d • **Kidney** of cat, t.s. showing cortex with Malpighian corpuscles and medulla with tubules, Mallory's stain
Ma413e • **Kidney** of mouse, sagittal l.s. through complete organ with cortex, medulla and pelvis
Ma414c **Kidney** of mouse, t.s. through the complete organ
Ma415f • **Kidney** of mouse, t.s. vital stained with trypan-blue to demonstrate storage
Ma4156d **Kidney** of dog, t.s.
Ma4157d **Kidney** of rabbit, t.s.
Ma416f **Kidney**, sec. fixed and stained to show mitochondria
Ma417f **Kidney**, sec. injected showing the blood vessels
Ma418c **Renal papilla** of rabbit, t.s.
Ma4183d **Renal pelvis** of cat, t.s.
Ma419e **Cancer** of human kidney, t.s.
Ma421c • **Ureter** of rabbit, t.s.
Ma4214d • **Ureter** of pig, t.s.
Ma422c • **Urinary bladder** of rabbit, t.s.
Ma423c **Urethra** of rabbit, t.s.

Reproductive system

Ma431d • **Ovary** of cat, t.s. for general study, shows primary, secondary and Graafian follicles
Ma433g **Ovary**, sec. selected to show Cumulus oophorus with egg cell *
Ma4332f **Ovary**, sec. selected to show Graafian follicle with detatched egg cell
Ma434d • **Ovary**, sec. selected to show the Corpus luteum
Ma4341d **Ovary** of rabbit, t.s.
Ma4342e **Ovary**, sec. of juvenile organ showing developing tissue
Ma435c • **Fallopian tube** of pig, t.s.
Ma4353c **Fallopian tube** of cat, t.s.
Ma4354c **Fallopian tube** of rabbit, t.s.
Ma4355d **Fallopian tube** with Infundibulum of sheep, l.s.
Ma437d • **Uterus** of pig or rabbit, resting stage, t.s.
Ma438d **Uterus** of pig or rabbit, pregnant stage, t.s.
Ma439d • **Uterus** of rat with embryo in situ, t.s.
Ma4393d **Uterus** of sheep, t.s.
Ma4394c **Uterus**, juvenil, of cat, t.s.
Ma440e • **Placenta**, human , t.s.
Ma4405c **Placenta** of cat, t.s.
Ma445f • **Embryo of mouse**, sagittal l.s. of entire specimen
Ma446d **Embryo of mouse**, t.s. of head
Ma447d • **Embryo of mouse**, t.s. of thoracal region
Ma448d **Embryo of mouse**, t.s. of abdominal region
Ma449e **Embryo of pig**, t.s.
Ma451d • **Vagina** of pig, t.s.
Ma4513c **Vagina** of rabbit, t.s.
Ma452d **Vagina** and urethra of rabbit or cat, t.s.
Ma453d • **Umbilical cord (navel string)** of cow, t.s.
Ma454d **Umbilical cord** of pig, t.s.
Ma461d • **Testis** of mouse, t.s. showing spermatogenesis. The slide for general study of spermatogenesis
Ma4613d **Testis** of rat, t.s. showing spermatogenesis
Ma4614d **Testis** of rabbit, t.s. showing spermatogenesis
Ma462d • **Testis** of bull, t.s. showing spermatogenesis
Ma4623f **Testis** of monkey, showing insufficiency, t.s.
Ma4624f **Testis** of monkey, showing over-activity, t.s.
Ma463d • **Epididymis** of bull, t.s.
Ma4631d **Epididymis** of rat, t.s.
Ma4632e **Testis and epididymis** of rat, t.s.
Ma4634e **Testis and epididymis** of cat, t.s.
Ma464d • **Sperm smear** of bull
Ma4642d **Sperm smear** of rat
Ma466d • **Spermatic cord (Ductus deferens)** of pig or rabbit, t.s.
Ma467d • **Seminal vesicle (Gl. vesiculosa)** of pig, t.s.
Ma4672d **Seminal vesicle (Gl. vesiculosa)** of rat, t.s.
Ma468d • **Prostate gland** of monkey, t.s.
Ma4683c **Prostate gland** of rat, t.s.
Ma469d • **Penis** of guinea pig, t.s.
Ma470d **Penis** of rabbit, t.s.

Nervous system

Ma511d • **Cerebral cortex** of cat or dog, t.s. routine stained
Ma512f • **Cerebral cortex**, t.s. silvered to show the pyramid cells
Ma518f **Cerebral cortex**, t.s. stained after Held to show neuroglia cells
Ma562f **Cerebrum** of cat, sec. stained for medullated sheaths (Weigert) *
Ma514d • **Cerebellum** of cat or dog, t.s. routine stained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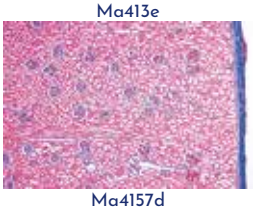
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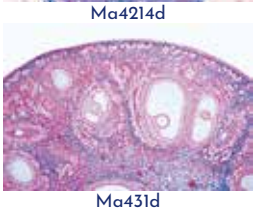
Ma4214d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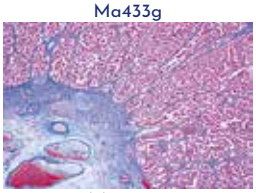
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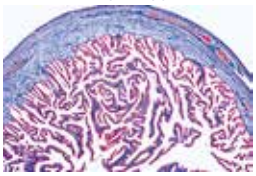
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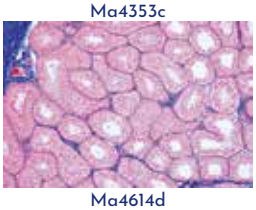
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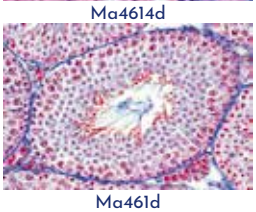
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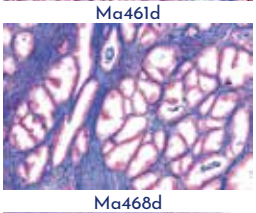
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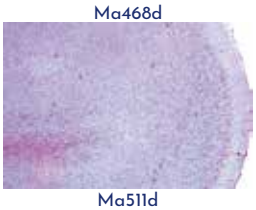
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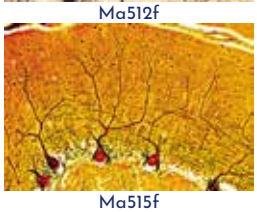
Ma512f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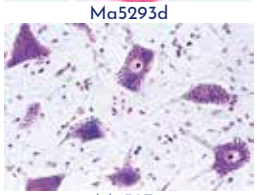
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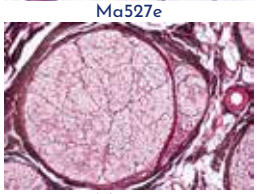
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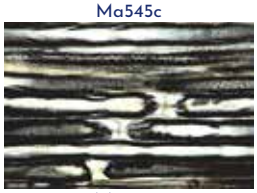
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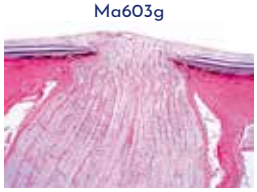
Ma551e


Ma552h


Ma603g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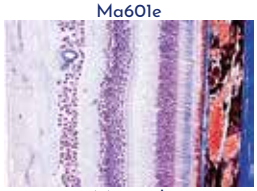

Ma605d

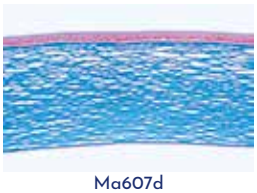
Ma515f • **Cerebellum**, t.s. silvered to show the Purkinje cells
Ma5152f **Cerebellum**, t.s. stained by Cajal's method
Ma563f **Cerebellum** of cat, sec. stained for medullated sheaths (Weigert) *
Ma521e **Brain** of mouse, horizontal l.s. of the complete organ
Ma522e **Brain** of mouse, sagittal l.s. of the complete organ
Ma523f **Brain** of mouse, t.s. of brain in three different regions
Ma525d • **Medulla oblongata**, of rabbit, t.s.
Ma526d • **Spinal cord** of cat, t.s. routine stained
Ma527e **Spinal cord** of cat, section special stained for Nissl bodies
Ma528f **Spinal cord** of cat, t.s. silvered for nerve cells and fibres
Ma5285f **Spinal cord** of cat, t.s. stained after Klüver-Barrera
Ma529d **Spinal cord** of cat, l.s. routine stained
Ma5293d **Spinal cord** of pig, t.s.
Ma5294e • **Spinal cord** of cow, t.s. stained for Nissl bodies
Ma5295c **Spinal cord** of rabbit, t.s.
Ma5296d **Vertebra with spinal cord** of rat, t.s.
Ma531e **Spinal cord**, human, t.s. of cervical region
Ma532e **Spinal cord**, human, t.s. of thoracal region
Ma533e **Spinal cord**, human, t.s. of lumbar region
Ma564f **Spinal cord** of cat, sec. stained for medullated sheaths (Weigert) *
Ma534e **Spinal cord**, t.s. with dorsal root ganglion and portions of ventral and dorsal nerve roots
Ma542f • **Sympathetic ganglion** of cow or pig, t.s. with multipolar nerve cells
Ma543d **Spinal ganglion** of cow, t.s.
Ma541e **Ganglion semilunare** (G. Gasseri), t.s. shows unipolar nerve cells *
Ma540f **Ganglion** of cat, t.s. fixed and stained with osmic acid
Ma544c • **Peripheral nerve** of cow or pig, l.s. routine stained
Ma545c • **Peripheral nerve** of cow or pig, t.s. routine stained
Ma5453d **Peripheral nerve** of cat, l.s.
Ma547g • **Peripheral nerve**, teased material of osmic acid fixed material showing Ranvier's nodes and medullary sheaths
Ma546e **Peripheral nerve**, t.s. fixed and stained with osmic acid for medullary sheaths
Ma548e **Peripheral nerve**, l.s. of osmic acid fixed material shows Ranvier's nodes and medullary sheaths in section
Ma549c • **Optic nerve (Nervus opticus)** of calf or pig, t.s.
Ma550f **Entrance of optic nerve** into the retina, sag.sec.
Ma551e • **Motor nerve cells**, smear preparation from spinal cord of ox shows nerve cells and their appendages
Ma5513f **Motor nerve cells**, smear preparation from spinal cord of ox stained for Nissl bodies
Ma552h • **Motor nerve endings**, muscle stained with gold chloride showing the motor end plates *
Ma554e • **Pacinian corpuscles** in mesentery or pancreas of rabbit
Ma555e • **Grandry corpuscles** in t.s. through beak of duck
Ma556e **Merkel corpuscles** in section through snout of pig
Ma557f • **Meissner's corpuscles** of monkey, sec. showing tactile corpuscles

Organs of sense

Ma601e • **Eye** of cat, posterior part with retina, sagittal l.s.
Ma602e • **Eye** of cat, anterior part with iris, ciliary body, cornea, sagittal l.s.
Ma603g • **Eye** of rat or guinea pig, entire organ sagittal l.s. for general study
Ma6031h **Eye** of rat or guinea pig, entire organ, near median sagittal l.s. passing the entrance of optic nerve *
Ma608e • **Developing eyes** in t.s. of head from guinea pig embryo
Ma6034d • **Retina** of cat, t.s. for general study
Ma6035f **Retina** of cat, section passing through the entrance of optic nerve
Ma605d **Retina** of pig, thin sec. special stain for details of rods and cones
Ma606f **Retina** of pig, section passing through the entrance of optic nerve
Ma6062e **Retina** of pig, horizontal sec. for fine detail, t.s. of rods and cones
Ma6064e **Retina**, w.m. showing pigment cells
Ma607d • **Cornea** of eye from pig, sagittal l.s.
Ma6066e • **Lacrimal gland** of cat, t.s.
Ma609h • **Cochlea (internal ear)** from guinea pig, l.s. showing organ of Corti
Ma610e **Cochlea** from guinea pig, t.s.
Ma6103g **External and internal ear** with eardrum and cochlea, l.s.
Ma6105t **Crista ampullaris**, sec. through ear of guinea pig *
Ma612d • **Olfactory region** from nose of rabbit, t.s.
Ma6123d **Olfactory epithelium**, dog, t.s.
Ma6124d **Olfactory epithelium**, cat, t.s.
Ma614e • **Taste buds**, t.s. of papilla foliata in tongue of rabbit shows abundant taste buds, carefully stained
Ma6142e **Taste buds**, t.s. of papilla foliata in tongue of rabbit, sec. unstained special mounted for phase contrast observation
Ma615d **Taste buds**, t.s. of tongue of rat
Ma617e • **Tactile hairs** with blood sinus, l.s. or t.s.

Integument (Skin)

Ma632d • **Human skin from palm**, vertical sec. showing cornified layers, sweat glands, etc.
Ma633d **Human skin from palm**, horizontal sec.
Ma6334d • **Human body skin**, white, vertical sec.
Ma6335d **Human body skin**, negro, vertical sec.
Ma6336f **Human body skin**, white and negro, two vertical sec.
Ma6337f **Human skin**, sec. showing Pacinian corpuscles *
Ma6338f **Human skin**, sec. showing Meissner's corpuscles *
Ma635g • **Human scalp**, sagittal l.s. showing l.s. of hair follicles, sebaceous glands, etc.
Ma636d • **Human scalp**, horizontal sec. shows t.s. of hair follicles
Ma637d • **Human skin** from foetus, vertical sec. showing hair development
Ma638e • **Finger tip** from human foetus, sagittal l.s. of nail development
Ma6382e **Finger tip** from human foetus, t.s. of nail development
Ma639f **Foot of calf** embryo, sagittal l.s. showing hoof development
Ma6404c • **Skin with hairs**, cat, vertical sec.
Ma6405c **Skin of foot**, cat, vertical sec. showing stratum corneum and stratum germinativum
Ma641d **Skin** of pig, vertical sec.
Ma642d **Skin** of pig, horizontal sec.
Ma6427e **Corium** of pig, horizontal sec. stained for elastic fibres
Ma6422f **Skin** of pig embryo, t.s. showing injected vessels
Ma644d **Skin** of dog, vertical sec. routine stained for comparison
Ma643f **Skin** of dog, vertical sec. injected to show the blood vessels
Ma6443d **Skin** of guinea pig, vertical sec.
Ma6425d **Skin** from snout of calf, horizontal sec. for fine detail of the different layers of skin
Ma640c • **Eyelid** of rabbit, t.s.
Ma6402c **Eyelid** of cat, t.s. showing Meibomian gland
Ma647b • **Human hair**, w.m.
Ma649b **Hair (bristle) of pig**, w.m.
Ma6493b **Hair of ren**, w.m.
Ma652b **Hair of cat**, w.m.
Ma653b **Hair of camel**, w.m.
Ma651d **Mammalian hair**, composite slide of five types, w.m.: rabbit, muskrat, mink, seal, Persian lamb
Ma645c • **Mammary gland** of rabbit or mouse, active stage t.s.
Ma646c **Mammary gland** of rabbit or mouse, resting stage t.s.
Ma6461e **Mammary gland**, active and resting, two t.s. in one slide
Ma6465f **Mammary gland**, active, t.s. fixed and stained with osmic acid to show the milk fat
Ma6468d **Mammary gland** of cow, active t.s.
Ma6469d **Mammary gland** of cow, juvenile t.s.
Ma6467e **Nipple** of mammary gland, l.s.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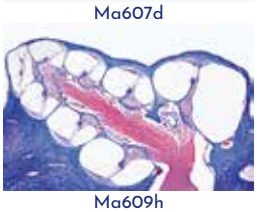
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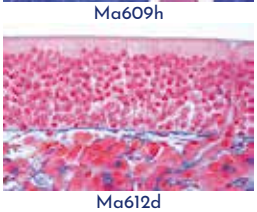
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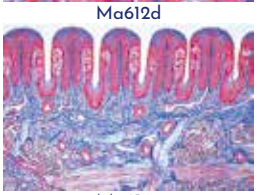
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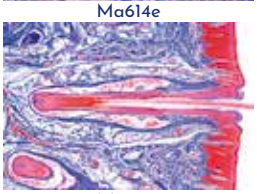
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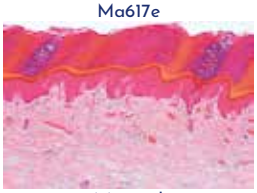
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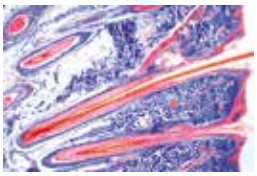
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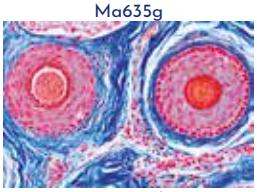
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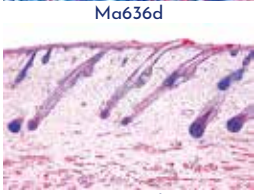
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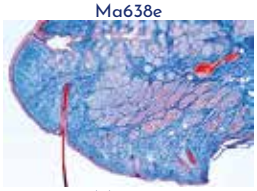
Ma638e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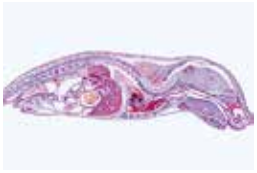
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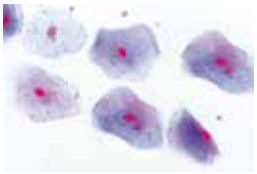
Ma708f


Ma712e


Ma713e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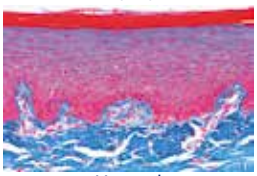
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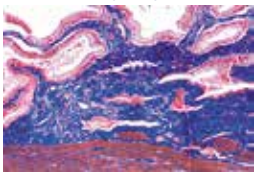
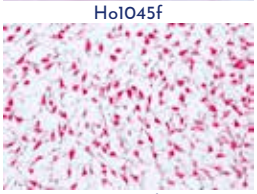

Ho1143e


Ho1045f


Ho126d


Ho123f


Ho1282e

General view of mammalian histology

Ma703g • **Young mouse**, sagittal l.s. through entire specimen passing the vertebral column
Ma704i **Young mouse**, median sagittal l.s. through entire specimen
Ma705g **Young mouse**, parasagittal l.s. through entire specimen
Ma706g • **Young mouse**, horizontal (frontal) l.s. through entire specimen
Ma708f **Young mouse**, t.s. of head in region before the eyes, with nasal region, tooth development, sinus hairs etc.
Ma709f • **Young mouse**, t.s. of head passing the eyes
Ma710f **Young mouse**, t.s. of head in region back to the eyes with brain
Ma712e • **Young mouse**, t.s. of thorax with heart, lungs, etc.
Ma713e • **Young mouse**, t.s. of abdomen with intestinal organs
Ma714d **Young mouse**, t.s. of leg

Human Histology

Epithelia and Cytology

Ho111c • **Squamous epithelium**, isolated cells from human mouth, smear
Ho1124e • **Stratified, non-cornified squamous epithelium**, section of oesophagus
Ho1127d **Stratified, cornified squamous epithelium**, in vertical sec. of human body skin
Ho114e • **Simple columnar epithelium**, in sec. of secreting tubules of human kidney
Ho1143e • **Columnar epithelium,** in t.s. of human gall bladder
Ho116e • **Simple ciliated columnar epithelium**, in t.s. of oviduct
Ho1163e • **Pseudostratified ciliated columnar epithelium**, trachea, t.s.
Ho118e **Simple cuboidal epithelium**, in sec. of human thyroid gland
Ho120e • **Transitional epithelium**, in sec. of human bladder
Ho1202e **Glandular epithelium**, in sec. of human colon with unicellular mucous glands
Ho1213d **Holocrine glands**, sebaceous glands from human skin, l.s.
Ho1214e **Eccrine glands**, in section of human salivary gland
Ho1215e **Mucous glands** from human intestine, colouring of goblet cells, PAS-HE
Ho1204e **Mesothelium**, sec. of human mesentery
Ho1205g • **Golgi apparatus**, section of jenunum silver stained *
Ho104i • **Human chromosomes** in smear from culture of blood, male
Ho1041i • **Human chromosomes** in smear from culture of blood, female
Ho1045f • **Barr bodies** (human sex chromatin) in smear from female squamous epithelium *

Connective and supporting tissues

Ho121e • **Areolar connective tissue**, human, streched and w.m.
Ho123f **Reticular fibres** in human spleen, t.s. silver steined
Ho126d • **Embryonic connective tissue** from human foetus, sec.
Ho127e • **Mucous tissue**, t.s. of umbilical cord (navel string) from foetus
Ho128e • **Adipose tissue,** human, sec. fat removed to show the cells
Ho1282e **Adipose tissue,** human, section stained for fat with Sudan III
Ho1292e • **White fibrous tissue,** tendon, human, l.s.
Ho1293e **White fibrous tissue,** tendon, human, t.s.
Ho1295e **Peritoneum,** human, t.s.
Ho130e • **Hyaline cartilage,** human t.s.
Ho1305e **Hyaline cartilage,** from human foetus, sec.
Ho133e **Sternal cartilage,** human sec.
Ho131e • **Yellow elastic cartilage,** human, sec. stained for elastic fibres
Ho1312e **Yellow elastic cartilage,** from human foetus sec.
Ho132f • **White fibrous cartilage,** human sec.
Ho1322f **White fibrous cartilage,** human intervertebral disc, sec.
Ho135e • **Compact bone,** human t.s. special stained for cells and canaliculi
Ho136e **Compact bone,** human l.s. special stained for cells and canaliculi
Ho1365e • **Spongy (cancellous) bone,** human t.s.
Ho1368h **Bone human,** ground thin, non-decalcified, t.s. and l.s. mounted in balsam *
Ho138e • **Bone development** (intracartilaginous), l.s. of foetal finger
Ho139e • **Bone development** (intermembranous), vertical l.s. of foetal skull-cap (cranial bone)
Ho141e **Joint** of human foetus, l.s.

Muscle tissues

Ho151e • **Striated (skeletal) muscle,** human l.s.
Ho1512f **Striated (skeletal) muscle,** human l.s., special stain of striations
Ho152e • **Striated (skeletal) muscle,** human t.s.
Ho1522g **Striated (skeletal) muscle,** isolated fibres, gold impregnation
Ho1524e **Striated (skeletal) muscle** from human foetus, l.s.
Ho154e • **Smooth (involuntary) muscle**, human l.s. and t.s.
Ho156e • **Heart (cardiac) muscle**, human l.s. and t.s.
Ho160f **Muscle-tendon junction**, human l.s.
Ho165g **Muscle types**, composite slides with l.s. of striated, smooth and heart muscles

Circulatory system

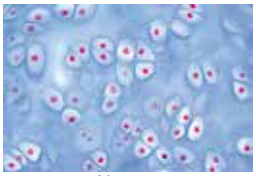
Ho171e **Artery,** human, t.s. routine stained
Ho172e • **Artery,** human, t.s. stained for elastic fibres
Ho1726e **Coronary artery,** human t.s.
Ho170e **Artery with valve,** human l.s. *
Ho173e **Vein,** human, t.s. routine stained
Ho174e • **Vein,** human, t.s. stained for elastic fibres
Ho1743e **Vena cava,** human t.s.
Ho175e **Artery and vein of smaller size,** human t.s. routine stained
Ho1751e **Artery and vein of smaller size,** human t.s. elastic fibres stained
Ho176e **Aorta,** human, t.s. routine stained
Ho1762e • **Aorta,** human, t.s. stained for elastic fibras
Ho1765e **Aortic valve,** human or sheep, t.s. *
Ho180c • **Blood smear,** human, Giemsa stain
Ho1802c **Blood smear,** human, Wright's stain

Respiratory system

Ho214f • **Trachea,** human t.s.
Ho215f **Trachea,** human l.s.
Ho2152e **Trachea** from human fetus t.s.
Ho2153f **Larynx**, human foetus, t.s.
Ho213g **Epiglottis,** human sec.
Ho2134f **Vocal cord,** human t.s.
Ho220e **Bronchus of lung,** human, t.s.
Ho216e • **Lung,** human, sec. routine stained
Ho217e **Lung,** human, sec. special stained for elastic fibres
Ho2183g **Lung,** human, thick section showing injected vessels
Ho219e **Lung from human foetus,** sec.

Lymphatic system

Ho231e • **Lymph node,** human t.s.
Ho232e **Lymph node,** of human foetus, t.s.
Ho233e • **Tonsil (Tonsilla palatina),** human t.s.
Ho234e • **Spleen,** human t.s.
Ho2352e **Spleen** from human foetus t.s.
Ho236e • **Red bone marrow**, human rib t.s.
Ho2363e **Red bone marrow,** human fetus, t.s., Giemsa stained
Ho237f **Red bone marrow**, human, smear, Giemsa stained
Ho2372e **Developing blood cells** in sec. of liver of human foetus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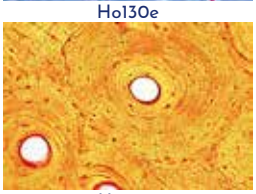
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Ho138e

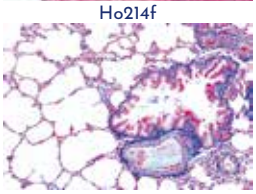

Ho139e


Ho152e


Ho171e


Ho173e


Ho214f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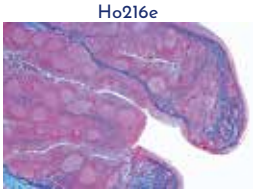
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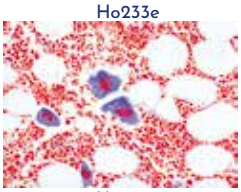
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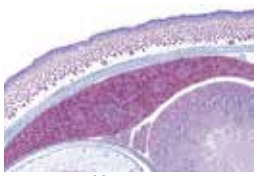
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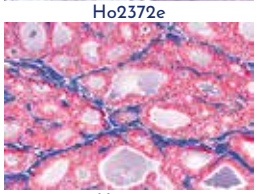
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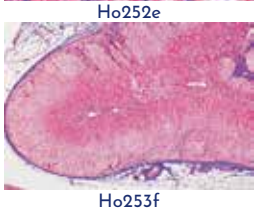
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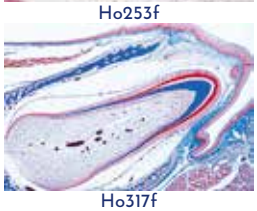
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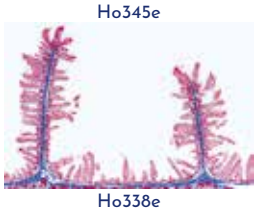
Ho312e


Ho331e


Ho337e


Ho345e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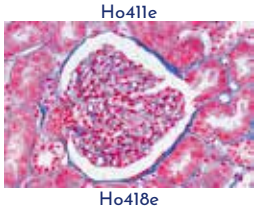
Ho411e


Ho418e

Ho2376e **Thymus** from human foetus, sec.
Ho238f • **Thymus** from human child, t.s.
Ho239f **Thymus** from human adult, t.s.

Endocrine glands

Ho252e • **Thyroid gland (Gl. thyreoidea),** human t.s. showing colloid
Ho2523g **Parathyroid gland (Gl. parathyreoidea),** human t.s. *
Ho253f • **Adrenal gland (Gl. suprarenalis),** human t.s.
Ho255h • **Pituitary gland (Hypophysis),** human t.s. *
Ho257f • **Pineal body (Epiphysis),** human t.s. *
Ho254f • **Pancreas** with islets of Langerhans, human, sec.

Digestive system

Ho310f • **Lip,** human t.s.
Ho3102e **Lip,** human foetus, t.s.
Ho311e • **Tooth,** human, t.s. of crown
Ho312e **Tooth,** human, t.s. of root
Ho313f **Tooth,** human, complete l.s.
Ho3137g **Tooth,** human, ground thin, t.s. *
Ho3138k **Tooth,** human, ground thin, l.s. *
Ho315f **Tooth development** from human foetus, early stage l.s.
Ho316f • **Tooth development** from human foetus, medium stage l.s.
Ho317f **Tooth development** from human foetus, later stage l.s.
Ho322e • **Tongue,** human, t.s.
Ho3234f **Tongue,** human, sec. with filiform papillae
Ho3235f **Tongue,** human, sec. with fungiform papillae
Ho324e **Tongue** from human foetus, t.s.
Ho326e • **Soft palate,** human t.s.
Ho327e **Hard palate,** human t.s.
Ho331e • **Oesophagus,** human t.s.
Ho333e **Stomach,** cardiac region, human t.s.
Ho334e • **Stomach,** fundic region, human t.s.
Ho335e **Stomach,** pyloric region, human t.s.
Ho3361e **Stomach** from human foetus, t.s.
Ho3365f **Stomach – duodenum** junction, human, l.s.
Ho337e • **Duodenum,** human t.s.
Ho3373f **Duodenum,** human t.s. mucous glands stained PAS-HE
Ho338e **Jejunum,** human t.s.
Ho339e **Ileum,** human t.s.
Ho340e **Small intestine** from human foetus, t.s.
Ho341e • **Vermiform appendix,** human t.s.
Ho345e • **Colon,** human t.s.
Ho347e **Rectum,** human t.s.
Ho3472f **Rectum-anus** junction, human l.s.
Ho351g • **Parotid gland (Gl. parotis),** human t.s.
Ho352g • **Submaxillary gland (Gl. submandibularis),** human t.s.
Ho353e • **Sublingual gland (Gl. sublingualis),** human t.s.
Ho354e • **Pancreas,** human t.s.
Ho3543e **Pancreas** from human foetus, t.s.
Ho357e • **Liver,** human t.s.
Ho359e **Liver,** human foetus, sec.
Ho3592f **Liver,** human foetus, sec. showing injected vessels
Ho360f **Liver,** human, sec. staining of glycogen
Ho362e • **Gall bladder,** human t.s.

Excretory system

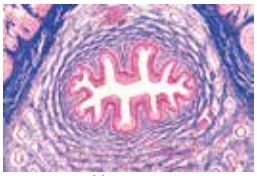
Ho411e • **Kidney,** human t.s.
Ho418e **Renal papilla,** human t.s.
Ho419e **Kidney,** human foetus, t.s.
Ho4195f **Kidney,** human, t.s. showing injected vessels
Ho421e • **Ureter,** human t.s.
Ho422e • **Urinary bladder,** human t.s.
Ho4225e • **Urethra,** human, t.s.
Ho423e **Urethra,** prostatic part, human t.s.

Reproductive system

Ho428f **Ovary,** human foetus, t.s. *
Ho429f • **Ovary,** mature (active phase), human t.s.
Ho430f **Ovary,** senile (inactive phase), human t.s.
Ho434f • **Ovary** with corpus luteum, human t.s.
Ho4343f **Ovary** with corpus albicans, human t.s.
Ho435e • **Oviduct (fallopian tube),** t.s. in region of ampulla
Ho4352e **Oviduct (fallopian tube),** t.s. in region of fimbria
Ho4365f **Uterus,** human foetus, t.s.
Ho4368e • **Uterus,** human, t.s. for general structure
Ho437f **Uterus,** human, proliferative stage t.s.
Ho438f **Uterus,** human, secretory stage t.s.
Ho439f **Uterus,** human, desquamative stage t.s.
Ho4395f **Uterus,** human, pregnant (gravid), t.s.
Ho4397f **Cervix uteri,** human l.s.
Ho440e • **Placenta,** human t.s.
Ho4402f **Placenta,** implantation site, human t.s.
Ho4404e • **Umbilical cord (navel string),** human t.s.
Ho445h **Human foetus,** l.s.
Ho450e • **Vagina,** human t.s.
Ho460f **Testis** from human child, t.s.
Ho461f • **Testis** from human adult, mature stage t.s. with spermatogenesis
Ho4628e **Efferent tubules** of testis, human t.s.
Ho463e **Epididymis,** human t.s.
Ho464e • **Sperm smear,** human
Ho466e • **Spermatic cord (Ductus deferens) of** human t.s.
Ho4663e **Spermatic cord (Ampulla ductus deferens),** human t.s.
Ho467e • **Seminal vesicle (Glandula vesiculosa),** human t.s.
Ho4678h **Prostate** of young man, t.s.
Ho468e • **Prostate** of old man, t.s.
Ho469g **Penis** from human foetus, t.s. *

Nervous system

Ho511e • **Cerebral cortex,** human, t.s. routine stained with hematoxylin-eosin
Ho512g **Cerebral cortex,** human, t.s. silvered
Ho518g **Cerebral cortex,** human, t.s. stained after Held for neuroglia cells
Ho5125e **Cerebral cortex** from human foetus, t.s. routine stained
Ho5126g **Cerebral cortex** from human foetus, t.s. silvered
Ho514e • **Cerebellum,** human, t.s. routine stained with hematoxylin-eosin
Ho515g **Cerebellum,** human, t.s. silvered
Ho5155e **Cerebellum** from human foetus, t.s. routine stained with hematoxylin-eosin
Ho5156g **Cerebellum** from human foetus, t.s. silvered
Ho5158f **Cerebellum,** human, t.s., Weigert stained for myeline sheaths
Ho516g **Cerebrum and cerebellum** composite slide, human, t.s. routine stained
Ho5163g **Developing brain** of human foetus, sagittal sec.
Ho517g **Brain stem,** human t.s.
Ho5368f **Chiasma opticum,** human t.s. routine stained with hematoxylin-eosin
Ho5232f **Chiasma opticum,** human, stained after Klüver - Barrera
Ho5233f **Corpus callosum,** human, stained after Klüver - Barrera
Ho5235f **Pons,** human, t.s. routine stained with hematoxylin-eosin
Ho5236g **Pons,** human, t.s. silvered
Ho5238f **Thalamus,** human, stained after Klüver - Barrera
Ho5239f **Penunculus cerebri,** human, Klüver - Barrera
Ho525f • **Medulla oblongata,** human, t.s. routine stained with hematoxylin-eosin
Ho5251f **Medulla oblongata,** human, t.s. Klüver - Barrera
Ho5252t **Medulla oblongata,** human, t.s. silvered
Ho5254f **Medulla oblongata** from human foetus, t.s.
Ho530e • **Spinal cord,** human, t.s. for general structure, routine stained with hematoxylin-eosin
Ho534g **Spinal cord,** human, t.s. silvered
Ho535e **Spinal cord,** human, l.s. routine stained with hematoxylin-eosin
Ho531e **Spinal cord,** human, t.s. cervical region, routine stained
Ho5315f **Spinal cord,** human, t.s. cervical, Klüver - Barrera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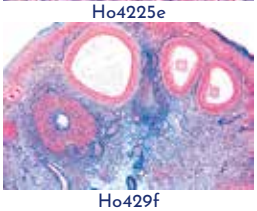
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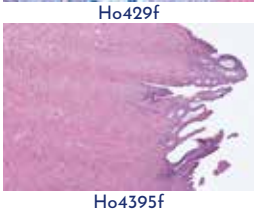
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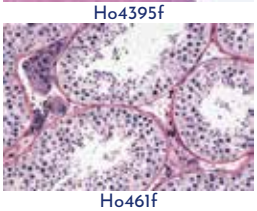
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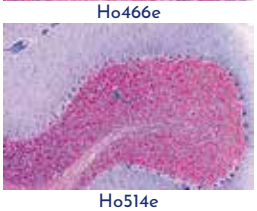
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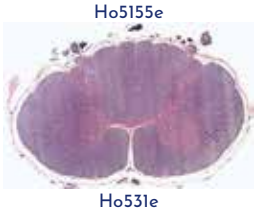
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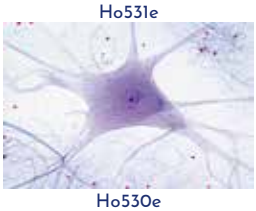
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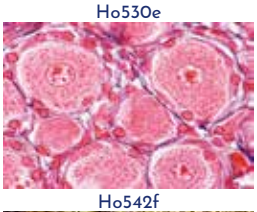
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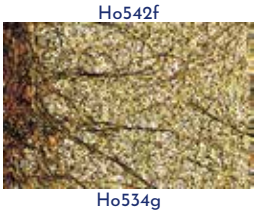
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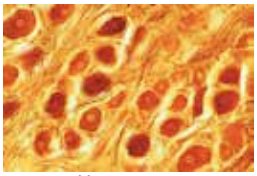
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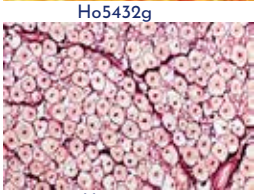
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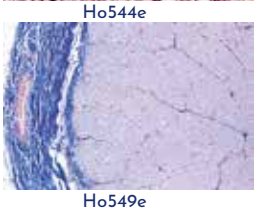
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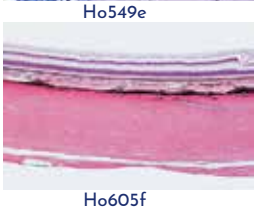
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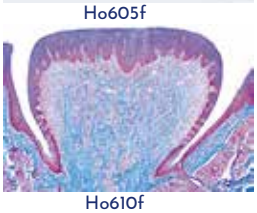
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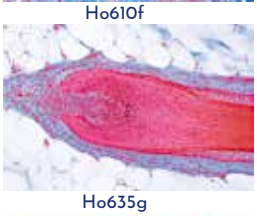
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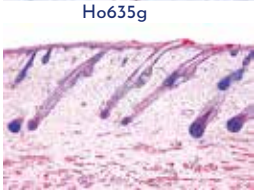
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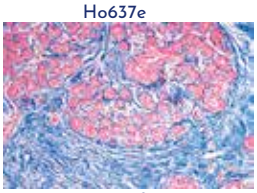
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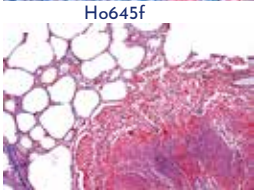
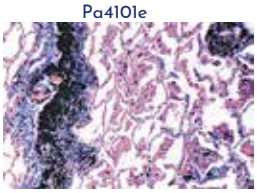
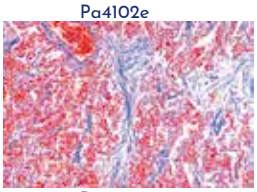

Pa4101e


Pa4102e


Pa4106e

Ho532e **Spinal cord,** human, t.s. thoracic region, routine stained
Ho5325f **Spinal cord,** human, t.s. thoracic, Klüver - Barrera
Ho533e **Spinal cord,** human, t.s. lumbar region, routine stained
Ho5335f **Spinal cord,** human, t.s. lumbar, Klüver - Barrera
Ho5365f **Dorsal root ganglion,** human t.s. routine stained
Ho5366g **Dorsal root ganglion,** human t.s. silvered
Ho542f • **Sympathetic ganglion,** human t.s. routine stained
Ho5423g **Sympathetic ganglion,** human t.s. silvered
Ho543f **Spinal ganglion,** human t.s. routine stained
Ho5432g **Spinal ganglion,** human t.s. silvered
Ho544e • **Peripheral nerve,** human t.s. routine stained with hematoxylin-eosin
Ho545e **Peripheral nerve,** human l.s. routine stained with hematoxylin-eosin
Ho5453f **Peripheral nerve,** human t.s. and l.s. routine stained with hematoxylin-eosin
Ho549e • **Optic nerve,** human t.s. routine stained with hematoxylin-eosin

Organs of sense

Ho605f • **Retina** from eye, human t.s. *
Ho607e • **Cornea** from eye, human t.s.
Ho610f **Wallate papillae** with taste buds, human t.s. *
Ho612f • **Olfactory epithelium**, human t.s.
Ho6103g **Internal ear**, human foetus, t.s. *
Ho5572t **Nerves and nerve endings** in sec. of skin from palm, silvered *
Ho5573f • **Touch corpuscles** in human skin, t.s. routine stained
Ho5574t **Touch corpuscles** in human skin, t.s. silver stained *

Integument (Skin)

Ho632e • **Skin from finger tip**, human, vertical l.s. quadruple stained
Ho633e **Skin from palm,** human, vertical l.s.
Ho6334d • **Body skin,** white, vertical l.s.
Ho6335d **Body skin,** negro, vertical l.s.
Ho6336f **Body skin,** white and negro, two vertical l.s.
Ho634e **Skin from armpit** with apocrine glands, vertical l.s.
Ho635g • **Scalp**, vertical l.s. shows l.s. of hair follicles, human, quadruple stained
Ho636d • **Scalp**, horizontal l.s. shows t.s. of hair follicles, human, quadruple stained
Ho637e **Scalp** of human foetus, vertical l.s. shows l.s. of hairs
Ho638e • **Finger tip** of human foetus, sagittal l.s. showing nail development
Ho639f **Finger nail** l.s.
Ho640e **Eyelid**, human, t.s.
Ho645f • **Mammary gland**, active, human t.s.
Ho646e **Mammary gland**, resting, human t.s.
Ho648e **Mammary gland**, senile, human t.s.

Human Pathology *

Lung and trachea

Pa4101e **Miliary tuberculosis of lung**
Pa4102e **Anthracosis of lung**
Pa4152e **Tuberculous coal lung**
Pa4103e **Croupous pneumonia**
Pa4104e **Chronic tuberculous pulmonary cavity with bacteria ***
Pa4105e **Cyanotic induration of lung**
Pa4106e **Chronic pneumonia**
Pa4107e **Chronic pulmonary emphysema**
Pa4108e **Hemorrhagic infarct of lung**
Pa4109e **Necrotic (cheesy) pneumonia**
Pa4110e **Influenzal pneumonia**
Pa4180t **Pneumonia, sec. of lung**
Pa4250t **Abscessus lumbalis**
Pa4153e **Carcinoma of lung**
Pa4182f **Diphtheria, sec. of trachea ***

Blood, spleen and lymph system

Pa4112e **Infarct of spleen**
Pa4115e **Amyloid degeneration of spleen**
Pa4123e **Erysipelas of spleen**
Pa4113g **Malaria melanemia of spleen**
Pa4111e **Myeloid sarcoma of spleen**
Pa4117e **Chronic myeloid leukemia of spleen**
Pa4124e **Tuberculosis of lymph glands**
Pa4121e **Lymphangio-endothelioma of neck**
Pa4126e **Myeloid sarcoma of lymph node**
Pa4120e **Lymphosarcoma mediastini**
Pa4167e **Tonsillitis, sec. of palatine tonsil**
Pa4122e **Myxoma mandibulae**
Pa4162i **Leukaemia, blood smear ***
Pa4163i **Anaemia, blood smear ***

Heart and vessels

Pa4114e **Myocarditis chronica acute recidivans**
Pa4116e **Adiposis of heart**
Pa4118e **Cardiac callosity**
Pa4119e **Cor villosum**
Pa4160e **Arteriosclerosis**

Glands

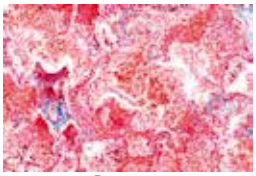
Pa4129e **Goiter of thyroid gland, Struma colloides**
Pa4165e **Struma nodosa, thyroid gland**
Pa4164e **Adenoma of thyroid gland, sec.**
Pa4125e **Scirrhous carcinoma of thyroid gland**
Pa4127e **Fibroepithelial mixed tumor of parotid gland**
Pa4128e **Carcinoma medullare glandulae**
Pa4232e **Fibroadenoma of breast**
Pa4237e **Fibroadenoma intracanaliculare of mamma**
Pa4234e **Scirrhous carcinoma of breast**
Pa4247e **Carcinoma solidum simplex of breast**
Pa4159e **Adenoma of adrenal gland**

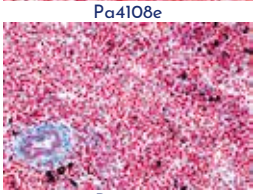
Intestinal tract

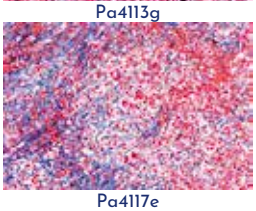
Pa4147e **Necrotic oesophagitis**
Pa4155e **Carcinoma of stomach**
Pa4154e **Carcinoma of large intestine**
Pa4137e **Adenocarcinoma of colon**
Pa4184e **Thickening of intestine**
Pa4185f **Bleeding of intestine by sublimate poisoning**
Pa4166e **Inflammation of appendix**
Pa4132e **Gelatinous carcinoma of rectum**
Pa4138e **Colitis dysenterica Shiga-Kruse**

Liver

Pa4130e **Miliary tuberculosis of liver**
Pa4172e **Fatty degeneration of liver**
Pa4133e **Parenchymatous and fatty degeneration of liver**
Pa4148e **Parenchymatous degeneration of liver**
Pa4143e **Amyloid degeneration of liver**
Pa4203g **Liver cirrhosis**
Pa4134e **Pigmentary cirrhosis of liver**
Pa4141e **Cyanotic atrophy of liver (nutmeg liver)**
Pa4144e **Brown atrophy of liver**
Pa4142e **Hemorrhagic necrosis of liver (eclampsia)**
Pa4135e **Hemosiderosis of liver**
Pa4146e **Icterus hepatis**
Pa4149e **Cavernous hemangioma of liver**
Pa4173e **Liver carcinoma**
Pa4140e **Carcinoma of liver, primary**
Pa4136e **Metastasis of liver**
Pa4174e **Peritoneal metastasis of hepatoma**
Pa4201e **Liver metastasis from a melanosarcoma recti**
Pa4145e **Lymphatic leukemia of liver**
Pa4191e **Inflammation of gall bladder,**
Pa4202e **Malignant tumor of gall bladder**
Pa4150f **Congenital syphilis of liver (feuerstein liver) ***
Pa4131g **Congenital syphilis of liver, silvered for spirochaetes ***
Pa4139f **Cirrhosis hepatis luetica ***


Pa4108e


Pa4113g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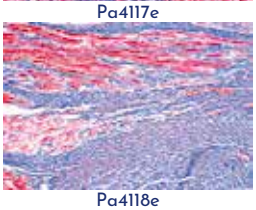
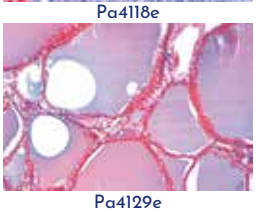
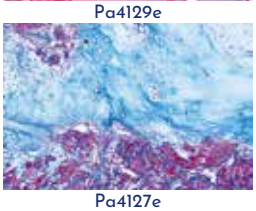

Pa4118e


Pa4129e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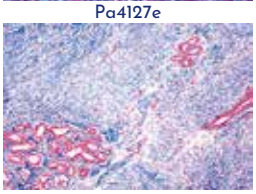
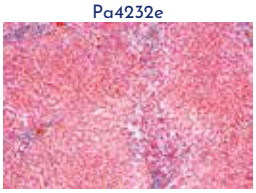
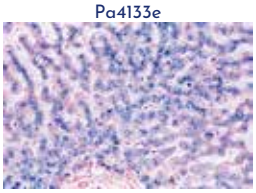

Pa4232e


Pa4133e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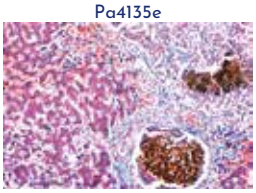
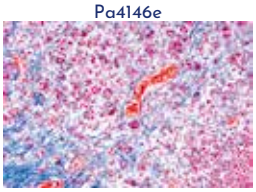
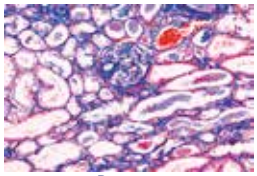

Pa4146e


Pa4136e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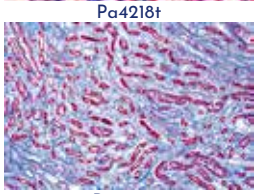
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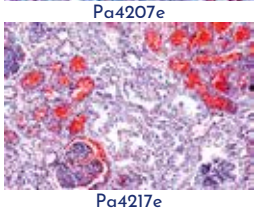
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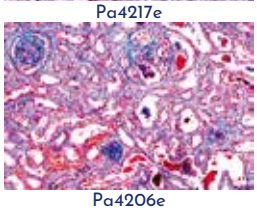
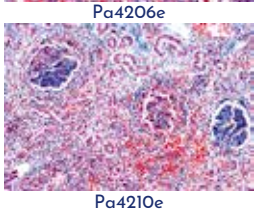

Pa4206e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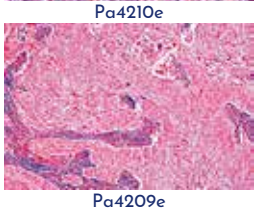
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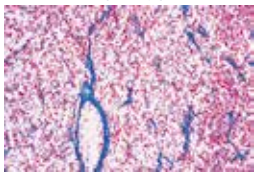
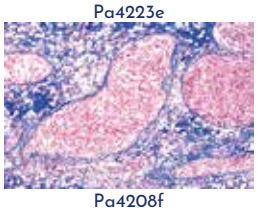

Pa4223e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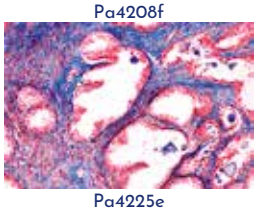
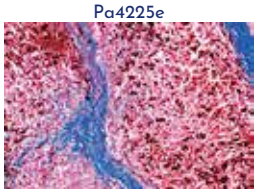
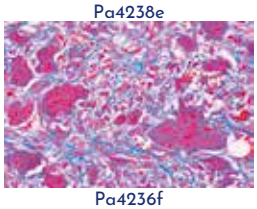

Pa4225e


Pa4238e


Pa4236f

Kidney and urinary organs

Pa4213e **Tuberculosis of kidney**
Pa4215e **Parenchymatous degeneration of kidney**
Pa4207e **Amyloid degeneration of kidney**
Pa4218e **Glycogenosis of kidney**
Pa4216t **Acute nephritis**
Pa4217e **Acute hemorrhagic nephritis (bleeding of kidney)**
Pa4206e **Chronic glomerulonephritis**
Pa4210e **Septic embolic nephritis**
Pa4205e **Cardiac kidney (icterus, jaundice)**
Pa4219e **Glomerularatrophy of kidney (cirrhosis)**
Pa4221e **Hypernephroma of kidney**
Pa4175g **Syphilis of kidney**
Pa4181t **Papilloma of urinary bladder**

Reproductive organs

Pa4224e **Cyst of ovary**
Pa4211e **Cystadenoma papilliferum of ovary**
Pa4220e **Adenoma of ovary**
Pa4222e **Malignant ovarian tumor**
Pa4169t **Teratoma of ovary**
Pa4204e **Myoma of uterus**
Pa4226e **Fibromyoma uteri**
Pa4209e **Carcinoma cervicis uteri**
Pa4212e **Papilloma of uterine fundus**
Pa4188e **Atrophy of testis**
Pa4214f **Undescended testicle with hyperplasia of Leydig's cells**
Pa4187e **Testis, icterus (jaundice)**
Pa4223e **Sarcoma of testicle**
Pa4208f **Gumma of testicle**
Pa4189f **Inhibition of spermatogenesis, testis** (subject to hormone disorder) *
Pa4225e **Hypertrophy of the prostate**
Pa4190e **Carcinoma of praeputium**

Nervous system

Pa4227e **Glioma cerebri**
Pa4228e **Ganglioneuroma myelinicum (neuroma)**
Pa4161t **Meningitis**

Skin, locomotor system

Pa4231e **Hemangioma simplex hypertrophicum subcutaneum**
Pa4230e **Foreign body granuloma with hemosiderin and giant cells**
Pa4229t **Organized venous thrombosis of muscle**
Pa4248e **Fat embolism after fracture of the leg**
Pa4244e **Zenker's degeneration of M. rectus abdominis (influenza)**
Pa4242e **Myxofibroma of abdominal wall**
Pa4241e **Myxoma of thigh**
Pa4239e **Sarcoma of thigh**
Pa4240e **Fibroma of skin**
Pa4245e **Basaloma**
Pa4235e **Chondroma of pubic bone**
Pa4238e **Melanosarcoma of skin**
Pa4156e **Carcinoma of squamous epithelium of skin**
Pa4233e **Spindle cell sarcoma**
Pa4236f **Giant cell sarcoma of maxilla ***
Pa4243e **Atheroma of head ***
Pa4249g **Pustule of variola vera ***
Pa4246e **Cicatricial tissue**

Embryology

Embryology of the mussel (Bivalvia, Pelecypoda) *

Em211e **Mussel embryology** (Lamellibranchiata, Bivalvia or Pelecypoda). Unfertilized and fertilized ova w.m. *
Em213e **Mussel embryology.** Zygote, two-cell and four-cell embryos w.m.
Em215s **Mussel embryology.** Early zygote through late cleavage. Polar bodies, polar lobes and spiral cleavage *
Em217e **Mussel embryology.** Blastula w.m. *
Em218e **Mussel embryology.** Gastrula w.m. *
Em219f **Mussel embryology.** Trochophore larva w.m. *
Em221s **Mussel embryology.** Veliger larvae, early and later stages *
Em223e **Mussel embryology.** Veliger larva w.m. *
Em225e **Mussel embryology.** Glochidia larva w.m.

Embryology of insecta *

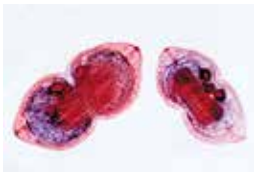
Em301g **Acheta,** cricket, egg showing maturation division w.m. *
Em302g **Acheta,** superficial cleavage *
Em3021g **Acheta.** first cleavage w.m. *
Em303g **Acheta,** superficial cleavage, nuclei migrating to surface *
Em304g **Acheta,** w.m. of egg showing formation of germ layer *
Em305g **Acheta,** w.m. of egg with young germ *
Em306g **Acheta,** w.m. of egg shows early blastokinesis, germ starts to roll in *
Em307g **Acheta,** w.m. of egg shows late blastokinesis, germ with limb buds *
Em308g **Acheta,** w.m. of egg showing rolling out of the germ *
Em309f **Insect,** t.s. of egg showing nuclei migrating to surface, cleavage
Em310f **Insect,** t.s. of egg showing superficial cleavage in the blastoderm
Em311f **Insect,** t.s. of egg showing young germ with primitive streak
Em312f **Insect,** t.s. of egg showing formation of amnion and serosa
Em313f **Insect,** t.s. of egg showing fusion of the embryonic envelopes
Em314f **Insect,** t.s. of older germ showing process of differentiation in ectoderm and mesoderm
Em315f **Insect,** t.s. of older germ in region of head
Em316g **Carausius,** walking stick, w.m. of germ with primordium of head, limb buds, neural groove, coelom *
Em317f **Carausius,** sagittal l.s. of egg with early germ
Em318f **Carausius,** sagittal l.s. of egg with medium germ
Em319f **Carausius,** sagittal l.s. of egg with later germ
Em320f **Carausius,** sagittal l.s. of egg with germ ready for hatching

Embryology of the sea-urchin (Psammechinus miliaris)

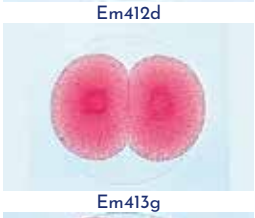
Em411d **Sea-urchin** embryology (Psammechinus miliaris), unfertilized eggs w.m.
Em412d **Sea-urchin** embryology. Fertilized eggs w.m.
Em413g **Sea-urchin** embryology. Two cells w.m.
Em414g **Sea-urchin** embryology. Four cells w.m.
Em415g **Sea-urchin** embryology. Eight cells w.m.
Em416g **Sea-urchin** embryology. Sixteen cells w.m.
Em417g **Sea-urchin** embryology. Thirty two cells w.m.
Em418d **Sea-urchin** embryology. Morula w.m.
Em419g **Sea-urchin** embryology. Blastula w.m.
Em420g **Sea-urchin** embryology. Beginning gastrulation w.m.
Em421g **Sea-urchin** embryology. Progressive gastrulation w.m.
Em422g **Sea-urchin** embryology. Pluteus larva w.m.

Embryology of the starfish (Asterias rubens) *

Em431d **Starfish** embryology (Asterias rubens). Ovary t.s. showing ova of large size
Em432d **Starfish** embryology. Testis t.s. with developing sperm


Em225e


Em412d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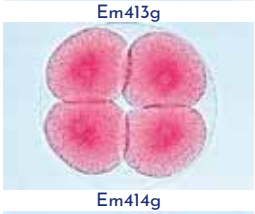
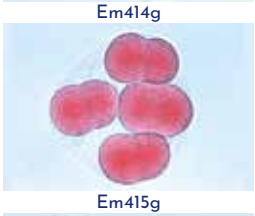

Em414g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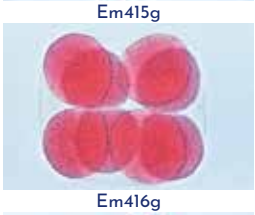
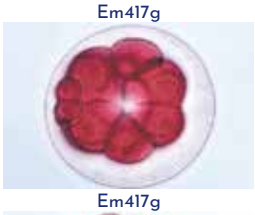

Em416g


Em417g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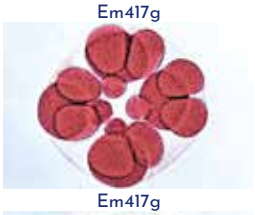
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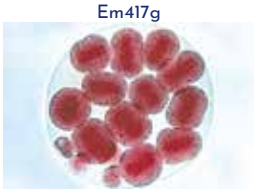
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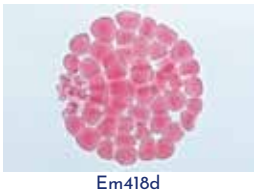
Em418d


Em418d

Em434e **Starfish** embryology. Sperm smear
Em435e **Starfish** embryology. Germinal vesicle stage w.m.
Em436e **Starfish** embryology. Unfertilized ova w.m.
Em437e **Starfish** embryology. Fertilized ova w.m. Zygote with polar bodies
Em438e **Starfish** embryology. Two cell stage w.m.
Em439e **Starfish** embryology. Four cell stage w.m.
Em440e **Starfish** embryology. Eight cell stage w.m.
Em441e **Starfish** embryology. Sixteen cell stage w.m.
Em443e **Starfish** embryology. Thirty-two cell stage w.m.
Em444e **Starfish** embryology. Sixty-four cell stage w.m.
Em447e **Starfish** embryology. Early and late blastula w.m.
Em448e **Starfish** embryology. Early and late gastrula w.m.


Em419d

Em451f **Starfish** embryology. Early bipinnaria larva w.m.
Em452f **Starfish** embryology. Late bipinnaria larva w.m.
Em456s **Starfish** embryology. Brachiolaria larva w.m.
Em458s **Starfish** embryology. Young starfish w.m.


Em420d

Embryology of the Amphioxus (Branchiostoma lanceolatum)

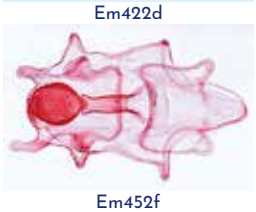
Em511g **Branchiostoma** embryology. Unfertilized ova w.m. *
Em516k **Branchiostoma** embryology. Two to sixteen cells stage w.m. *
Em519g **Branchiostoma** embryology. Thirty-two and sixty-four cells stage w.m. *
Em522g **Branchiostoma** embryology. Blastula stage w.m. *
Em524g **Branchiostoma** embryology. Gastrula stage w.m. *
Em526g **Branchiostoma** embryology. Early larva w.m. *
Em528g **Branchiostoma** embryology. Late larva w.m. *


Em421d


Em422d

Embryology of the frog (Rana sp.)

Em601f **Frog,** uncleaved egg, t.s.
Em602f **Frog,** egg, two cell stage (first cleavage) l.s.
Em603f **Frog,** egg, four cell stage (second cleavage) t.s.
Em604g **Frog,** egg, eight cell stage (third cleavage) l.s.
Em6045f **Frog,** egg, sixteen cells l.s.
Em605g **Frog,** morula l.s. with micro- and macromeres
Em606g **Frog,** blastula l.s. showing blastocoel
Em607g **Frog,** early gastrula, sagittal l.s. shows formation of germ layers and dorsal lip
Em608g **Frog,** later gastrula (yolk plug stage), sagittal l.s. with germ layers, yolk plug, blastocoel, primary intestinal cavity


Em452f

Em609g **Frog,** early neurula, t.s. showing the neural plate
Em610g **Frog,** medium neurula, t.s. showing the neural groove
Em611f **Frog,** late neurula with neural tube, t.s. through the intestinal region
Em612f **Frog,** late neurula with neural tube, t.s. through the frontal region
Em613f **Frog,** late neurula stage with neural tube, sagittal l.s.
Em614f **Frog,** early tail bud stage, t.s. through the head region
Em615g **Frog,** early tail bud stage, t.s. through the body region
Em616f **Frog,** early tail bud stage, sagittal l.s.
Em617g **Frog,** early tail bud stage, near median sagittal l.s. with forebrain, neural tube, notochord, digestive tract *


Em528g

Em618f **Frog,** late tail bud stage, t.s. through the head region
Em619f **Frog,** late tail bud stage, t.s. of body region with processes of differentiation in mesoderm
Em6195f **Frog,** late tail bud stage, t.s. in region of pronephros
Em620f **Frog,** late tail bud stage, frontal l.s. with differentiation of coelom sacs
Em621f **Frog,** hatching stage, t.s. of head with developing eyes
Em622f **Frog,** hatching stage, t.s. through region of heart, gills
Em623f **Frog,** hatching stage, t.s. through the midbody
Em624f **Frog,** hatching stage, sagittal l.s.


Em603f

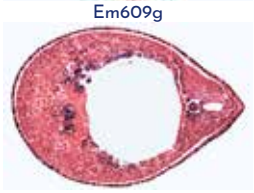

Em604g

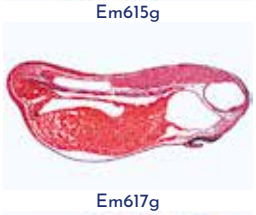

Em606g


Em608g

Em625e **Frog,** young tadpole, t.s. through the region of the head
Em626e **Frog,** young tadpole, t.s. through the region of gills
Em627e **Frog,** young tadpole, t.s. through the region ofabdomen
Em628f **Frog,** young tadpole, sagittal section of entire specimen
Em629f **Frog,** young tadpole, frontal (horizontal) section of entire specimen
Em630e **Frog,** older tadpole, t.s. through the region of head
Em631e **Frog,** older tadpole, t.s. through the region of gills
Em632e **Frog,** older tadpole, t.s. in region of heart and lungs
Em633e **Frog,** older tadpole, t.s. through the region of abdomen
Em6333f **Frog,** older tadpole, sagittal sec. through the entire specimen
Em634f **Frog,** older tadpole, section through the limb bud


Em609g

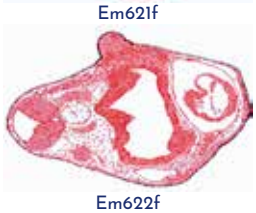

Em615g


Em617g

Embryology of the chicken (Gallus domesticus)

Em701f **Chicken,** 12 hour, t.s. through the primitive streak
Em702g **Chicken,** 12 – 24 hour, l.s. through the primitive streak *
Em703f **Chicken,** 12 – 24 hour, t.s. with neural plate
Em704f **Chicken,** 24 hour, t.s. with neural groove, notochord, germinal layers, somites
Em7042f **Chicken,** 24 hour, t.s. through the head fold region
Em7043f **Chicken,** 24 hour, t.s. through the intestinal region
Em7044f **Chicken,** 24 hour, t.s. through the pericardial region t.s.
Em7047f **Chicken,** 24 hour, l.s. through the entire specimen
Em705f **Chicken,** 36 hour, t.s. with neural tube, notochord, differentiation of mesoderm (myotom, nephrotom and splanchnotom)
Em706f **Chicken,** 36 hour, t.s. of anterior region with developing heart (pericardial region)
Em708g **Chicken,** 36 – 48 hour, sagittal l.s., formation of the somites *
Em709f **Chicken,** 48 hour, t.s. through the region of the head
Em710f **Chicken,** 48 hour, t.s. through the region of heart
Em711f **Chicken,** 48 hour, t.s. showing neural tube, mesoderm
Em712g **Chicken,** 48 hour, sagittal l.s. through primitive node, formation of coelom, Vena terminalis *
Em713g **Chicken,** 48 – 60 hour, horizontal l.s. with brain, heart, and somites *
Em714f **Chicken,** 60 hour, t.s. through the region of head
Em715f **Chicken,** 60 hour, t.s. through the region of heart
Em716f **Chicken,** 60 hour, t.s. through the region of abdomen
Em717f **Chicken,** 72 hour, t.s. through the region of brain
Em718f **Chicken,** 72 hour, t.s. through the region of heart and eyes
Em719f **Chicken,** 72 hour, t.s. through the caudal region of heart
Em720f **Chicken,** 72 hour, t.s. through the abdominal region
Em722g **Chicken,** 72 hour, horizontal l.s. of entire specimen
Em723f **Chicken,** 4 – 5 days, t.s. through the region of head
Em724f **Chicken,** 4 – 5 days, t.s. through region of heart and eyes
Em725f **Chicken,** 4 – 5 days, t.s. through the abdominal region
Em726g **Chicken,** 4 – 5 days, sagittal l.s. of entire specimen*
Em727f **Chicken,** 8 days, t.s. through the region of brain
Em728f **Chicken,** 8 days, t.s. through the region of eyes
Em729f **Chicken,** 8 days, t.s. through the region of gill slits


Em621f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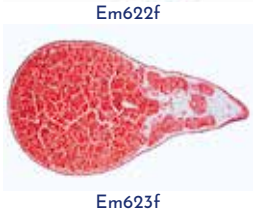
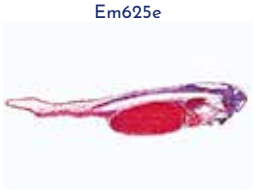

Em623f


Em625e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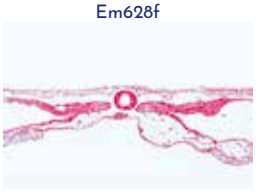
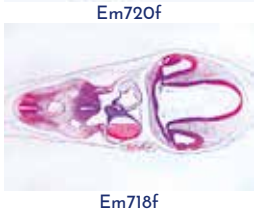

Em705f


Em706f


Em711f


Em762i


Em720f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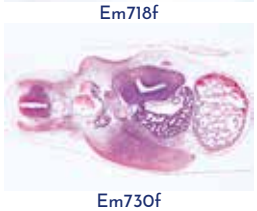
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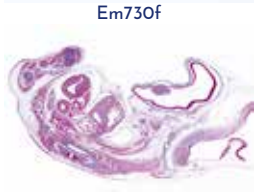
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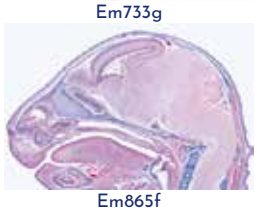
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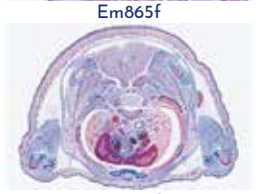
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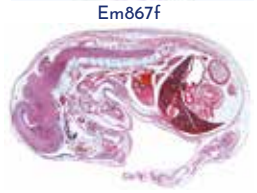
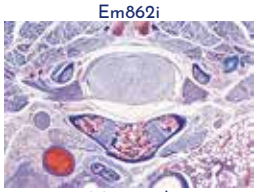
Em867f


Em852k


Em862i


Ma5296d

Em730f **Chicken,** 8 days, t.s. in region of heart and lungs
Em731f **Chicken,** 8 days, t.s. in region of intestine and liver
Em732f **Chicken,** 8 days, t.s. in region of intestine and kidney
Em733g **Chicken,** 8 days, sagittal l.s. of the entire specimen *
Em751 **Chicken,** 16 hour, w.m. showing primitive streak *
Em752 **Chicken,** 18 hour, w.m. of the entire specimen *
Em753 **Chicken,** 21 hour, w.m. of the entire specimen *
Em754 **Chicken,** 24 hour, w.m. showing neural groove *
Em756 **Chicken,** 28 hour, w.m. showing heart and blood vessels *
Em758 **Chicken,** 33 hour, w.m. showing the formation of the somites *
Em760 **Chicken,** 40 hour, w.m. flexion of the anterior end *
Em761 **Chicken,** 43 hour, w.m. *
Em762 **Chicken,** 48 hour, w.m. showing the formation of the coelom *
Em764 **Chicken,** 56 hour, w.m. the gill arches can be seen *
Em766 **Chicken,** 66 hour, w.m. progression of gill arches and other structures *
Em768 **Chicken,** 72 hour, w.m. with well developed limb buds *
Em770 **Chicken,** 80 hour. w.m. more advanced stage of organ development *
Em772 **Chicken,** 96 hour, w.m. allantois outside the body *

Embryology of the pig (Sus scrofa)

Em811h **Pig** embryo, 4 mm, sagittal l.s. *
Em813g **Pig** embryo, 4 mm, typical t.s. *
Em821h **Pig** embryo, 6 mm, sagittal l.s. *
Em823g **Pig** embryo, 6 mm, typical t.s. *
Em831h **Pig** embryo, 8 mm, sagittal l.s.
Em833g **Pig** embryo, 8 mm, typical t.s.
Em841g **Pig** embryo, 11 – 12 mm, sagittal l.s.
Em843k **Pig** embryo, 11 – 12 mm, near median sagittal l.s. *
Em845g **Pig** embryo, 11 – 12 mm, frontal l.s.
Em846f **Pig** embryo, 11 – 12 mm, typical t.s.
Em847h **Pig** embryo, 11 – 12 mm, three typical t.s. through head, thorax and abdomen
Em848k **Pig** embryos, 6, 8, and 11 mm, three typical t.s. *
Em849k **Pig** embryos, 6, 8, and 11 mm, three typical sagittal l.s. *
Em851g **Pig** embryo, 15 mm, sagittal l.s.
Em852k **Pig** embryo, 15 mm, near median l.s. *
Em853g **Pig** embryo, 15 mm, frontal l.s.
Em854f **Pig** embryo, 15 mm, head t.s.
Em855f **Pig** embryo, 15 mm, thorax t.s.
Em856f **Pig** embryo, 15 mm, abdomen t.s.
Em858i **Pig** embryo, 15 mm, three typical t.s. through head, thorax, and abdomen
Em861g **Pig** embryo, 20 – 25 mm, sagittal l.s.
Em862i **Pig** embryo, 20 – 25 mm, near median sagittal l.s.
Em863g **Pig** embryo, 20 – 25 mm, frontal l.s.
Em865f **Pig** embryo, 20 – 25 mm, head t.s.
Em866f **Pig** embryo, 20 – 25 mm, thorax t.s.
Em867f **Pig** embryo, 20 – 25 mm, abdomen t.s.
Em869i **Pig** embryo, 20 – 25 mm, three typical t.s. through head, thorax, and abdomen

Bacteria

Spherical bacteria, cocci

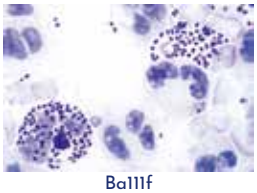
Ba117e • **Diplococcus pneumoniae,** causing croupous pneumonia, smear
Ba118d **Gaffkya tetragena,** occuring as tetrads, smear
Ba113d **Micrococcus roseus,** smear from culture
Ba110e **Neisseria catarrhalis,** smear from culture
Ba111f • **Neisseria gonorrhoeae,** causing gonorrhoea, smear *
Ba1113e • **Neisseria meningitidis (intracellularis),** causing epidemic meningitis, smear from culture *
Ba114d • **Sarcina lutea,** chromogenic rods occuring in packets
Ba112d • **Staphylococcus aureus,** pus organism, smear from culture
Ba1123d **Staphylococcus epidermidis,** smear from culture
Ba1163d **Streptococcus faecalis,** smear from culture
Ba116d • **Streptococcus lactis,** milk souring organism, smear from culture showing short chains
Ba115e • **Streptococcus pyogenes,** smear from pus showing long chains
Ba1151d **Streptococcus pyogenes,** smear from culture showing short chains
Ba1165f **Hemolytic streptococci,** blood poisoning, blood smear

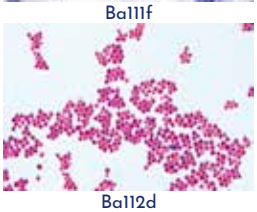
Rod-shaped bacteria, non spore-forming, gram-positive

Ba136d • **Corynebacterium diphtheriae,** smear from culture
Ba137f **Corynebacterium diphtheriae,** stained to show the polar bodies
Ba127d • **Lactobacillus bulgaricus (Thermobacterium),** Yoghurt bacteria (Bulgarian soured milk), from culture
Ba1272e **Lactobacillus casei,** cheese and other milk products
Ba135h **Mycobacterium leprae,** causing leprosy, smear or tissue section *
Ba131t **Mycobacterium tuberculosis,** smear from culture
Ba132e • **Mycobacterium tuberculosis,** smear from positive sputum stained after Ziehl-Neelsen
Ba133g **Mycobacterium tuberculosis,** section of infected tissue, bacteria stained *

Rod-shaped bacteria, non spore-forming, gram-negative

Ba153d • **Acetobacter aceti,** manufacture of vinegar, smear
Ba1385d **Aerobacter aerogenes,** smear from culture
Ba155d • **Azotobacter,** rods from soil, smear
Ba139e **Bacterium erysipelatos** (Erysipelothrix rhusiopathiae), smear *
Ba151d **Bacterium prodigiosum** (Serratia marcescens), formation of red pigment, smear
Ba1502d • **Brucella abortus,** causing abortation in cattle (Bang disease), smear
Ba144d • **Eberthella typhi,** causing typhoid fever, smear
Ba1416e **Erwinia amylovora,** occuring in short chains, causing pear blight, smear
Ba1417e **Erwinia caratovora,** causing soft root in vegetables, smear
Ba1418e **Erwinia caratovora,** section showing bacterial infection of tissue
Ba143d • **Escherichia coli,** colon bacteria, smear
Ba150d • **Hemophilus influenzae (Pfeiffer),** smear
Ba138e • **Klebsiella pneumoniae (Friedlander),** causing pneumonia smear
Ba158f **Pasteurella (Yersinia) pestis,** bubonic plague, smear
Ba1505d **Pasteurella pseudotuberculosis,** smear from culture
Ba142d • **Proteus vulgaris,** putrefaction, smear
Ba1425d **Pseudomonas aeruginosa,** smear from culture
Ba1426e **Pseudomonas solonacearum,** causes tobacco bacterial wilt, smear
Ba1427e **Pseudomonas solonacearum,** t.s. stem with bacteria in tissue *
Ba141d • **Rhizobium radicicola,** smear from culture
Ba140d **Rhizobium radicicola,** nitrogen fixing organisms, section through root nodule of lupin showing bacteria in situ
Ba146d • **Salmonella enteritidis,** causes meat poisoning, smear
Ba145d • **Salmonella paratyphi,** paratyphoid fever, smear
Ba147d **Salmonella pullorum,** chicken disease, smear
Ba149d • **Shigella dysenteriae,** causes bacillary dysentery, smear


Ba111f

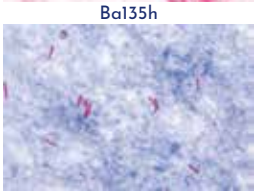

Ba112d


Ba115e


Ba116d


Ba136d


Ba135h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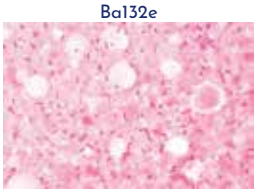
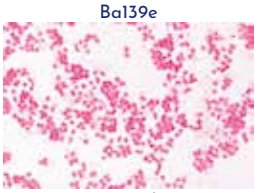
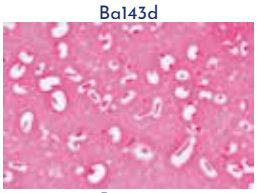
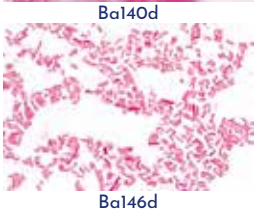

Ba139e

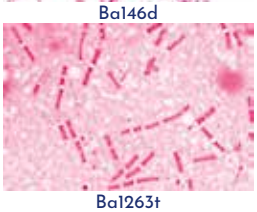

Ba151d

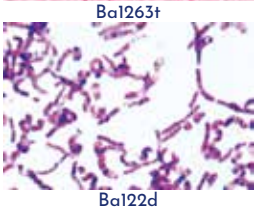

Ba143d


Ba138e


Ba140d


Ba146d


Ba1263t

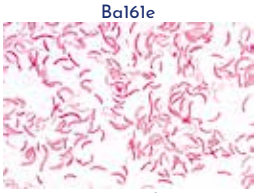

Ba122d

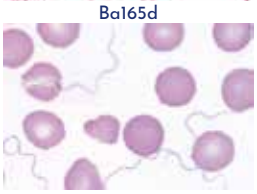

Ba121d

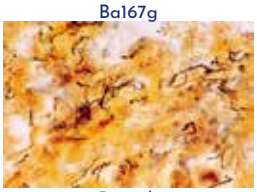

Ba128d


Ba130f


Ba161e


Ba165d


Ba167g


Ba170h

Ba1493d **Shigella sonnei,** smear from culture
Ba1428e **Xanthomonas phaseoli,** causing bacterial bean blight, sec. through the infected tissue

Rod-shaped bacteria, spore-forming (bacilli)

Ba1263t • **Bacillus anthracis,** smear from culture
Ba125f **Bacillus anthracis,** causes wool sorter's disease, smear from infected spleen. Olt's capsule stain
Ba1265f **Bacillus anthracis,** spores stained *
Ba126g **Bacillus anthracis,** in section through infected tissue *
Ba120d **Bacillus cereus,** bacteria from soil, smear from culture
Ba1202f **Bacillus cereus,** spores stained
Ba134d **Bacillus larvae,** bee disease, smear
Ba124d **Bacillus megaterium,** from soil, smear from culture
Ba123d • **Bacillus mesentericus,** smear from culture
Ba122d • **Bacillus mycoides,** large soil organisms growing in chains
Ba121d • **Bacillus subtilis,** hay bacillus, smear showing bacilli and spores doubly stained
Ba1303t • **Clostridium botulinum,** causing food poisoning, smear
Ba1285t **Clostridium perfringens,** causing gas gangrene, smear
Ba1287f **Clostridium perfringens,** smear stained to show spores
Ba128d **Clostridium septicum,** smear from culture
Ba130f • **Clostridium tetani,** special stained to show the terminal spores by the Ziehl-Neelsen method
Ba129e **Clostridium tetani,** causing lockjaw, smear

Spiral bacteria and spirochaetes

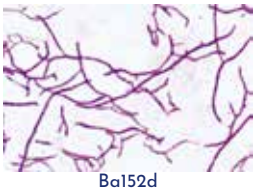
Ba164t • **Vibrio comma,** causing Asiatic cholera, smear
Ba161e • **Spirillum volutans,** a very large spirillum, smear *
Ba162d **Spirillum serpens,** from putrid water, smear
Ba163d **Spirillum undula,** in stagnant water, smear
Ba165d • **Rhodospirillum rubrum,** chromogenic rods, smear
Ba167g • **Borrelia duttoni (Spirochaeta recurrentis),** causes Central african relapsing fever, blood smear with organisms *
Ba170h • **Treponema pallidum (Spirochaeta pallida),** section through syphilitic lesion stained by Levaditi's silver method *

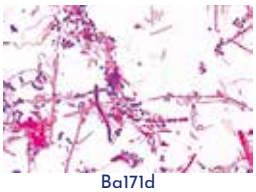
Miscellaneous groups

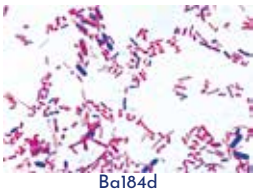
Ba1528d **Actinomyces alni,** sec. of root nodule showing mycorrhiza of alder
Ba1526f **Actinomyces bovis,** causing lumpy jaw, section through infected tissue
Ba1525e **Actinomyces,** causing lumpy jaw, smear
Ba157e **Caulobacter,** stalk bacterium, smear
Ba193d **Galionella,** iron bacteria, smear
Ba191d **Methanobacterium,** forming methane, smear
Ba190d • **Sphaerotilus natans,** from putrid water, long chains with sheaths
Ba152d • **Streptomyces griseus,** streptomycin antibiotic, smear
Ba192d **Thiocystis or Lamprocystis,** sulphur bacteria, smear
Ba250e **Tobacco mosaic,** a virus disease, sec. of infected leaf *

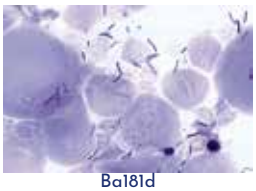
Typical bacteria, composite slides

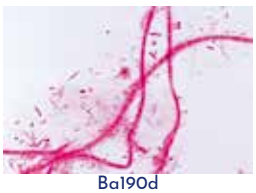
Ba171d • **Bacteria from mouth,** Gram positive and negative bacteria can be observed in this slide, ideal for demonstration
Ba201e • **Typical bacteria:** three smears on one slide, cocci, bacteria and spirilli are shown, carefully stained
Ba203e • **Mixed bacteria:** slide showing mixed species from a number of different pure cultures
Ba2061d **Typical coccus,** round-shaped, Gram-negative, smear
Ba2062d **Typicalcoccus,** round-shaped, Gram-positive, smear
Ba2071d **Typical cocci in chains** (streptococci), smear
Ba2072d **Typical cocci in clumps** (staphylococci), smear
Ba2051d **Typicalbacillus,** rod-shaped, Gramnegative, smear
Ba2052d **Typicalbacillus,** rod-shaped, Gram-positive, smear
Ba2065d **Typical bacilli in chains** (streptobacilli), smear
Ba209d **Typical spirilli,** spiral- or comma-shaped, smear
Ba181d **Bacteria from bread,** direct smear
Ba182d **Bacteria from cheese,** smear or section
Ba183d **Bacteria from sour milk,** smear
Ba184d **Bacteria from human intestine,** smear
Ba185d **Bacteria from yoghurt,** smear
Ba186d **Bacteria from sauerkraut,** smear
Ba187d **Bacteria from hay infusion** causing decomposition, smear


Ba152d


Ba171d


Ba184d


Ba181d


Ba190d

Cytological slides, special staining techniques

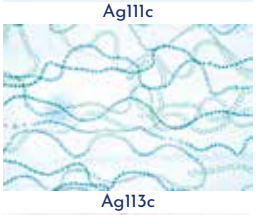
Ba2081d **Typical mixed bacteria,** including Gram-positive and Gram-negative rods, smear
Ba210g **Lophotrichous flagella** on Spirillum, specially stained *
Ba212g **Monotrichous flagella** on Vibrio or Pseudomonas, spec. stained *
Ba211g **Peritrichous flagella** on Salmonella or Proteus, spec. stained *
Ba221f **Capsule stain** (Klebsiella pneumoniae), smear specially stained
Ba224g **Nuclear stain** (Bacillus cereus), smear specially stained for nuclear material (DNA) *
Ba225t **Cell division** (Bacillus cereus), smar with Feulgen stain *
Ba229f **Metachromatic granules** or polar bodies (Corynebacterium diphtheriae), smear specially stained
Ba226f **Spore stain** (Bacillus subtilis), smear doubly stained with central spores
Ba228f **Spore stain** (Clostridium botulinum), smear doubly stained with subterminal spores

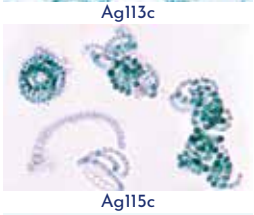
Algae

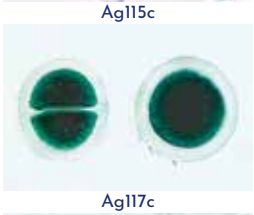
Cyanophyceae – Blue-Green Algae

Ag111c • **Oscillatoria,** a blue-green filamentous alga w.m.
Ag112d **Oscillatoria,** thin sections specially stained to show the nuclear material
Ag1123c **Oscillatoria,** mucous sheath stained, w.m.
Ag113c • **Nostoc,** w.m. shows filaments and heterocysts
Ag114d **Nostoc,** section for finer details of filaments and sheaths
Ag1146f **Nostoc** or other blue-green alga, special preparation for nuclear material, Feulgen stain *
Ag1145d **Nostoc gunnerae,** symbiotic algae living in the stem of Gunnera, section
Ag1147c **Nostoc zetterstettii,** a gelatinous alga, unbranched filaments, w.m.
Ag1148c **Nostoc caeruleum,** unbranched filaments,
Ag1151f **Anabaena or Oscillatoria,** nuclear stain
Ag115c • **Anabaena,** thread shaped blue-green algae with heterocysts w.m.
Ag1156d **Aphanizomenon,** single filaments of various length w.m.
Ag1157d **Aphanothece,** small single cells in colonies
Ag1153d **Arthrospira,** filaments in regular spirals w.m.
Ag1205c **Beggiatoa,** a colourless alga showing lack of chlorophyll
Ag117c • **Chroococcus,** large single celled blue-green algae w.m.
Ag1162d **Cylindrospermum,** with heterocysts and spores w.m.
Ag1152d **Fischerella (Hapalosiphon),** branched filaments w.m.
Ag116c • **Gloeocapsa,** small colonies within sheaths
Ag119c • **Gloeotrichia,** forming akinetes w.m.
Ag1166d **Lyngbya,** filamentous algae within sheaths
Ag1164d **Merismopedia,** flat colonies w.m.
Ag1176c • **Microcystis,** irregular colonies w.m.
Ag1207d **Ophridium versatile,** a gelationous alga, filaments with heterocysts
Ag118f **Rivularia,** with basal heterocysts w.m.

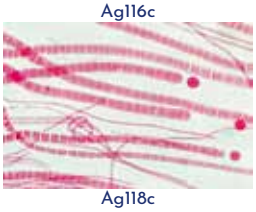

Ag111c


Ag113c

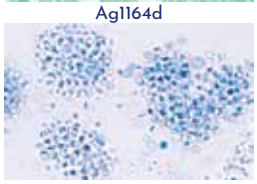

Ag115c

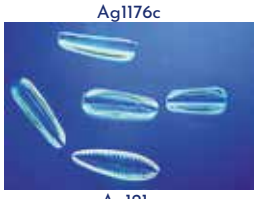

Ag117c

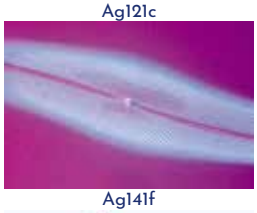

Ag116c

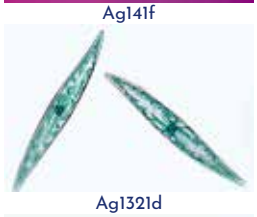

Ag118c

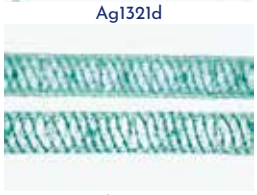

Ag1164d

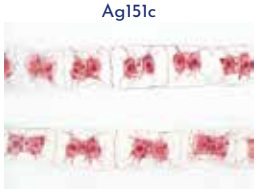

Ag1176c


Ag121c


Ag141f


Ag1321d


Ag151c


Ag155c


Ag158d


Ag160d


Ag165e


Ag182c

Ag120c **Scytonema,** trichomes with false branchings
Ag1172d **Spirulina,** unicellular spirals w.m.
Ag1174d **Stigonema,** branched thallus w.m.
Ag1155c **Tolypothrix,** a blue-green alga with false branchings w.m.
Ag1201d **Mixed blue-green algae,** many different species in one slide for comparison w.m.

Diatomeae

Ag121c • **Diatoms,** recent from fresh water, mixed species
Ag122c • **Diatoms,** fossil from fresh water, mixed species
Ag123c • **Diatoms,** recent marine, mixed species
Ag124c • **Diatoms,** fossil marine, mixed species
Ag131d • **Diatoms,** fixed and stained to show the chromatophores
Ag1321d **Diatoms** from fresh water, fixed and stained to show the chromatophores
Ag1322d **Diatoms** marine, fixed and stained to show the chromatophores
Ag133c **Diatomeous earth,** a mixture of various fossil diatoms
Ag141f **Pleurosigma angulatum,** for testing microscope resolution, nD 1,0
Ag142f **Surirella gemma,** for testing microscope resolution, nD 1,0
Ag143d **Synedra ulna,** species from fresh water
Ag144e **Arachnoidiscus,** central marine diatoms
Ag1441e **Coscinodiscus,** central marine diatoms, mixed species
Ag1442e **Triceratium and Tricnaria,** triangular marine diatoms
Ag149d **Silicoflagellates,** Distephanus and others,

Conjugatae

Ag151c • **Spirogyra,** a common alga with spiral chloroplasts, w.m. of vegetative filaments, carefully stained. The standard slide for general study.
Ag1512d **Spirogyra,** vegetative w.m., a large species with several chloroplasts in each cell
Ag1513d **Spirogyra,** vegetative w.m., a small species with single chloroplast in each cell
Ag152e • **Spirogyra,** in scalariform conjugation and after the stage of conjugation, w.m.
Ag153e **Spirogyra,** showing formation of zygotes w.m.
Ag154e **Spirogyra,** in lateral conjugation w.m. *
Ag1542e **Spirogyra,** in scalariform conjugation showing zygotes w.m., a large species with several chloroplasts in each cell
Ag155c • **Zygnema,** vegetative filaments with stellate chloroplasts w.m.
Ag156e **Zygnema,** in conjugation and after conjugation with zygotes w.m.
Ag1565c **Mougeotia,** a filamentous alga with flat chloroplasts w.m.
Ag158d **Cosmarium,** a common desmid with isthmus
Ag157d • **Closterium,** a crescent-shaped desmid w.m.
Ag159d **Mesothaenium,** a small rod-shaped desmid
Ag160d • **Micrasterias,** large plate-shaped desmids w.m.
Ag161d **Staurastrum,** double cells with spines w.m.
Ag162d **Hyalotheca,** a filamentous desmid w.m.
Ag165e • **Mixed desmids** of various forms, strewn slide w.m.

Chlorophyceae – Green Algae

Ag1923e **Acetabularia,** a marine species with an umbrella-shaped thallus w.m.
Ag1925d **Bryopsis,** marine green algae w.m.
Ag1722d **Bulbochaete,** sessile filaments w.m.
Ag1725d **Carteria,** unicellular algae with four flagella w.m.
Ag1907d **Chaetophora,** thallus with many branches w.m.
Ag171c • **Chlamydomonas,** small biflagellate algae w.m.
Ag1711f **Chlamydomonas,** specially stained to show the flagella *
Ag191c • **Chlorella,** small unicellular green algae, w.m.
Ag1902d **Chlorococcus,** living on ground, hollow-sphere-shaped chloroplasts
Ag182c • **Cladophora,** branching filaments with multinucleate cells w.m.
Ag1904d **Coelastrum,** cell colonies w.m.
Ag1908d **Coleochaete,** a soil species w.m.
Ag183c • **Draparnaldia,** main filaments and clusters of branches w.m.
Ag1723d **Dysmorphococcus,** flagellate algae with shells
Ag192d • **Enteromorpha,** seaweed, inflated narrow frond
Ag1757d **Eremosphaera,** large unicellular green algae
Ag174d • **Eudorina,** spherical colonies of thirty-two cells w.m.
Ag172d • **Gonium pectorale,** plate-like colonial forms w.m.
Ag1721f **Gonium sp.,** specially stained to show the flagella *
Ag1715c • **Haematococcus,** unicellular red biflagellate algae w.m.
Ag180d • **Hydrodictyon,** water net alga, w.m.
Ag184c • **Oedogonium,** a common filamentous green alga without branches, vegetative filaments
Ag188d **Oedogonium,** macrandrous with oogonia w.m.
Ag189d **Oedogonium,** nannandrous with dwarf males w.m.
Ag173f • **Pandorina,** spherical colonies of sixteen cells or smaller w.m.
Ag177d • **Pediastrum,** star-shaped flat colonies w.m.
Ag1724d **Pithophora,** branched tropic green algae w.m.
Ag1743d **Platydorina,** horseshoe-shaped coenobium showing the flagella w.m.
Ag1742d **Pleodorina,** colonies with cells of different size
Ag179c • **Pleurococcus (Protococcus),** small colonies growing on bark, w.m.
Ag1905d **Protosiphon,** living on ground, with rhizoids w.m.
Ag178d • **Scenedesmus,** colonies of four cells w.m.
Ag1832d **Stigeoclonium,** main filaments and simple branches w.m.
Ag1756d **Tetracystis,** earth algae, groups of four cells
Ag1755d **Tetraspora,** cells in a gelatinous layer w.m.
Ag181c • **Ulothrix,** simple filaments with girdle-shaped chloroplasts w.m.
Ag185d • **Ulva,** sea lettuce, a marine green alga, w.m. of thallus
Ag1852d **Ulva,** w.m. of thallus with developing gametes
Ag1862e • **Vaucheria geminata,** sexual stages on lateral branches w.m.
Ag186d **Vaucheria sessilis,** showing sexual stages
Ag175e • **Volvox,** spherical colonies with daughter colonies and sexual stages w.m.
Ag1752f **Volvox,** flattened and specially stained to show flagella
Ag1916d **Mixed flagellates,** many different species for comparison w.m.
Ag1915d **Mixed green algae,** many different species for comparison w.m.

Chrysophyceae – Golden Algae

Ag195d • **Dinobryon,** a golden alga forming colonies
Ag197d **Hydrurus,** golden alga in a gelatinous matrix
Ag199d **Ochromonas,** a flagellate golden alga w.m.
Ag198d **Tribonema,** a filamentous golden alga w.m.

Charophyceae – Stoneworts

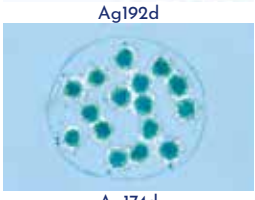
Ag211d • **Chara,** stonewort, thallus with reproductive organs w.m.
Ag212c **Chara,** thallus t.s.
Ag2121e **Chara,** thallus and reproductive organs l.s.
Ag2122e **Chara,** w.m. of mature antheridia showing spermatogenous filaments
Ag2125f **Chara,** thallus with apex l.s. *
Ag213d **Nitella,** thallus with reproductive organs w.m.

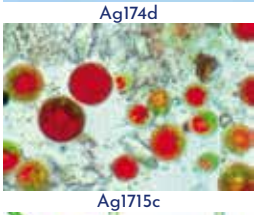
Phaeophyceae – Brown Algae

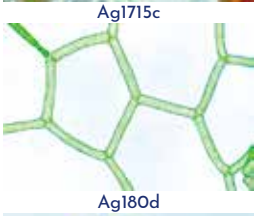
Ag221d • **Fucus vesiculosus,** seaweed, male conceptacle with antheridia, t.s.
Ag222d • **Fucus vesiculosus,** female conceptacle with oogonia t.s.
Ag2224e **Fucus vesiculosus** composite slide, t.s. of male and female conceptacles of a dioecious species on same slide
Ag223d **Fucus platycarpus,** hermaphrodite conceptacle with antheridia and oogonia, t.s.
Ag2234d **Fucus serratus,** male branch with antheridia, t.s.
Ag2235d **Fucus serratus,** female branch with oogonia t.s.
Ag2236e **Fucus serratus,** male and female branches, two t.s.
Ag237g **Fucus,** l.s. through apical region with apical cell *
Ag239d **Ascophyllum nodosum,** c.s. of male conceptacle
Ag233e **Dictyota,** thallus with tetraspores t.s. *
Ag234e **Dictyota,** thallus with oogonia t.s. *
Ag235e **Dictyota,** thallus with antheridia t.s. *
Ag238g **Dictyopteris,** apical region showing more apical cells *

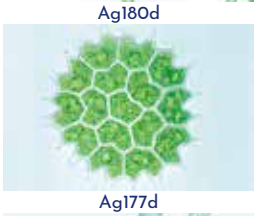

Ag183c

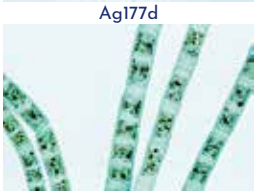

Ag192d

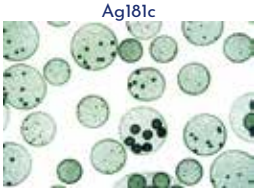

Ag174d


Ag1715c


Ag180d

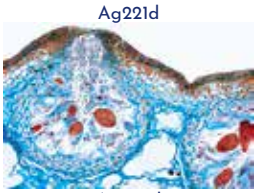

Ag177d


Ag181c


Ag175e


Ag211d


Ag221d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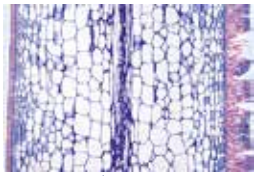
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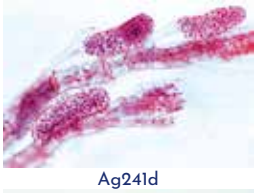
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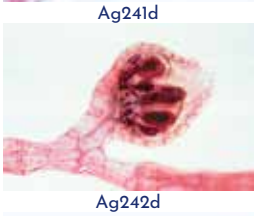
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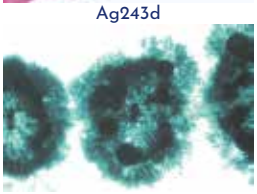
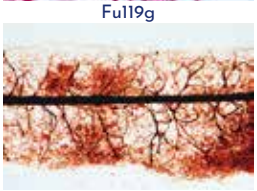
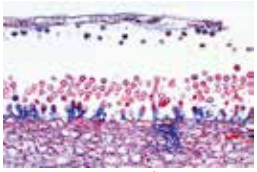
Ag243d


Ag246d

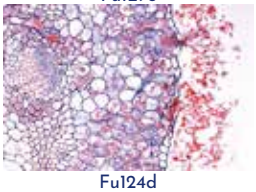

Fu119g


Fu111d


Fu127d


Fu138e


Fu129c


Fu124d

Ag225g • **Ectocarpus,** plurilocular gametangia or sporangia w.m.
Ag2252g • **Ectocarpus,** unilocular sporangia w.m. *
Ag2393d **Elachista fucicola,** epiphytic living, w.m. of unilocular sporangia
Ag231d **Himanthalia lorea,** male conceptacle with antheridia t.s.
Ag232d **Himanthalia lorea,** female conceptacle with oogonia t.s.
Ag228c • **Laminaria saccharina,** thallus with sporangia t.s.
Ag230d **Pylaiella litoralis,** uni- and plurilocular sporangia w.m.
Ag2302d **Pylaiella litoralis,** w.m. showing formation of swarms-cells
Ag229d **Sargassum,** gulfweed, thallus with conceptacles t.s.
Ag2395d **Sphacelaria sp.,** thallus with bulbs, w.m.

Rhodophyceae – Red Algae

Ag241d • **Polysiphonia** (or Rhodomela), marine red alga, male plant with antheridia w.m.
Ag242d • **Polysiphonia** (or Rhodomela), female plant with cystocarps w.m.
Ag243d • **Polysiphonia** (or Rhodomela), tetraspores w.m.
Ag250d **Audouinella,** a mat-forming fresh water red alga, w.m.
Ag251d **Bangia,** a ligamentous fresh water red alga,
Ag246d • **Batrachospermum,** a fresh water red alga,
Ag244d **Ceramium,** thallus with tetraspores w.m.
Ag2445d **Corallina,** a marine calcareous red alga w.m.
Ag254d **Dasya,** a marine red alga with irregular branchings w.m.
Ag255d **Furcellaria,** marine species w.m.
Ag253d **Lemanea,** a fresh water red alga with tubular cortical layer w.m.
Ag245d • **Nemalion,** thallus with reproductive organs
Ag252d **Porphyridium,** gelatinous layer with algal cells, t.s.
Ag256c **Porphyra,** marine red alga, w.m. of one cell layer thallus

Fungi

Myxomycetes – Slime Fungi

Fu112d **Arcyria,** slime mold with cylindrical fruiting bodies w.m.
Fu1182e **Ceratiomyxa,** primitive slime mold with external spores, w.m. *
Fu118e **Dictydium,** fruiting body w.m.
Fu115e • **Fuligo,** slime mold, section through the fruiting body *
Fu113d **Hemitrichia,** slime mold with bell-shaped fruiting bodies w.m. *
Fu114d **Lycogola,** slime mold with bean-shaped fruting bodies w.m.
Fu119g **Myxoflagellatae,** myxamoebae and young plasmodia w.m. *
Fu117e **Physarum,** fruiting body w.m.
Fu116e • **Spongospora subterranea,** potato powdery scab, section with spore balls
Fu111d • **Stemonitis,** slime mold, entire capillitium with spores w.m.

Phycomycetes – Algalike Fungi

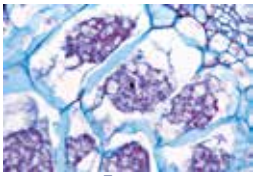
Fu1253e **Achlya,** water mold, with oogonia, antheridia, and zoosporangia
Fu127d • **Albugo candida (Cystopus candidus),** white rust of cruzifers, t.s. of Capsella tissue showing conidia
Fu128d **Albugo candida,** t.s. of Capsella tissue showing oogonia and zygotes
Fu140h **Candida albicans,** thrush fungus infective to man, from culture w.m.
Fu138e • **Empusa muscae,** parasite of insects, sec. through insect showing mycelium and conidia
Fu129c • **Mucor mucedo,** black mold, sporangia and mycelium w.m.
Fu1291e • **Mucor mucedo,** formation of zygospores w.m.
Fu124d • **Peronospora parasitica,** downy mildew of cruzifers, host tissue with conidia t.s.
Fu1242e **Peronospora tabacina,** blue mold of tobacco, leaf pieces with sporangia w.m.
Fu135d • **Phytophthora infestans,** late blight of potato, t.s. of infected tissue
Fu133e **Pilobolus,** mycelium, spongiophore and sporangia w.m. *
Fu121c • **Plasmodiophora brassicae,** clubroot, host cells with spores t.s.
Fu123d • **Plasmopara viticola,** downy mildew of grapes, leaf with conidia t.s.
Fu130c • **Rhizopus,** bread mold, sporangia and mycelium w.m.
Fu131d • **Rhizopus,** formation of zygospores w.m.
Fu132f **Rhizopus,** sporangia and zygospores on same slide w.m.
Fu136e **Rhizophydium pollinis,** living on pollen grains of pine, w.m. *
Fu125d • **Saprolegnia,** water mold, showing sexual stages w.m.
Fu122d • **Synchytrium endobioticum,** potato black scab, t.s. of infected tissue

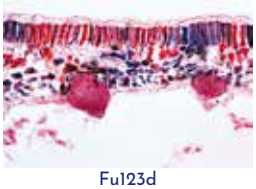
Ascomycetes – Sac Fungi

Fu163c • **Aspergillus,** brown mold, conidiophores and conidia w.m.
Fu1631d **Aspergillus,** perithecia (cleistothecia)
Fu172c **Botrytis allii,** grey mold of onions, t.s. of infected tissue
Fu180d **Cladosporium,** deuteromycet, destruction of textile goods, w.m.
Fu149c • **Claviceps purpurea,** ergot, mature sclerotium t.s.
Fu150e • **Claviceps purpurea,** stroma with perithecia and asci l.s.
Fu142e • **Erysiphe pannosa,** rose mildew, t.s. of rose leaf or stem with conidia
Fu144e **Erysiphe sp.,** w.m. of perithecia
Fu1441d **Erysiphe sp.,** t.s. of infected leaf showing perithecia *
Fu154c **Lachnea,** a small cup fungus, l.s. of apothecium with asci
Fu158c • **Morchella edulis,** morel, fruiting body with asci and spores, t.s.
Fu177c **Morchella,** teased preparation of mature hymenium with w.m. of asci with the typical eight ascospores
Fu161c • **Penicillium,** blue mold, mycelium and conidiophores, w.m.
Fu162d **Penicillium,** t.s. of host tissue showing mycelium and conidiophores
Fu153c • **Peziza,** cup fungus, l.s. of apothecium showing typical asci very clearly
Fu143d **Podosphaera leucotricha,** apple mildew, t.s. with conidia
Fu171c • **Rhytisma acerinum,** tar-spot of maple, t.s. of leaf with sclerotia
Fu164b • **Saccharomyces cerevisiae,** yeast, with budding cells w.m.
Fu1643d **Saccharomyces octosporus,** yeast showing asci and ascospores w.m. *
Fu1644d **Saccharomyces sp.,** yeast, sexual phase, meiosis and meiospores w.m. *
Fu179e **Molds,** composite slide of three types: Aspergillus, Rhizopus and Penicillium, w.m.
Fu155c • **Sclerotinia fructigena (Monilia albicans),** plum rot, sec. through yeast-like conidia on surface of host tissue
Fu178e **Sordaria fimicola,** showing the wild type. Perithecia and spores
Fu1781e **Sordaria fimicola,** showing the mutant tan. Perithecia and spores
Fu1782e **Sordaria fimicola,** showing the mutant gray after crossing wild type with mutant tan, hybrid asci with 4 dark and 4 light ascospores
Fu148d **Sphaerotheca mors uvae,** gooseberry mildew, t.s. with perithecia
Fu141d • **Taphrina pruni (Exoascus pruni),** plum pockets, t.s. of host tissue with haustoria and asci
Fu1413e **Taphrina deformans,** peach leaf curl, infected leaf with asci and ascospores t.s.
Fu1415d **Taphrina sp.,** infected leaf c.s.
Fu152c • **Tuber rufum,** truffle, fruiting body with hymenium and asci, t.s.
Fu146d • **Uncinula necator (Oidium Tuckeri),** grape mildew, t.s. of leaf
Fu145d **Uncinula salicis,** willow mildew, t.s. of infected leaf
Fu156c • **Venturia pirinum (Fusicladium),** pear scab, sec. conidia
Fu157d **Venturia sp.,** leaf with perithecia *

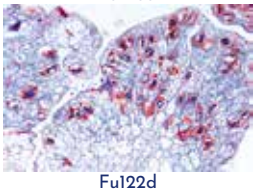
Basidiomycetes – Club Fungi

Fu227c • **Boletus edulis,** pore fungus, horizontal sec. of pileus showing c.s. of pores


Fu121c


Fu123d


Fu125d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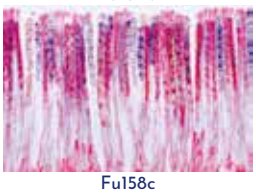
Fu150e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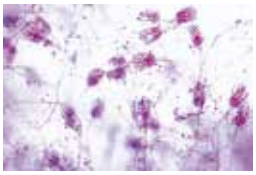
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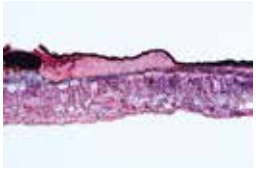
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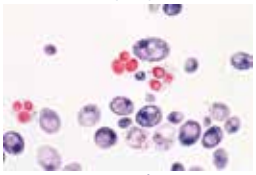
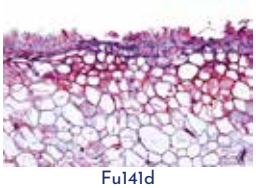

Fu164b


Fu155c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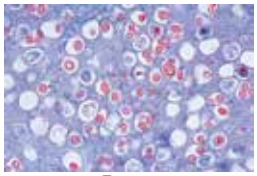
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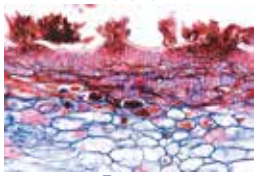
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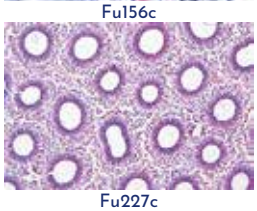
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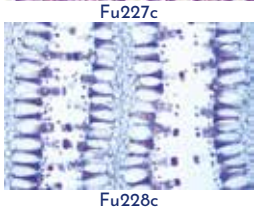
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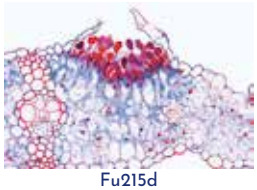
Fu226c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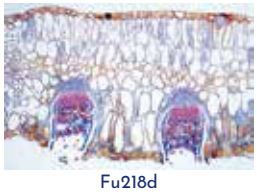
Fu216d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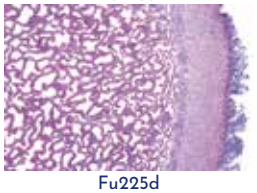
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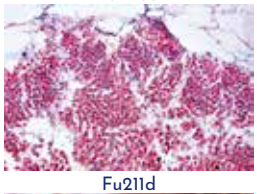

Fu211d

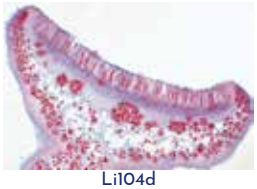

Fu243f

Fu2271c **Boletus edulis,** vertical sec. of pileus showing l.s. of pores
Fu233d **Coleosporium tussilaginis,** aecia on coltsfoot leaf t.s.
Fu228c • **Coprinus,** ink cap, t.s. of pileus showing typical basidia and spores
Fu229d **Coprinus,** l.s. of entire specimen
Fu2461e **Cronartium ribicola,** pine blister rust, sec. of pine bark with pycnidia
Fu2462e **Cronartium ribicola,** sec. of Ribes leaf with telia
Fu2463e **Cronartium ribicola,** sec. of Pinus stem with aecia
Fu236d **Cryptomyces pteridis,** infecting ferns, sec. of infected tissue
Fu240d **Geaster,** earth star, sec. of fruiting body
Fu222d **Gymnosporangium sabinae,** sec. of teleutospores on Juniperus
Fu223d **Gymnosporangium sabinae,** pear rust, section of pycnidia on pear leaf
Fu224d **Gymnosporangium sabinae,** section of aecidia on pear leaf
Fu2242f **Gymnosporangium sabinae,** section of aecidia and pycnidia on same slide
Fu245d **Hydnum,** prickly fungus, sec. of basidiocarp showing spores
Fu230c • **Lycoperdon bovista,** bovist, t.s. of fruiting body
Fu231c **Lycoperdon gemmatum,** puff-ball, t.s. of fruiting body
Fu2452d **Phragmidium,** sec. with teleutospores
Fu244d • **Polyporus,** pore fungus, sec. of fruiting body
Fu226c • **Psalliota campestris (Agaricus),** mushroom, gill fungus, t.s. of pileus
Fu2263d **Psalliota ,** l.s. of complete young fruiting body
Fu215d • **Puccinia graminis,** wheat rust, sec. of uredinia on wheat causing red rust
Fu216d • **Puccinia graminis,** sec. of telia on wheat causing black rust
Fu217e **Puccinia graminis,** sec. of uredinia and telia on same slide
Fu218d • **Puccinia graminis,** sec. of aecidia and pycnidia on barberry leaf
Fu2195s **Puccinia graminis,** composite slide of four stages, sections of uredinia, telia, aecia and pycnidia
Fu221d **Puccinia coronifera,** crown rust of oats, sec. with telia
Fu225d • **Scleroderma vulgare,** sec. of young fruiting body
Fu250d **Scleroderma sp.,** sporogenous mycelium isolated to show formation of basidia clearly *
Fu235d **Uromyces pisi,** pea rust, sec. of host tissue with parasitic fungus
Fu211d • **Ustilago zeae,** cornsmut, t.s. of pustule with spores
Fu212b **Ustilago zeae,** spores w.m.
Fu213b **Ustilago tritici,** spores w.m.
Fu214b **Ustilago avenae,** loose smut of oats section showing spores
Fu2141d **Ustilago avenae,** infected stem, c.s.
Fu243f **Wood rot fungus,** sec. through rotted wood showing detail of hyphae and mycelium specially stained
Fu219f **Germinating teleutospores** show basidia and basidiospores w.m. *

Lichenes - Lichens

Li103d • **Physcia,** sec. through thallus of a typical lichen showing the fungus and the embedded algae, doubly stained
Li104d • **Physcia,** sec. through apothecium showing asci and spores
Li105d • **Xanthoria,** sec. of thallus showing hyphae with symbiontic algae
Li106d • **Xanthoria,** sec. of apothecium showing asci and spores
Li124d **Cladonia,** reindeer moss, sec. of thallus showing hyphae with symbiontic algae
Li125d **Cladonia,** sec. of apothecium
Li115d **Usnea barbata,** a shrubby lichen, t.s. of stem-like thallus
Li117d **Usnea barbata,** sec. of apothecium with asci
Li112d **Lobaria pulmonaria,** a foliose lichen, sec. of thallus with algae
Li114d **Peltigera,** sec. of thallus or apothecium
Li120c **Lichen sp.,** w.m. of soredia
Li121e **Lichen sp.,** sec. through soredia
Li130d **Lichen sp.,** teased preparation of thallus showing detail of hyphae and spherical algae *
Li131d **Lichen sp.,** teased preparation of thallus showing detail of hyphae and filamentous algae *


Li103d


Li104d

Bryophyta

Hepaticae – Liverworts

Br101f • **Anthoceros,** l.s. of sporophyte
Br102e **Anthoceros,** l.s. of thallus with antheridia *
Br1025c **Anthoceros,** t.s. of thallus
Br108d **Conocephalum,** t.s. of thallus
Br1085e **Conocephalum,** l.s. of antheridia *
Br109e **Conocephalum,** l.s. of sporophyte showing spores with elateres
Br120c **Jungermanniales sp.,** stem with leaves w.m.
Br1193g **Pellia epiphylla,** liverwort, antheridia l.s. *
Br1194h **Pellia epiphylla,** archegonia l.s. *
Br1195f **Pellia epiphylla,** sporogon l.s.
Br1093f **Porella,** antheridial branch l.s.
Br1094f **Porella,** archegonial branch l.s.
Br1095e **Porella,** young sporophyte l.s. *
Br1096e **Porella,** mature sporophyte l.s. *
Br104d **Riccia natans,** w.m. of thallus
Br105e **Riccia natans,** thallus with antheridia *
Br106g **Riccia natans,** thallus with archegonia *
Br107e **Riccia natans,** l.s. of sporophyte *
Br1075e **Ricciocarpus,** c.s. of thallus showing sexual organs
Br1076e **Ricciocarpus,** c.s. of thallus showing sporophytes
Br111c • **Marchantia,** liverwort, thallus with air chambers, t.s.
Br118c **Marchantia,** rhizoids w.m.
Br112d • **Marchantia,** cupule with gemmae, l.s.
Br113d **Marchantia,** isolated gemmae w.m.
Br114d • **Marchantia,** l.s. of archegonial branch showing archegonia
Br1141h **Marchantia,** median l.s. of a young archegonium showing egg cell, neck canal cells and ventral canal cells *
Br1142g **Marchantia,** median l.s. of an archegonium after fertilization *
Br115d • **Marchantia,** l.s. of antheridial branch showing antheridia
Br1151g **Marchantia,** median l.s. of antheridium through opening *
Br1152d **Marchantia,** horizontal sec. of antheridial branch
Br1153f **Marchantia,** l.s. of antheridial and archegonial branches
Br1154e **Marchantia,** sperm w.m., stained for flagella *
Br116d • **Marchantia,** young sporophyte with developing spores l.s.
Br117d • **Marchantia,** older sporophyte with mature spores l.s.
Br1171f **Marchantia,** median l.s. of older sporophyte *
Br1185g **Marchantia,** liverwort. composite slide of four stages: cupule with gemmae l.s., antheridial branch l.s., archegonial branch l.s., and sporophyte l.s.


Br111c


Br112d


Br114d

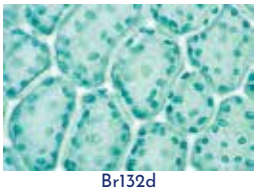

Br115d


Br117d


Br129d

Musci – Mosses

Br129d **Mnium,** t.s. of stem with primitive central stele and peripheral tissue
Br130d • **Mnium,** l.s. of stem through central stele
Br131d • **Mnium,** t.s. of leaves showing large chloroplasts
Br132d • **Mnium,** w.m. of leaf stained to show large chloroplasts
Br125e • **Mnium,** moss, l.s. of antheridia
Br1251g **Mnium,** median l.s. of antheridium *
Br1252e **Mnium,** teased preparation of antheridia w.m.
Br1254e **Mnium** or other moss, sperm w.m. stained for flagella *
Br126e • **Mnium,** l.s. of archegonia
Br1261g **Mnium,** median l.s. of archegonium *
Br1262e **Mnium,** teased preparation of archegonia w.m.
Br1265d • **Mnium,** l.s. of sporophyte with spores
Br1266d • **Mnium,** t.s. of sporophyte with spores

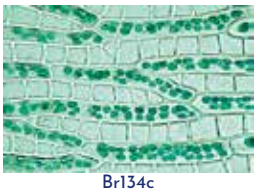

Br132d

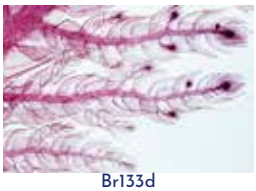

Br125e


Br126e


Br127d


Br122d


Br134c


Br133d

Br127d • **Mnium,** protonema w.m.
Br1275e **Mnium,** young gametophyte w.m. young leafy shoot with protonema *
Br1325t **Mnium,** moss, composite slide of four stages: antheridial branch l.s., archegonial branch l.s., sporogon with spores l.s., and protonema w.m.
Br121c • **Polytrichum,** moss, t.s. of stem
Br1212d **Polytrichum,** l.s. of stem with leaves
Br1214c **Polytrichum,** t.s. of seta
Br122d • **Polytrichum,** t.s. of leaves showing photosynthetic lamellae on the upper side
Br1223e **Polytrichum,** l.s. of antheridial branch
Br1226e **Polytrichum,** l.s. of archegonial branch
Br123d **Polytrichum,** l.s. of sporophyte with spores
Br124d **Polytrichum,** t.s. of sporophyte with spores
Br1242d **Polytrichum,** l.s. of young sporophyte with developing spores
Br1244c • **Polytrichum,** w.m. of peristome
Br1246d **Polytrichum,** w.m. of protonema
Br134c • **Sphagnum,** peat moss, w.m. of leaf showing chlorophyll bearing and hyaline cells
Br135d **Sphagnum,** t.s. of stem and leaves
Br136e **Sphagnum,** l.s. of antheridia *
Br137f **Sphagnum,** l.s. of archegonia *
Br138d **Sphagnum,** l.s. of young sporophyte
Br133d **Tortula,** moss, w.m. of gametophyte and young sporophyte
Br1331d **Tortula,** gametophyte and older sporophyte with peristome w.m.

Pteridophyta

Psilotales – Psilopsids

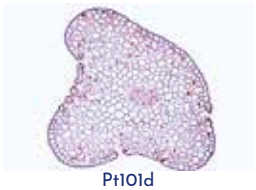
Pt101d • **Psilotum,** t.s. of stem showing exarch protostele and leaflets
Pt102e • **Psilotum,** t.s. of three-lobed sporangium
Pt103e **Psilotum,** l.s. of stem and sporangium
Pt1032d **Psilotum,** t.s. of rhizome
Pt1034d **Tmesipteris,** aerial stem t.s.
Pt1035d **Tmesipteris,** leaves t.s.
Pt1036e **Tmesipteris,** sporangium t.s.

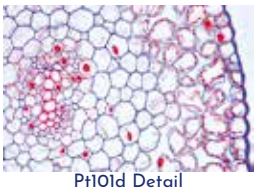
Lycopodiatae – Clubmosses

Pt104f • **Isoetes,** quillwort, l.s. of entire plant with corm, leaves, sporangia and rhizophores
Pt105e **Isoetes,** l.s. of microsporophyll *
Pt106e **Isoetes,** l.s. of macrosporophyll *
Pt107d **Isoetes,** t.s. of stem
Pt110d **Lycopodium,** club moss, l.s. of stem showing stele
Pt111c • **Lycopodium,** t.s. of stem showing typical actinostele
Pt1115d • **Lycopodium,** t.s. of rhizome
Pt112e • **Lycopodium,** t.s. of mature sporophyll showing isospores
Pt113e **Lycopodium,** l.s. of young sporophyll showing developing spores
Pt114b • **Lycopodium,** spores w.m.
Pt1145d **Lycopodium,** young sporophyll w.m.
Pt115f **Lycopodium,** stem with apical region l.s.
Pt116c • **Selaginella,** t.s. of stem
Pt1163c **Selaginella,** t.s. of rhizophore
Pt117e • **Selaginella,** l.s. of strobilus with micro- and megasporangia
Pt118f **Selaginella,** w.m. of strobilus *
Pt119d **Selaginella,** l.s. of stem and leaves
Pt1193c **Selaginella,** c.s. of leaves

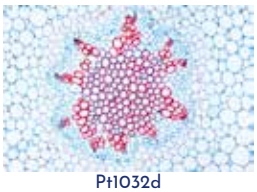
Equisetatae – Horse-tails

Pt125d **Equisetum,** root t.s.
Pt1245d • **Equisetum,** rhizome t.s.
Pt124c • **Equisetum,** stem t.s.
Pt126d • **Equisetum,** l.s. of stem tip showing apical region and developing leaves
Pt120d **Equisetum,** horse tail, young strobilus showing developing spores l.s.
Pt121d • **Equisetum,** mature strobilus t.s.
Pt122d • **Equisetum,** mature strobilus l.s.
Pt1223e **Equisetum,** l.s. and t.s. of mature strobilus on one slide
Pt123b • **Equisetum,** spores and elaters w.m.
Pt127e **Equisetum,** prothallium w.m. *


Pt101d


Pt101d Detail


Pt102e


Pt1032d

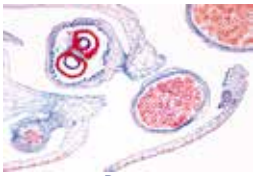

Pt104f


Pt111c

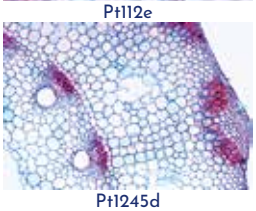

Pt111c Detail

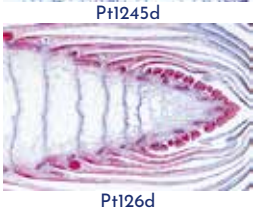
Filicatae – Ferns

Pt1835d **Adiantum,** maiden-hair fern, leaf with sori and sporangia w.m.
Pt1836d **Adiantum,** leaf with sori and sporangia t.s.
Pt1837d **Adiantum,** rhizome t.s., amphiphloic siphonostele
Pt1831d **Angiopteris,** root t.s.
Pt1832d **Angiopteris,** rhizome with dictyostele t.s.
Pt130c • **Aspidium (Dryopteris),** male fern, root t.s.
Pt132c • **Aspidium,** rhizome t.s.
Pt131c • **Aspidium,** stem with bundles t.s.
Pt133d • **Aspidium,** leaves with sori showing indusia, sporangia and spores, section showing l.s. of sori
Pt134d **Aspidium,** leaflet with kidney-shaped indusia w.m.
Pt136d **Aspidium,** sec. of leaves with young sori showing spore development
Pt135b • **Aspidium,** isolated sporangia and spores w.m.
Pt1841d **Athyrium,** leaf with sori and sporangia w.m.
Pt1776c **Blechnum,** macerated xylem elements w.m.
Pt1851d **Botrychium,** fern, stem t.s.
Pt1852d **Botrychium,** sporangium t.s.
Pt1861d **Dennstaedtia,** rhizome with amphiphloic siphonostele t.s.
Pt1863d **Dennstaedtia,** leaf with sori and sporangia t.s.
Pt151d • **Fern prothallium,** young filamentous stage w.m.
Pt152e **Fern prothallium,** with antheridia w.m.
Pt153e **Fern prothallium,** with archegonia w.m.
Pt154f • **Fern prothallium,** selected to show antheridia and archegonia w.m. *
Pt155d • **Fern prothallium,** section with antheridia
Pt156e • **Fern prothallium,** section with archegonia *
Pt157g **Fern prothallium,** older stage with young sporophyte and root w.m. *
Pt1353d **Fern,** germinating spores of Aspidium or Pteridium, w.m.
Pt1575e **Fern,** sperm w.m. and stained for flagella *
Pt159t **Fern,** composite slide of four stages: leaflet with sori and sporangia t.s., rhizome t.s., prothallium with sex organs w.m., prothallium with young sporophyte w.m.
Pt1871d **Gleichenia,** tropical fern, rhizome t.s.
Pt191f **Huperzia,** l.s. of sporangia on leaf bases
Pt1875d **Lygodium,** leaf with sori and sporangia w.m.
Pt175c **Marattia,** tropical fern, root t.s.
Pt176c **Marattia,** rhizome t.s.
Pt177e **Marattia,** synangium t.s.
Pt1881d **Marsilea,** nardoo, rhizome with amphiphloic siphonostele, t.s.
Pt1882c **Marsilea,** petiole t.s.
Pt1883d **Marsilea,** leaflet t.s.
Pt1884e **Marsilea,** sporocarp t.s.
Pt1672d **Ophioglossum,** root t.s.
Pt167c **Ophioglossum,** rhizome t.s.
Pt165c **Ophioglossum,** adders tongue fern, stem t.s.
Pt1675c **Ophioglossum,** leaf t.s.
Pt1676e **Ophioglossum,** sporocarp with spores t.s.
Pt166e **Ophioglossum,** sporocarp with spores l.s.
Pt1673c **Ophioglossum,** macerated xylem elements w.m.
Pt181c **Osmunda,** root t.s.
Pt180c **Osmunda,** royal fern, rhizome with ectophloic siphonostele t.s.
Pt1803c **Osmunda,** stem, l.s.
Pt1824c **Osmunda,** stem t.s.
Pt1825c **Osmunda,** leaf t.s.
Pt182d **Osmunda,** sporangia and spores t.s.
Pt1821d **Osmunda,** leaf with sori and sporangia w.m.
Pt1822c **Osmunda,** macerated xylem elements w.m.
Pt161d **Phyllitis scolopendrium,** hart's tongue fern, leaf with sori and sporangia t.s.
Pt1612d **Phyllitis scolopendrium,** rhizome t.s.
Pt147c **Platycerium,** epiphytic fern, sterile and fertile leaves t.s.
Pt1891d **Polypodium,** rhizome with dictyostele t.s.
Pt1893d • **Polypodium,** leaf with sori and sporangia w.m. shows lack of indusia

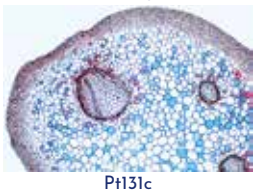

Pt117e

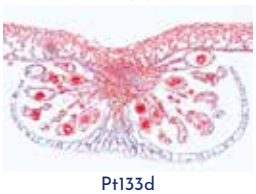

Pt112e

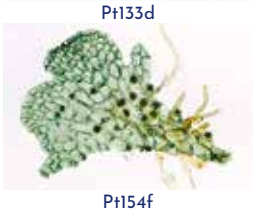

Pt1245d

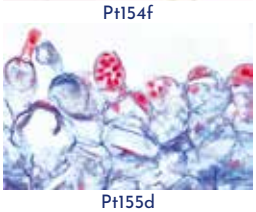

Pt126d


Pt122d


Pt131c

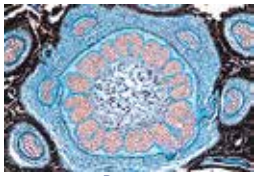

Pt133d

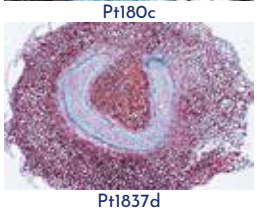

Pt154f


Pt155d

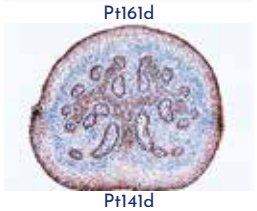

Pt156e

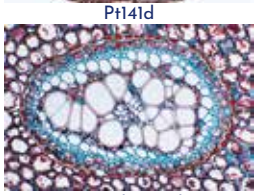

Pt157g


Pt180c


Pt1837d


Pt161d


Pt141d


Pt141d Detail


Gy111c


Gy122d


Gy123e


Gy125d

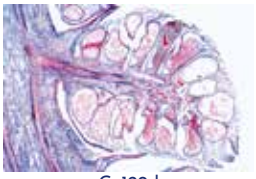

Gy126f

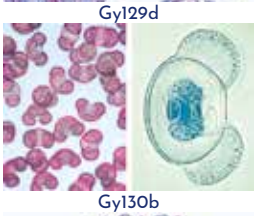

Gy127c

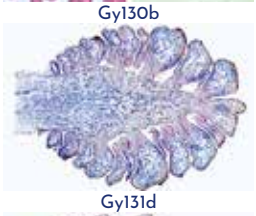
Pt1894c **Polypodium,** t.s. of leaf showing modification of epidermis (water pit)
Pt1895d **Polystichum,** Christmas fern, leaf with sori and sporangia w.m. showing shield-shaped indusia
Pt144d **Pteridium,** root t.s.
Pt140d • **Pteridium,** l.s. of rhizome showing scalariform vessels
Pt141d • **Pteridium,** t.s. of rhizome with dictyostele
Pt139d **Pteridium (Pteris),** bracken fern, macerated rhizome with scalariform vessels w.m.
Pt142c **Pteridium,** stem t.s.
Pt143c **Pteridium,** leaves with sori and sporangia, section shows l.s. of sori within inrolled margins of the leaves
Pt1433d • **Pteridium,** w.m. of leaf with sori and sporangia
Pt1422c **Pteridium,** macerated xylem elements w.m.
Pt145c • **Salvinia natans,** waterfern, leaf t.s.
Pt146d • **Salvinia natans,** sporocarp t.s.

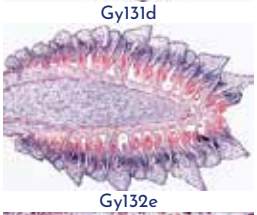
Gymnospermae

Gy1041e **Cycas,** three sections of wood, t.s., r.l.s., t.l.s.
Gy1042d **Cycas,** leaf t.s.
Gy1048f **Cycas,** seed, t.s.
Gy101d **Zamia (cycad),** root t.s.
Gy102e **Zamia,** stem t.s.
Gy1021d **Zamia,** leaf t.s.
Gy1022e **Zamia,** male cone t.s. showing microsporophyll with spores *
Gy103f **Zamia,** young female cone showing ovules l.s. *
Gy1031g **Zamia,** ovule with archegonia l.s. *
Gy112c **Ginkgo biloba,** stem t.s.
Gy1116c **Ginkgo biloba,** young sprout, t.s.
Gy1114d **Ginkgo biloba,** shoot apex, l.s.
Gy1124e **Ginkgo biloba,** three sections of wood, t.s., r.l.s., t.l.s.
Gy1123c **Ginkgo biloba,** macerated xylem elements w.m.
Gy111c **Ginkgo biloba,** leaf t.s.
Gy105d **Ginkgo biloba,** male cone t.s. showing microsporophyll
Gy1051d **Ginkgo biloba,** male cone l.s. showing microsporophyll
Gy1055e **Ginkgo biloba,** young female cone showing growing ovules l.s.
Gy106f **Ginkgo biloba,** archegonium before fertilization, l.s. *
Gy107f **Ginkgo biloba,** archegonium after fertilization l.s. *
Gy108e **Ginkgo biloba,** ovule l.s. for general study, free nuclear stage
Gy109g **Ginkgo biloba,** archegonium showing proembryo l.s. *
Gy110f **Ginkgo biloba,** later stage of embryo l.s. *
Gy113c **Taxus baccata,** yew, young stem t.s.
Gy114c **Taxus baccata,** root t.s.
Gy115c **Taxus baccata,** leaves t.s.
Gy121c • **Pinus,** pine, young root from seedling t.s.
Gy122c • **Pinus,** older woody root t.s.
Gy123e **Pinus,** stem apex shows meristematic tissue and leaf origin l.s.
Gy1234c **Pinus,** young sprout with needles, t.s.
Gy124c • **Pinus,** one year stem t.s.
Gy125c • **Pinus,** older stem with annual rings, resin ducts t.s.
Gy1255d **Pinus,** one and two year stem, t.s.
Gy126d • **Pinus,** three sections of wood: cross, radial and tangential sections
Gy1265c **Pinus,** wood, tangential sec. stained for tracheids with pits
Gy127c • **Pinus,** leaves (needles), t.s. for general study of gymnosperm leaves
Gy1271c **Pinus monophylla,** single-leaf pine, leaves t.s.
Gy1272c **Pinus nigra,** Austrian pine, the two-needle type, leaves t.s.
Gy1273c **Pinus australis,** long-leaf pine, the three-needle type, leaves t.s.
Gy1274c **Pinus strobus,** white pine, the five-needle type, leaves t.s.
Gy128d **Pinus,** male cone with pollen t.s. (staminate cone)
Gy129d • **Pinus,** male cone with pollen l.s.
Gy1291d **Pinus,** young male cone with developing pollen l.s.
Gy1295e **Pinus,** l.s. and t.s. of male (staminate) cone on one slide
Gy130b • **Pinus,** mature pollen grains w.m.
Gy1301d **Pinus,** germinating pollen grains with pollen tubes w.m.
Gy131d • **Pinus,** young female (ovulate) cone, entire l.s. for general study
Gy132e **Pinus,** young female cone at time of pollination, l.s. with pollen grains and micropyle
Gy1322g **Pinus,** ovule l.s. showing megaspore mother cell *
Gy1324k **Pinus,** ovule l.s. showing meiosis of megaspore mother cell, 2 to 4 haploid daughter cells *
Gy133f • **Pinus,** ovule l.s. showing growing female gametophyte at the free nuclear stage
Gy134h **Pinus,** young archegonium before separation of egg nucleus and ventral canal nucleus l.s. *
Gy135f • **Pinus,** ovule l.s. showing archegonia, the standard slide for general study
Gy1351h **Pinus,** archegonium median l.s. with egg nucleus and neck cells *
Gy1355k **Pinus,** archegonium l.s. with zygote cell in division. As available *
Gy1357i **Pinus,** archegonium l.s. showing free proembryonic nuclei in the center of the archegonium *
Gy136g **Pinus,** archegonium l.s. with early stage of proembryo
Gy1361h **Pinus,** young proembryo median l.s. showing four-cell stage *
Gy1362h **Pinus,** young proembryo median l.s. showing eight-cell or sixteen-cell stage.
Gy137g **Pinus,** archegonium l.s. with later stage of proembryo
Gy138e **Pinus,** young embryo l.s.
Gy139e • **Pinus,** mature embryo with endosperm l.s.
Gy1391f **Pinus,** mature embryo with endosperm, near median l.s.
Gy140e • **Pinus,** mature embryo with endosperm t.s.
Gy141f **Pinus,** germinating seed l.s.
Gy145d **Pinus,** older stem, t.s. and l.s. on one slide showing annual rings, resin ducts, bark
Gy146b **Pinus,** wood cells macerated and w.m.
Gy147c **Pinus,** leaf bud t.s.
Gy1478e **Pinus,** composite slide of three kinds: stem t.s., leaves t.s. and young ovulate cone on one slide
Gy151c • **Abies,** fir, leaves t.s.
Gy1514d **Abies,** shoot apex, l.s.
Gy1515d **Abies,** three sections of wood, t.s., r.l.s., t.l.s.
Gy1512c **Abies grandis,** leaves t.s.
Gy152c • **Picea,** spruce, leaves t.s.
Gy153c **Picea,** shoot apex with leaves t.s.
Gy1520e **Picea,** endosperm with embryo t.s.
Gy1536c **Picea asperata,** leaves t.s.
Gy1533c **Picea breweriana,** leaves t.s.
Gy1535c **Picea glauca,** leaves t.s.
Gy1537c **Picea orientalis,** leaves t.s.
Gy1532c **Picea polita,** leaves t.s.
Gy1534c **Picea pungens,** leaves t.s.
Gy251c • **Larix,** larch, leaves t.s.
Gy253d **Larix,** l.s. of male cone
Gy255e **Larix,** l.s. of female cone with ovules
Gy211c **Ephedra,** stem t.s.
Gy215e **Ephedra,** male flower t.s.
Gy216e **Ephedra,** female flower t.s.
Gy2165f **Ephedra,** mature female cone l.s.
Gy217c **Ephedra,** macerated xylem elements w.m.
Gy221c **Gnetum,** leaf t.s.
Gy2213c **Gnetum,** macerated xylem elements w.m.
Gy1549c **Arbor-vitae,** leaves l.s.
Gy1565c **Cedrus deodora,** cedar, leaves t.s.
Gy156c **Cephalotaxus fortunei,** leaves t.s.
Gy157c **Chamaecyparis nootkatensis,** leaves t.s.
Gy155c **Cryptomeria japonica,** leaves t.s.
Gy1582c **Juniperus communis,** juniper, leaves t.s.
Gy158c **Juniperus virginiana,** leaves t.s.
Gy159c **Librocedrus decurrens,** leaves t.s.
Gy1595c **Metasequoia,** leaves t.s.
Gy160c **Pseudotsuga menziesii,** leaves t.s.
Gy1575c **Taxodium distichum,** cypress, leaves t.s.
Gy162c **Thuja plicata,** leaves t.s.
Gy161c **Tsuga canadensis,** leaves t.s.


Gy129d


Gy130b


Gy131d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Gy133f


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Gy1362h


Gy139e


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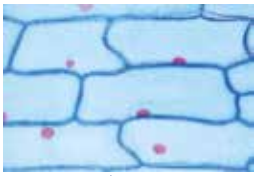
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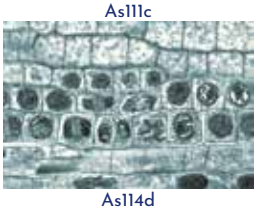
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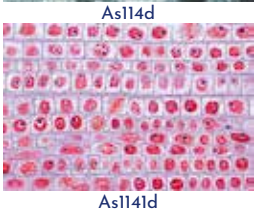
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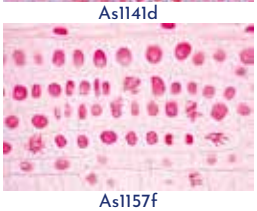
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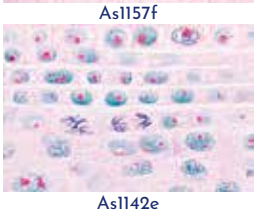
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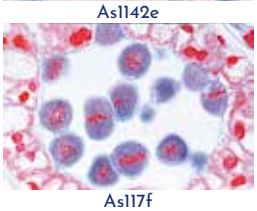
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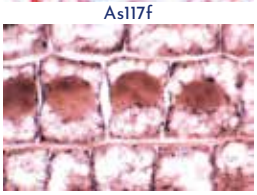
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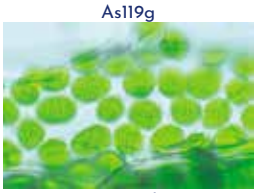
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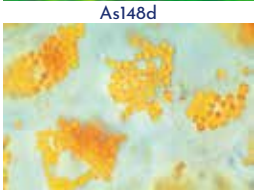
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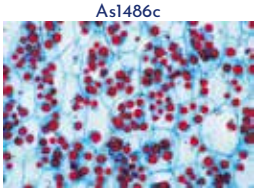
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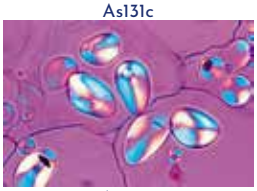

As132c

Angiospermae

I. Cytology and tissues

Cell nucleus, cell division, chromosomes

As111c • **Epidermal cells** of Allium cepa (onion), flat mount shows typical plant cells with nuclei, cytoplasm and cell walls

As1125d **Epidermal cells** of Allium cepa, w.m. of bulb scale epidermis, unstained preparation special mounted for phase contrast observation

As1127s **Epidermal cells** of Allium cepa, plasmolysis, w.m. turgid piece and plasmolized piece of onion epidermis for comparison

As114d • **Mitosis,** l.s. from Allium root tips showing all stages of plant mitosis carefully stained with iron-hematoxyline after Heidenhain

As1141d **Mitosis,** l.s. from Allium root tips showing all stages of plant mitosis carefully stained with a quadruple stain

As1142e **Mitosis,** l.s. from Allium root tips showing all stages of plant mitosis, specially stained with fuchsin and fast green

As115d • **Mitosis,** t.s. from Allium root tips showing all stages of plant mitosis in polar view

As1155g **Mitosis,** squash preparation from Allium root tip, shows intact mitotic stages, Feulgen stain *

As1157f **Mitosis,** l.s. from Allium root tips showing all stages of plant mitosis stained by the Feulgen stain *

As1158g **Mitosis,** squash preparation from Allium root tip, shows intact mitotic stages, orceine stained

As1159h **Mitosis,** squash preparation from Allium root tip, treated with colchicine for metaphase stages, orceine stained *

As116d **Mitosis,** l.s. from Vicia faba (bean) root tips showing all mitotic stages

As1165g **Mitosis,** squash preparation from Vicia faba root tips, showing intact mitotic stages, Feulgen stain *

As1166e • **Mitosis,** l.s. from Hyacinthus root tips showing all stages of plant mitosis carefully stained with a quadruple stain. Specially large chromosomes, for demonstration of plant mitosis

As1169g • **DNA and RNA,** thin l.s. from Allium root tips, specially fixed and stained with methylgreen and pyronine to show DNA and RNA in different colours *

As117f • **Meiosis,** t.s. of Lilium anthers showing different stages of meiotic divisions

Cell organelles

As112g **Epidermal cells** of Allium cepa, specially fixed and stained to show the mitochondria *

As119g • **Mitochondria,** thin l.s. of Allium root tips specially fixed and stained to show the mitochondria clearly

As148d • **Chloroplasts,** w.m. of leaf of Elodea or Spinacea showing detail of large chloroplasts

As1481d **Chloroplasts,** in sec. of Tradescantia shoot

As1485c **Chromoplasts,** w.m. of petal of Viola (violet)

As1486c **Chromoplasts,** t.s. of root of Daucus carota (carrot)

As1487c **Chromoplasts,** in w.m. of piece of petal from Tropaeolum

As1488e **Plasmodesmata,** in t.s. of palm seed (Phytelephas)

Inclusions: Reserve and storage substances

As131c • **Aleurone grains,** sec. of Ricinus endosperm

As6611d **Aleurone grains,** t.s. of seed and cotyledons of Evonymus

As132c • **Starch grains,** sec. of tuber of Solanum tuberosum (potato)

As1321c **Starch grains,** t.s. cotyledons of Vicia faba (bean)

As1322c **Starch grains,** t.s. of semen (grain) of Avena (oat)

As1323b **Starch grains,** smear from Euphorbia (spurge)

As1324b **Starch grains,** different kinds of mixed species w.m.

As1325b **Corroded starch grains,** w.m. from potato

As133d • **Fat,** t.s. of endosperm of Corylus (hazel) stained for fat

As146d • **Reserve cellulose,** t.s. seed of Phoenix (date)

Inclusions: Crystals and metabolic products

As135d • **Inulin crystals,** t.s. of tuber of Dahlia

As136d • **Acid tannic,** t.s. bark of Rosa

As137b • **Calcium oxalate crystals** in w.m. of dry Allium scale

As138c • **Raphides,** t.s. of Impatiens leaf

As1381c **Raphides,** t.s. of Oxalis leaf

As1382d **Raphid cells** with growing raphids, l.s. root tips of Hyacinthus

As1383c • **Crystal sand,** t.s. of Solanum tuberosum (potato) leaf

As1384d **Clustered crystals,** t.s. stem of Opuntia

As459c • **Cystoliths,** t.s. leaf of Ficus elastica, India rubber plant

Meristematic tissues

As121e • **Stem apex** and meristematic tissue of Elodea, l.s. showing growing zone and leaf origin

As1215f **Stem apex** and meristematic tissue of Elodea, median l.s. showing growing point *

As122d • **Stem apex** and meristematic tissue of Asparagus l.s.

As123e **Stem apex** and meristematic tissue of Hippuris l.s.

As124e **Stem apex** and meristematic tissue of Coleus l.s.

As1145e **Allium cepa,** median l.s. of root tip to show the meristematic tissue *

As1146f **Hyacinthus,** median l.s. of root tip showing meristematic tissue and growing point *

Supporting tissues

As140c • **Wood cells,** macerated and w.m.

As141e • **Thylosis,** t.s. and l.s. of Robinia (black locust) wood

As1431c **Sclerids,** t.s. of semen, (seed) of Phaseolus (bean) with palisade sclerids

As145c • **Angular collenchyma,** t.s. stem of Lamium or Salvia

As1451c • **Lamellar collenchyma,** t.s. stem of Sambucus

As1452c • **Lacunar collenchyme,** t.s. stem of Petasites or Lactuca

As147b • **Sclerenchyma fibres,** isolated and w.m.

As1471d **Sclerenchyma fibres of phloem,** t.s. and l.s. of stem of Linum (flax)

As1472d **Sclerenchyma fibres of xylem,** t.s. and l.s. of stem of Hypericum

As150b • **Bast cells** from coconut, isolated and w.m.

As1505b **Bast cells** from Cinchona, isolated and w.m.

Conducting tissues

As151d • **Annular and spiral vessels,** l.s.

As1525d **Annular and spiral vessels,** isolated and w.m.

As153d • **Scalariform vessels,** l.s.

As1535d **Scalariform vessels,** isolated and w.m.

As154d • **Pitted vessels,** l.s.

As1545d **Pitted vessels,** isolated and w.m.

As1547d **Tracheids with bordered pits,** wood of Pinus l.s. stained with thionine

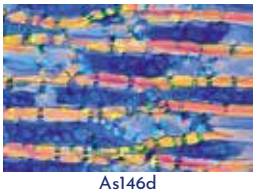
As155d • **Reticulate vessels,** l.s.

As1554d **Reticulate, annular, and spiral vessels,** isolated and w.m.

As160d • **Sieve tubes, sieve plates and vessels,** l.s. of stem of Cucurbita pepo

As161c • **Sieve plates** in top view, t.s. of Cucurbita stem showing large structures

As162d **Callose** on sieve plates of Vitis vinifera (grape) during the winter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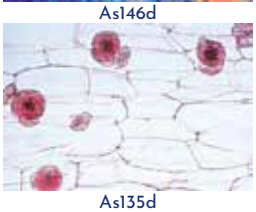
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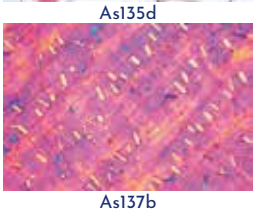
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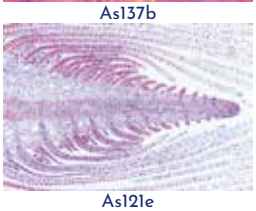
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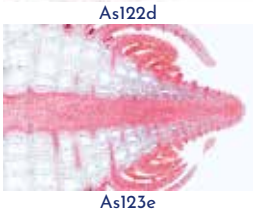
As122d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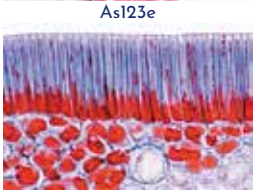
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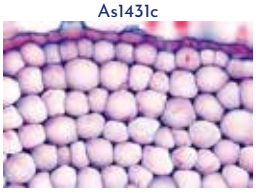
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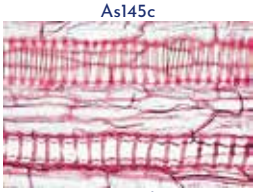
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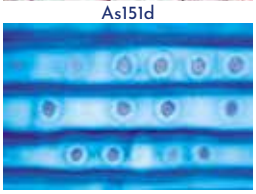
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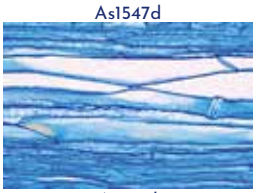
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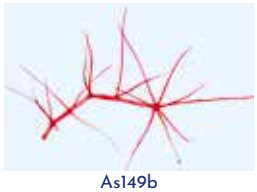
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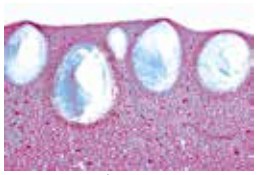
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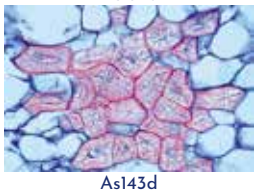
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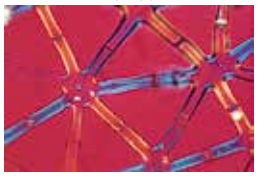
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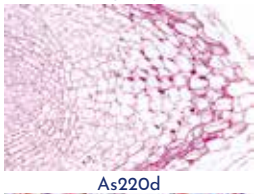
As224e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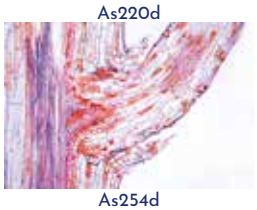

As254d

As142c • **Lactiferous vessels,** l.s. stem of Euphorbia (spurge)
As1423c • **Lactiferous vessels,** tangential l.s. of Taraxacum root
As489c **Lactiferous vessels,** t.s. of Asclepias, milkweed
As493d **Netted venation,** portion of dicot leaf w.m. showing venation only

Epidermal tissues

As139b • **Cork cells,** t.s. bark of Quercus suber (oak)
As1392c **Cork cambium development,** t.s. young stem of Sambucus (elderberry)
As360c • **Lenticells,** t.s. stem of Sambucus (elderberry)
As1344c • **Glandular hairs,** t.s. petiole of Primula
As149b • **Branched leaf hairs,** isolated and w.m. from Verbascum (mullein)
As1491b • **Scale-like stellate hairs,** isolated and w.m. from Elaeagnus (olive tree)
As1492c **Scale-like stellate hairs,** in t.s. of Elaeagnus leaf
As1493c **Hooked hairs,** t.s. of leaf of Humulus (hop)
As1494c **Absorbent hairs,** w.m. of epidermis from Tillandsia
As1495d **Absorbent hairs,** t.s. of leaf from Tillandsia
As1496b **Seed hairs,** w.m. from Gossypium (cotton)
As621d **Viola,** violet, t.s. of petal with hairs

Special cells and tissues

As134c • **Lysigenous oil glands,** t.s. rind of Citrus fruit
As1341c • **Schizogenous oil glands,** t.s. leaf of Hypericum
As4566c **Leaf with oil sacs,** t.s. Lavandula, lavender
As1343c **Glandular cells,** t.s. leaf of Thymus
As143d • **Stone cells,** t.s. fruit of Pyrus communis (pear)
As1432d **Sclerids,** t.s. of leaf of Camellia with stellate sclerids
As144b • **Parenchyme cells,** t.s. of marrow of Sambucus niger (elderberry)
As1435d **Aerial tissue,** t.s. leaf of Canna indica
As314c • **Juncus,** bulrush, stem with internal stellate cells t.s.
As583d • **Nectary with glands,** Fritillaria, t.s.

II. Roots

Typical roots in comparison

As201e **Monocot and dicot roots,** two t.s. on one slide for comparison
As202e **Herbaceous and woody roots,** two t.s. on one slide
As203e **Young (primary) and older (secondary) roots,** two t.s. on one slide
As204e **Fleshy and woody roots,** two t.s. on one slide

Root tips, root development

As210d • **Root tip and root hairs,** t.s. to show epidermal origin of root hairs
As211d • **Root tip and root hairs,** w.m.
As2113c **Hydrocharis,** root tip with central pith and root hairs, t.s.
As2133c **Vicia faba,** bean, t.s. of root tip
As2134d **Monstera,** philodendron, l.s. through root tip
As2175d **Asparagus,** root t.s. to show epidermal origin of root hairs
As2132c **Sinapis,** cross sections through young roots
As220d • **Zea mays,** l.s. of root tip specially stained for statolith starch
As224e **Hyacinthus,** l.s. of root tips showing all stages of mitosis
As254d • **Salix,** willow, l.s. of root showing origin of lateral roots
As2541d **Salix,** t.s. of root showing origin of lateral roots
As2545d **Vicia faba,** bean, l.s. of root showing origin and early development of lateral roots
As272c **Phaseolus,** bean, young root t.s. showing beginning secondary growth
As278e **Phaseolus,** l.s. showing transition root-stem

Typical monocot roots

As215c • **Zea mays,** corn, root t.s., a polyarch root
As214c • **Iris,** typical monocot root t.s. showing all structures
As217c • **Convallaria,** lily of the valley, t.s. of root shows endodermis, pericycle, phloem, xylem very clearly
As2135c **Allium cepa,** onion, t.s. of root tip showing epidermis, exodermis, endodermis and central pith
As222c **Lilium,** lily, t.s. of monocot root
As227c **Hordeum,** barley, young root t.s. shows development of vascular bundles
As228c **Triticum,** wheat, young root t.s., primary xylem and central vessel
As229c **Bromus,** brome-grass, t.s. of a grass root

Typical dicot roots

As241c • **Ranunculus,** buttercup, t.s. of a typical dicot root for general study showing all structures very clearly
As2411d **Ranunculus,** young and older roots on one slide, t.s.
As2419d **Helianthus,** sunflower, young root t.s.
As242d **Helianthus,** sunflower, older woody root t.s.
As245c • **Raphanus,** radish, t.s. of root showing secondary growth and several cambium rings
As247c **Medicago,** alfalfa, root t.s. showing secondary growth
As266c **Beta vulgaris,** beet, root showing anomalous secondary growth t.s.
As244c • **Tilia,** lime, older woody root t.s.
As258c **Rheum,** rhubarb, root with crystals t.s.
As267c **Cannabis sativa,** hemp, root t.s.
As268c **Clivia miniata,** t.s. of root showing polyarch central bundle
As269c **Quercus robur,** oak, young root from seedling t.s.
As270c **Quercus robur,** older woody root t.s.
As280c **Nicotiana tabacum,** tobacco, t.s. of root showing primary and secondary xylem
As281c **Actaea,** baneberry, young root with primary xylem t.s.
As282c **Sambucus,** elderberry, root t.s.

Adaptation to water: Hydrophytes and hygrophytes

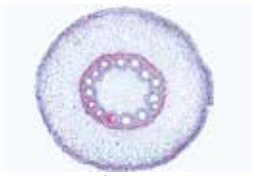
As212d • **Lemna,** duckweed, root tip and cap (calyptra) w.m.
As213d **Lemna,** l.s. of root tip and cap
As225c • **Elodea,** Canadian waterweed, t.s. of an aquatic root
As283d **Nymphaea,** water-lily, t.s. of root showing branch root origin
As2415d • **Caltha palustris,** t.s. of primary root showing endodermis and the Casparian strips
As253c • **Monstera,** aerial root t.s.
As2535c **Avicennia,** mangrove, breathing root (pneumatophore) t.s.
As259c • **Dendrobium,** orchid, aerial root with velamen t.s.
As287c **Taxodium distichum (Cypressacea),** t.s. of aerial root for respiration
As286c **Rhiziphora,** mangrove, t.s. of adventitious root

Adaptation to dry habitat: xerophytes

As216c • **Smilax,** carrion flower, t.s. of root shows thickened endodermis
As288c **Pelargonium,** t.s. of root for succulence
As284c **Sarothamnus,** broom, t.s. through woody root

Adaptation to unusual modes of nutrition

As248c • **Taraxacum,** dandelion, taproot with lactiferous vessels t.s.
As260c • **Scorzonera,** black salsify, root with lactiferous vessels l.s.
As249c **Lupinus,** lupin, root t.s.
As250d • **Lupinus,** root nodules with nitrogen fixing bacteria (Rhizobium radicicola) t.s.
As2502d **Pisum sativum,** pea, t.s. of nodule with nitrogen-fixing bacteria
As2505d **Vicia faba,** bean, t.s. of nodule with nitrogen fixing bacteria
As251d • **Alnus,** alder, root nodules with symbiotic actinomycetes (Streptomyces alni) t.s.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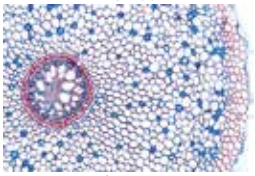
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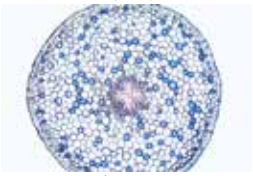
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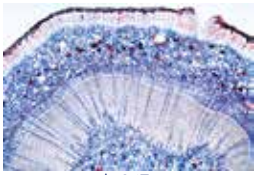
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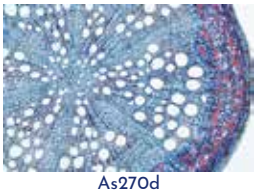
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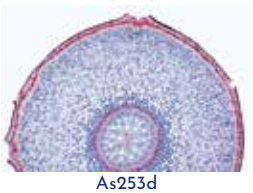
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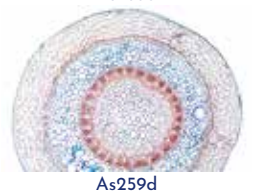
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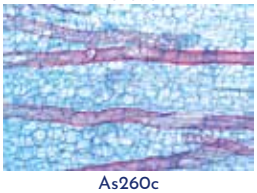
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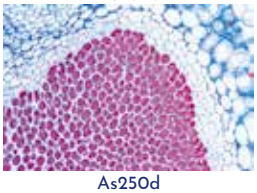
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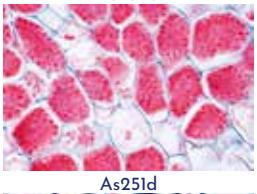
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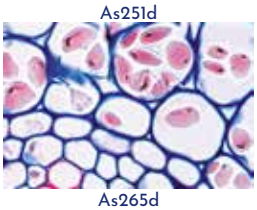
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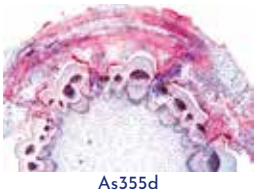
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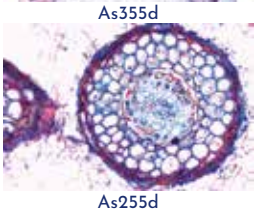
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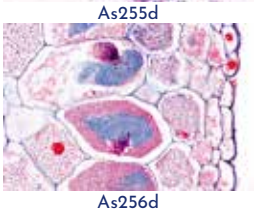
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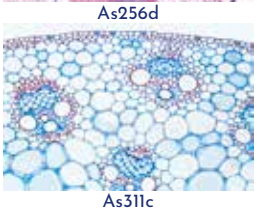
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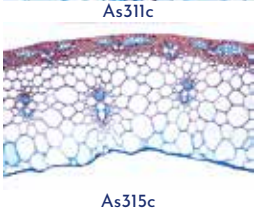
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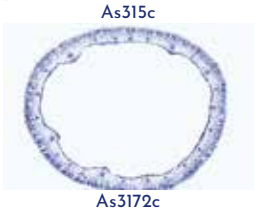
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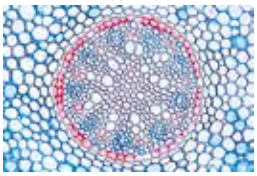
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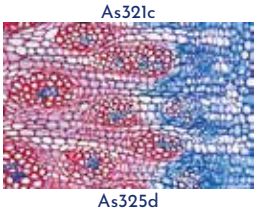
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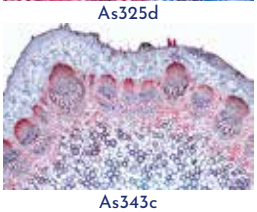
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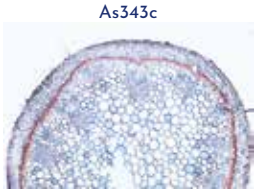
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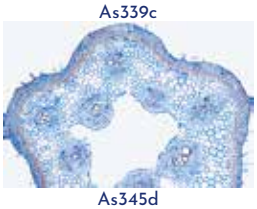
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As265d • **Ranunculus ficaria,** root storing starch grains, t.s.
As246c • **Daucus carota,** carrot, storage root t.s.
As255d • **Fagus,** beech, root with ectotrophic mycorrhiza, t.s.
As256d • **Neottia nidus avis,** orchid, root with endotrophic mycorrhiza, l.s.
As2417d **Orchid,** root t.s.
As2475c **Convolvulus,** twining plant, older root with compressed endodermis t.s.
As252c **Hedera helix,** ivy, aerial climbing root t.s.
As355d • **Cuscuta,** dodder, t.s. through stem of host showing the haustoria of the parasite
As285e • **Viscum album,** mistletoe, sec. showing parasitic root in wood of apple tree

III. Stems

Typical stems in comparison

As305e **Monocot and dicot stems,** two t.s. on one slide for comparison of the different structures
As3052e **Monocot and dicot stems,** two l.s. on one slide
As3054e **Dicot and monocot stem,** t.s. of Helianthus and Canna, on same slide
As3055e **Dicot and monocot stem,** t.s. of Ranunculus and Zea, on same slide
As306e **Stems of annual and perennial plants,** two t.s. on one slide
As3065e **Sun and shadow stems,** two t.s. on one slide
As307e **Herbaceous and woody stems,** two t.s. on one slide
As3942f **Dicot stem,** Aristolochia, t.s. of one year stem with widely separate bundles, two years stem and older stem with anomalous structure all 3 in on slide
As3944e **One year stem** with active cambium and older stem with secondary structures, Tilia, two t.s.
As3432e **Helianthus,** young and older stem, two t.s. on one slide
As3424e **Helianthus,** of older stem, t.s. and l.s. on one slide

Typical monocot stems

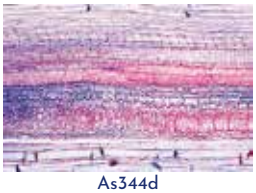
As311c • **Zea mays,** typical monocot stem with scattered bundles, t.s., a standard slide for general study
As310c **Zea mays,** corn, young undifferentiated stem t.s.
As3115c **Zea mays,** stem with leaf sheaths t.s.
As312c **Zea mays,** stem with vascular bundles l.s.
As3941e **Zea mays,** t.s. and l.s. of monocot stem on one slide
As317c • **Lilium,** lily, t.s. of stem showing assimilating parenchyma
As3203c **Tulipa,** tulip, t.s. of stem
As3989c **Allium,** l.s. of a subterraneous bulb
As3172c **Allium sativum,** stem t.s.
As3988c **Asparagus,** t.s. of stem
As3204c **Dianthus,** pink, t.s. of stem
As315c • **Triticum,** wheat, t.s. through the stem of a gramineous plant with pith cavity and the ring-shaped arrangement of vascular bundles
As316d **Triticum,** l.s. transition node – internode
As3162c **Secale,** rye, t.s. of typical grass stem
As323c • **Holcus lanatus,** grass, stem t.s.
As320c **Acorus calamus,** sweet flag, rhizome t.s.
As321c • **Convallaria,** lily of the valley, t.s. of rhizome with concentric vascular bundles
As322c • **Iris,** rhizome t.s. showing storage of starch
As325d **Dracaena,** dragon tree, stem t.s., secondary growth in a monocot plant
As3813c **Saccharum,** sugarcane, stem t.s.
As3986c **Phragmites,** reed, t.s. of monocot stem
As3987c **Alisma plantago,** t.s. of stem

Typical dicot stems: Herbaceous plants

As343c • **Helianthus,** sunflower, typical dicot herbaceous stem t.s. showing open vascular bundles and all structures very clearly
As3432e **Helianthus,** young and older stem, two t.s. on one slide
As3424e **Helianthus,** older stem, t.s. and l.s. on one slide
As3943c **Helianthus,** young sprout t.s.
As376b **Helianthus,** sunflower, t.s. of marrow shows large parenchyma cells
As339c **Pelargonium,** geranium, t.s. through young stem of an annual plant
As340c **Pelargonium,** geranium, t.s. through older stem of an annual plant showing phellogen and fascicular cambium
As344d • **Cucurbita,** pumpkin, l.s. of stem with sieve tubes and vascular bundles
As345d • **Cucurbita,** t.s. of stem showing large sieve tubes and vascular bundles
As3451e **Cucurbita,** pumpkin, t.s. and l.s. of stem
As365c **Ranunculus,** buttercup, t.s. of stem with open vascular bundles, no interfascicular cambium
As354c • **Lamium,** deadnettle, square stem with well developed collenchyma and continuous vascular cylinder t.s.
As3542c **Galium,** t.s. of typical square stem showing collenchyme cells
As367c • **Salvia,** sage, t.s. of a square stem
As368c **Coleus,** t.s. of a square stem showing collenchyma clearly
As3877c **Amaranthus,** stem t.s.
As375c **Arctium lappa,** burdock, stem t.s.
As3876d **Atriplex,** orache, stem t.s. with bladder hairs
As374c **Bryonia,** t.s. of stem showing large sieve plates
As385c • **Cannabis sativa,** hemp, t.s. of stem showing woody sclerenchyma fibres
As3985c **Chelidonium,** celandine, t.s. of stem
As3872c **Chenopodium,** goosefoot, stem t.s.
As382d **Coleus,** stem with leaf base and axillary bud l.s.
As380c **Digitalis,** foxglove, stem with continuous circular stele t.s.
As358c • **Euphorbia,** spurge, stem with lactiferous vessels l.s.
As3949c **Fuchsia,** t.s. of stem
As352c **Hedera helix,** ivy, stem with crystals t.s.
As359c **Hoya carnosa,** wax flower, stem with stone cells t.s.
As387c **Hydrangea,** stem t.s.
As3946c **Impatiens,** t.s. of stem
As3565c **Lactuca,** lettuce, stem t.s.
As3566c **Lactuca,** lettuce, stem l.s.
As3752c **Lonicera,** t.s. of young stem
As3753c **Lonicera,** t.s. of older stem
As357c • **Medicago,** alfalfa, young stem t.s.
As3571d • **Medicago,** alfalfa, old stem t.s. with secondary growth
As3982c **Mercurialis,** t.s. through monopodial rhizome
As3983c **Mercurialis,** t.s. of stem
As3878d **Ononis,** restharrow, stem t.s.
As3866c **Passiflora,** passion flower, stem t.s.
As3972c **Primula,** primose, t.s. of stem
As381c **Trifolium,** clover, stem t.s.

Typical dicot stems: Shrubs and trees

As341c • **Aristolochia,** one year stem t.s. for general study
As342c • **Aristolochia,** older stem t.s. for general study
As3422e **Aristolochia,** one year and older stem, two t.s. on one slide
As3423c • **Aristolochia,** older stem l.s. for general study
As3426c **Aristolochia,** meristematic stem t.s. showing developing vascular bundles
As3428c **Aristolochia,** macerated xylem elements w.m.
As363c • **Aesculus hippocastanum,** chestnut, petiole t.s.
As369c **Aesculus hippocastanum,** chestnut, young stem (shoot) t.s.
As386d • **Aesculus hippocastanum,** chestnut, twig with leaf scar t.s.
As346c • **Clematis,** young hexagonal stem t.s., collenchyma
As347c • **Clematis,** older stem t.s., phelloderm, phellogen, phellem
As3767c **Fagus silvatica,** beech, stem t.s.
As3945c **Fagus,** beech, t.s. of mature wood
As377c **Fagus,** beech, macerated wood cells w.m.
As3772e **Fagus,** three sections of wood: t.s., r.l.s., t.l.s.
As3505c **Fraxinus excelsior,** ash, one year stem t.s.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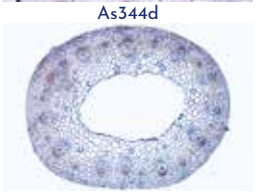
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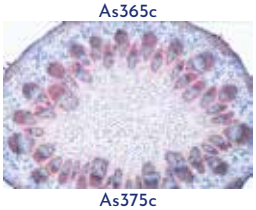
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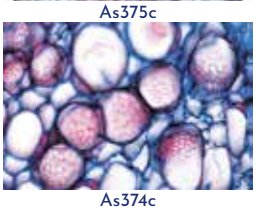
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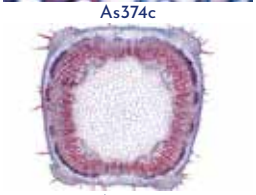
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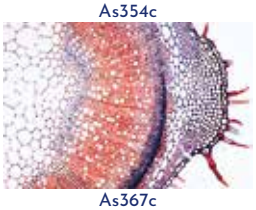
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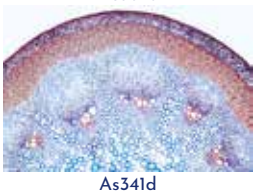
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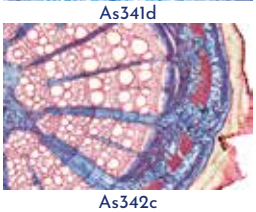
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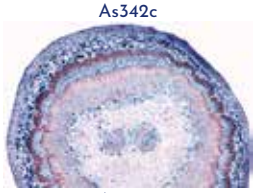
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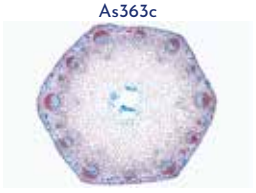
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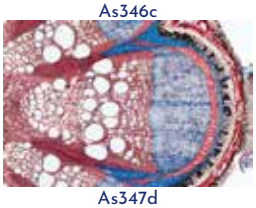
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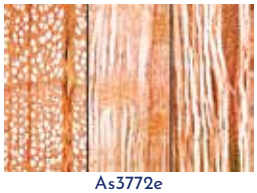
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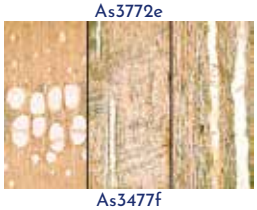
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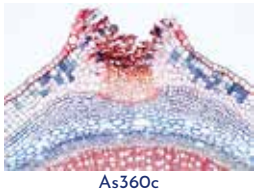
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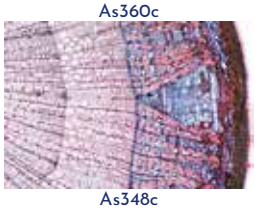
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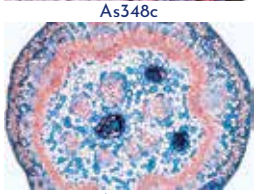
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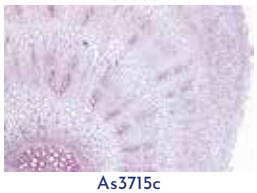
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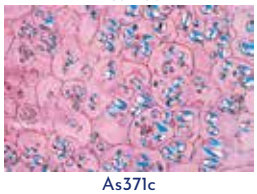
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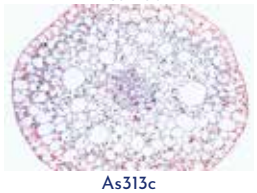
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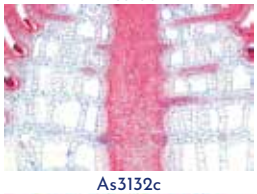
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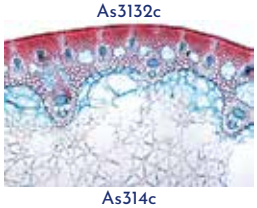

As314c

As3506d **Fraxinus excelsior,** ash, three sections of wood; t.s., r.l.s., t.l.s.
As3882d **Hibiscus tiliaceus,** stem t.s.
As3899d **Liquidambar,** sweetgum, woody stem t.s.
As3783d **Liriodendron,** three sections of wood; t.s., r.l.s., t.l.s.
As3784c **Liriodendron,** stem t.s.
As3785c **Liriodendron,** stem l.s.
As3781c **Magnolia,** stem, l.s.
As3895e **Magnolia,** stem t.s. and l.s. in one slide
As3782c **Magnolia,** macerated xylem elements w.m.
As3502d **Prunus avium,** cherry, one year, two year and three year stems, three t.s. on same slide for comparison
As3475c **Quercus robur,** oak, young stem t.s.
As3476c • **Quercus robur,** older woody stem t.s., annual rings
As3477d **Quercus robur,** three sections of wood, t.s., r.l.s., t.l.s.
As388d **Rhus,** poison ivy, stem t.s.
As3522d **Salix nigra,** willow, three sections of wood: t.s., r.l.s., t.l.s.
As3523c **Salix,** macerated xylem elements w.m.
As360c • **Sambucus,** elderberry, stem with lenticells t.s.
As3603d **Sambucus,** three sections of wood: t.s., r.l.s., t.l.s.
As3896f **Sycamore,** three sections of wood: t.s., r.l.s., t.l.s.
As348c • **Tilia,** lime, older woody stem t.s.
As349c • **Tilia,** older woody stem l.s.
As3492d **Tilia,** older woody stem t.s. and l.s. on one slide
As3494c **Tilia,** one year stem during the summer t.s., showing active cambium, ring-shaped primary vascular tissue
As3495c **Tilia,** one year stem during the winter t.s., showing resting cambium
As3496c **Tilia,** two year stem t.s., showing primary and secondary vascular tissues
As3497c **Tilia,** three year stem t.s.
As3498e **Tilia,** one year, two year and three year stems, three t.s. on same slide for comparison
As3499c **Tilia,** young stem l.s.
As350d • **Tilia,** three sections of wood: t.s., r.l.s., t.l.s.
As378c **Tilia platyphyllos,** lime, macerated wood cells w.m.
As351c • **Vitis vinifera,** grape, stem with medullary rays t.s.
As3512d **Vitis,** three sections of wood: t.s., r.l.s., t.l.s.
As3884d **Wisteria sinensis,** stem t.s.

Stems of selected useful plants

As3947c **Anthriscus,** t.s. of stem
As3948c **Asperula odorata,** woodruff, t.s. of stem
As3715c **Beta,** beet, t.s. of a superterrestrial storage root
As3911d **Brassica,** cabbage, stem with leaf traces t.s.
As3897c **Coffea arabica,** coffee, stem t.s.
As3851c **Linum,** flax, t.s. of stem showing husk fibres
As3898d **Nicotiana tabacum,** tobacco, stem t.s.
As3874d **Persea,** avocado, stem t.s.
As356c **Piper nigra,** pepper, dicot stem with scattered bundles t.s.
As362c **Ribes,** currant, t.s. of stem showing cork cambium (phellogen)
As3891c **Ricinus,** castor oil bean, young stem t.s. with separate bundles
As3892c **Ricinus,** older stem t.s. with secondary xylem cylinder
As371c **Solanum tuberosum,** potato, t.s. of tuber with starch grains and cork
As3713c **Solanum tuberosum,** aerial stem t.s.
As3514c **Vicia faba,** stem t.s.

Adaptation to water: Hydrophytes and hygrophytes

As3146d **Bamboo,** stem t.s.
As3984c • **Caltha,** march-marigold, t.s. of stem
As3123c **Canna,** t.s. of monocot stem showing scattered bundles
As3662c **Ceratophyllum,** hornwort, stem t.s.
As3285d • **Eichhornia,** water hyacinth, rhizome t.s.
As313c • **Elodea,** waterweed, t.s. of aquatic stem showing primitive bundle
As3132c **Hippuris,** t.s. of stem showing typical aquatic stem with large central pith
As314c • **Juncus,** bulrush, stem with internal stellate cells t.s.
As366c • **Myriophyllum,** water-milfoil, t.s. of aquatic stem
As353c • **Nymphaea,** water lily, stem with idioblasts t.s.
As3145c **Potamogeton,** pondweed, stem with aerial chambers t.s.
As3133c **Sagittaria,** t.s. monocot stem of a hydrophytic plant

Adaptation to dry habitat: xerophytes

As327d **Aloe,** stem t.s. showing secondary growth in a monocot plant
As383d • **Opuntia,** cactus, succulent stem t.s.
As3734d **Leaf thorn** on stem of Berberis (barberry), l.s.
As3735d **Stem thorn** on stem of Crataegus (hawthorn), l.s.
As373d **Prickle** on stem of Rosa (rose), l.s.
As3585c • **Nerium,** oleander, t.s. stem to show lactiferous ducts
As3586c **Nerium,** oleander, l.s. stem to show lactiferous ducts
As328d • **Smilax,** carrion flower, stem t.s.
As3854d **Bauhinia,** tropical liana, climbing stem t.s.
As3852d **Thunbergia,** liana, stem t.s. shows vascular bundles with enclosed phloem
As326d **Yucca,** stem t.s., formation of bark in a monocot plant

Adaptation to unusual modes of nutrition

As355d • **Cuscuta,** dodder, t.s. through stem of host showing the haustoria of the parasite
As370d **Dentaria,** toothwort, l.s. through bulbil

Petioles and miscellaneous

As4646c • **Acer platanoides,** maple, petiole t.s.
As4647c **Acer platanoides,** maple, l.s. stem and petiole leaf abscission
As363c • **Aesculus hippocastanum,** chestnut, petiole t.s.
As4794d **Canna indica,** petiole t.s.
As4674d **Eichhornia,** petiole t.s.
As4795d **Fragaria,** strawberry, petiole t.s.
As4671c • **Nymphaea,** petiole t.s.
As4798d **Passiflora,** passion flower, petiole with nectaries t.s.
As479c **Plantago,** plantain, petiole t.s.
As4797d **Portulak,** petiole t.s.
As4793d **Vitis vinifera,** petiole t.s.
As3971c **Drymis,** t.s. of stem with bark
As395e **Wound healing** on stem, early stage, t.s.
As396e **Wound healing** on stem, later stage, t.s.
As398e **Graft scion** on stem t.s.

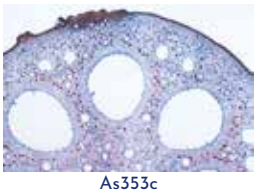
IV. Leaves

Typical leaves in comparison

As4005e **Monocot and dicot leaf epidermis** with stomata, two w.m. in one slide for comparison
As4118d **Monocot and dicot leaves,** two t.s. in one slide for comparison
As4119e **Leaf types,** composite slide of three t.s. through hydrophytic, mesophytic, and xerophytic leaves

Leaf epidermis and stomata

As411c • **Tulipa,** tulip, leaf epidermis with stomata w.m., showing large stomata and guard cells for general study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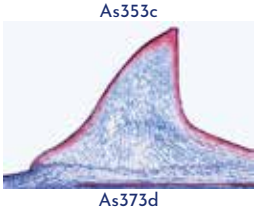
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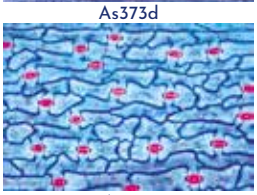
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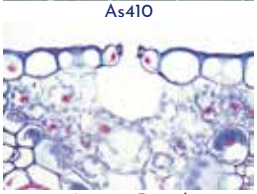
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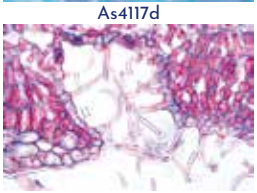
As4117d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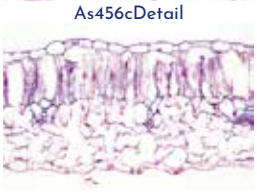
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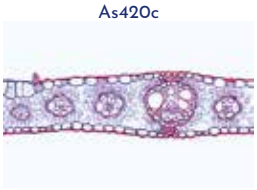
As464d


As420c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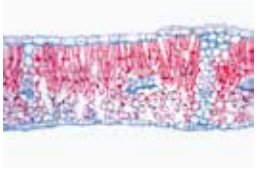
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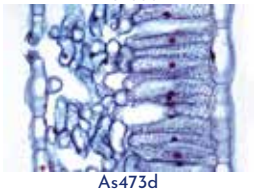
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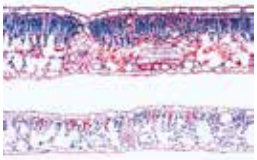
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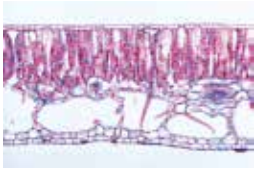

As467c


As4155c


As456c


As4492c


As477c

As410c **Calla,** leaf epidermis with stomata w.m.
As4102d **Sedum,** epidermis with stomata w.m.
As4103d **Saccharum (blade),** epidermis with stomata w.m.
As4108d **Allium cepa,** onion, leaf epidermis with stomata w.m.
As4109d **Lilium,** lily, leaf epidermis with stomata w.m.
As4112c • **Iris,** leaf epidermis w.m. showing stomata in rows
As4113d **Grass,** leaf epidermis w.m. or horizontal sec. showing stomata of a gramineous plant
As4114d **Saxifraga,** leaf epidermis w.m. or horizontal sec. showing stomata without accessory cells
As4115d **Begonia or Sedum,** leaf epidermis w.m. showing scattered stomata with many accessory cells
As4116d **Dianthus,** leaf epidermis w.m. showing stomata with two accessory cells
As4117d **Helleborus niger,** leaf epidermis w.m. with stomata
As448c • **Solanum tuberosum,** potato, leaf t.s. showing raised stomata
As456c • **Nerium,** oleander, leaf with sunken stomata t.s., showing the typical structures of a xerophytic leaf
As4953c • **Ruellia,** t.s. of leaf showing raised stomata

Leaf hairs and emergences

As420c • **Elaeagnus,** olive tree, scale-like stellate hairs w.m.
As421c • **Verbascum,** mullein, branched leaf hairs w.m.
As422c **Verbascum,** leaf with branched hairs t.s.
As464d • **Urtica,** stinging nettle, stinging hairs with poison ducts
As471c **Pelargonium,** geranium, t.s. of leaf with multicellular glandular hairs
As478c **Nicotiana tabacum,** tobacco, leaf with glandular hairs t.s.
As4955c **Galium,** w.m. of leaf showing climbing hairs
As4642d **Aesculus hippocastanum,** chestnut, leaf bud scales with colleteres t.s.

Typical monocot leaves

As412c • **Zea mays,** corn, monocot gramineous leaf t.s.
As415c • **Iris,** typical isobilateral leaf t.s.
As414c • **Lilium,** lily, leaf t.s. showing arm palisade cells
As429c **Allium schoenoprasium,** chive, t.s. of an unifacial folding leaf
As4166d **Aloe,** leaf t.s.
As4799c **Canna indica,** leaf t.s.
As4962c **Festuca,** grass, t.s. of leaf
As418c **Galanthus,** snowdrop, leaf t.s.
As4967c **Hyacinthus,** t.s. of leaf
As4167d **Musa,** banana, leaf t.s.
As4968c **Narcissus,** daffodil, t.s. of leaf
As413c **Poa annua,** meadow grass, leaf t.s.
As4172d **Saccharum,** sugarcane, leaf t.s.
As4961c **Secale,** rye, t.s. of stem enclosed in sheath leaves
As417c **Triticum,** wheat, t.s. of leaf showing stomata
As4183c **Tulipa,** tulip, t.s. of leaf

Typical dicot leaves

As453c • **Syringa,** lilac, t.s. of a typical mesophytic dicot leaf for general study, showing all structures very clearly
As4535c **Syringa,** paradermal l.s. through all leaf layers
As454c • **Ligustrum,** privet, t.s. of dicot leaf
As4541c **Ligustrum,** paradermal (horizontal) l.s. through all leaf layers
As455d • **Fagus,** beech, sun and shadow leaves t.s. on same slide for comparison of the different structures
As473d • **Helleborus,** t.s. of a typical mesophytic dicot leaf for general study, showing large cellular structures

As476c **Helianthus,** sunrose, t.s. of dorsiventral dicot leaf
As4964c **Ranunculus,** buttercup, t.s. of dicot leaf
As489c **Asclepias,** milkweed, leaf with lactiferous vessels t.s.
As449c **Begonia,** leaf t.s.
As488c **Belladonna,** deadly nightshade, leaf t.s.
As4676c **Beta vulgaris,** beet, leaf t.s.
As4971c **Brassica,** cabbage, t.s. of leaf
As4787d **Camellia (Thea) sinensis,** tea plant, leaf t.s.
As4785c **Coffea arabica,** coffee, leaf t.s.
As4965c **Dictamnus,** t.s. of leaf showing crystals
As446c **Eucalyptus,** an isobilateral foliage leaf t.s.
As459c • **Ficus elastica,** India rubber plant, leaf with cystoliths t.s.
As4912c **Gossypium,** cotton, leaf t.s.
As4958c **Hedera,** ivy, t.s. of evergreen leaf
As4782c **Lycopersicum,** tomato, leaf t.s.
As490c **Medicago sativa,** alfalfa, leaf t.s.
As4918c **Populus,** poplar, leaf with calcium oxalate crystals t.s.
As4944c **Quercus,** oak, t.s. of leaf showing stomata
As477c • **Rosa,** rose, leaf with several palisade layers t.s.
As423c **Sagittaria,** arrowhead, leaf t.s.
As4792d **Vitis vinifera,** grape, leaf t.s.
As493d **Netted venation,** portion of dicot leaf w.m. showing venation only

Adaptation to water: hydrophytes and hygrophytes

As4155c • **Elodea,** t.s. of leaf showing the simple structure of an aquatic leaf
As416d • **Elodea,** w.m. of leaf showing large chloroplasts
As4946c **Calla palustris,** t.s. of leaf of a typical marshy plant
As4673c **Eichhornia,** water hyacinth, aquatic leaf t.s.
As4595c **Impatiens,** hydrophytic foliage leaf t.s.
As4948c **Lemna,** duckweed, t.s. of leaf
As4949c **Myosotis palustris,** w.m. of leaf showing hairs for water reservoir
As467c • **Nymphaea,** water lily, floating leaf of an aquatic plant with air chambers t.s.
As425c • **Potamogeton,** pondweed, leaf t.s.
As457d **Tropaeolum,** nasturtum, showing hydathodes, w.m. or t.s.
As419c **Vallisneria,** tape grass, leaf of an aquatic plant t.s.

Adaptation to dry habitat: Xerophytes

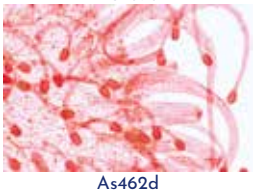
As456c • **Nerium,** oleander, leaf with sunken stomata t.s., showing the typical structures of a xerophytic leaf
As4165d **Agava,** xerophytic leaf with thick epidermis t.s.
As4567c • **Ammophila,** xerophytic leaf t.s.
As475c **Calluna,** ling, revolute leaves t.s.
As4564d **Cistus,** leaf of an evergreen xerophytic shrub t.s.
As4492c **Clivia nobilis,** leaf t.s. showing typical xerophytic thick epidermis
As4752c • **Erica,** xerophytic leaf t.s.
As4914c **Hakea,** a proteacean, leaf t.s.
As4563d **Ilex,** holly, leaf t.s.
As4959c **Sempervivum,** t.s. of leaf for succulence
As4565d **Larea tridentata,** creosote bush, leaf of a desert plant t.s.
As4566c **Lavandula,** lavender, leaf with oil sacs, t.s.
As4916d **Olea,** olive tree, leaf t.s.
As458c • **Sedum,** stonecrop, a typical succulent leaf t.s.
As4969c **Sempervivum,** t.s. of succulent leaf
As4963c **Stipa capillata,** t.s. of revolute grass leaf

Adaptation to unusual modes of nutrition

As469c • **Dionaea,** Venus flytrap, t.s. of leaf with digestive glands
As4957f **Dischidia,** t.s. of pitcher leaf showing cauline root
As462d • **Drosera,** sundew, leaf with glandular hairs w.m.
As463c • **Drosera,** leaf with glandular hairs t.s.


As475c


As469c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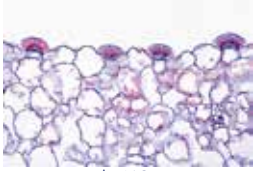
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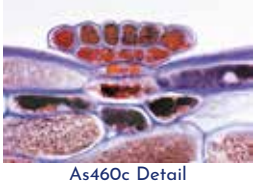
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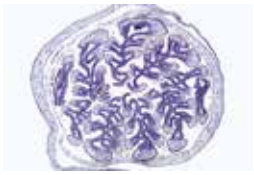
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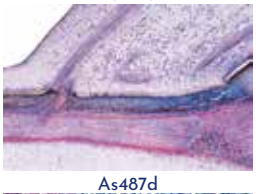
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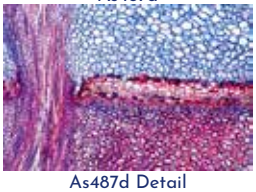
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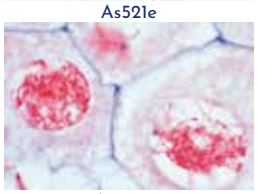
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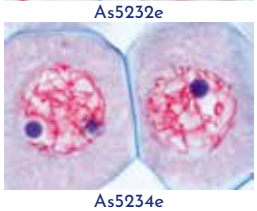
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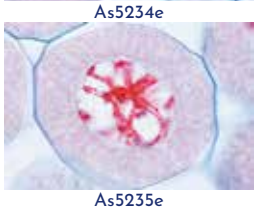
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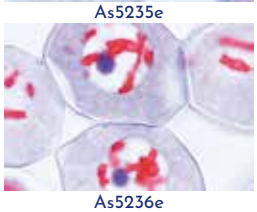
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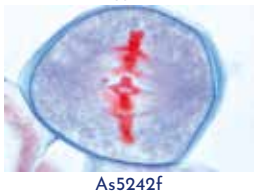
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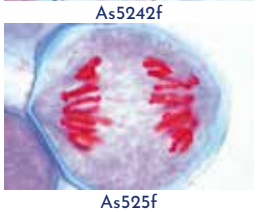
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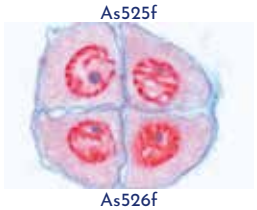
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As4951c **Lathraea squamaria,** t.s. of leaf without chloroplasts
As470d **Nepenthes,** pitcher plant, t.s. of pitcher with digestive glands
As460c • **Pinguicula,** butterwort, leaf with glandular cells t.s.
As4703d **Sarracenia,** pitcher plant, leaf t.s.
As465d • **Utricularia,** bladderwort, w.m. of bladder
As466c **Utricularia,** t.s. through leaves and bladders
As4941d **Viscum album,** mistletoe, t.s. of leaf showing chloroplasts

Leaf buds, leaf joints, leaf abscission

As451c • **Fagus,** beech, leaf bud t.s. showing leaf development
As452d • **Fagus,** beech, leaf bud l.s. showing leaf development
As4524d **Aesculus hippocastanum,** t.s. of leaf bud showing bud squama and embedded, folded leaves
As474d **Mimosa pudica,** sensitive plant, l.s. of leaf joint
As485d **Robinia pseudacacia,** black locust, leaflets with pulvini l.s.
As487d **Aesculus,** leaf base with leaf abscission l.s.
As361c **Acer platanoides,** maple, t.s. of petiole

V. Flowers and Fruits

Microspore development in Lilium

As521e **Lilium, anther** t.s., very young with microspore mother cells and tapetal layers
As522e **Lilium, anther** t.s., early prophase for general study
As523e **Lilium, anther** t.s., late prophase for general study
As5232e • **Lilium, anther** t.s., microspore mother cells in leptotene
As5233e • **Lilium, anther** t.s., microspore mother cells in zygotene
As5234e • **Lilium, anther** t.s., microspore mother cells in pachytene
As5235e • **Lilium, anther** t.s., microspore mother cells in diplotene
As5236e • **Lilium, anther** t.s., microspore mother cells in diakinesis
As524f • **Lilium, anther** t.s., microspore mother cells showing metaphase and anaphase of first (heterotypic) division (meiosis)
As5242f **Lilium, anther** t.s., microspore mother cells showing telophase of first and prophase of second (homeotypic) division
As525f • **Lilium, anther** t.s., microspore mother cells showing metaphase and anaphase of second (homeotypic) division (mitosis)
As526f • **Lilium, anther** t.s., microspore mother cells in tetrad stage
As5262e • **Lilium, anther** t.s., uninucleate (haploid) microspores after the separation of the daughter cells
As5264f **Lilium, anther** t.s., third division *
As5266e • **Lilium, anther** t.s., binucleate mature pollen grains at the time of shedding with tube cell and generative cell
As527d • **Lilium, anther** t.s. for general study showing pollen chambers and pollen grains
As5271d **Lilium, anther** l.s. for general study

Pollen types

As528b • **Lilium,** mature pollen grains w.m.
As577d **Tulipa,** anthers with pollen and pollen chambers t.s.
As625b • **Helianthus,** sunrose, pollen grains w.m.
As6252b **Ambrosia,** ragweed, pollen grains w.m.
As626b • **Corylus,** hazel, pollen grains w.m.
As6262b **Oenothera,** pollen w.m. showing viscin filaments
As6263b **Helianthus and Cucurbita,** pollen grains w.m.
As630c • **Mixed pollen types,** showing various forms of many different species

Fertilization

As529d **Lilium,** t.s. of stigma before pollination
As530e • **Lilium,** l.s. through pistil and stigma with pollen and pollen tubes
As531e **Lilium,** germinating pollen grains with pollen tubes w.m.

As609e • **Oenothera,** evening primrose, stigma with pollen grains and pollen tubes l.s.
As655e **Stigma of Eschscholtzia,** w.m. showing penetrating pollen
As656e • **Stigma of Eschscholtzia,** l.s. showing penetrating pollen
As6571e **Vicia,** bean, stigma and anthers, w.m.
As583d • **Fritillaria,** nectary with glands t.s.

Megaspore development in Lilium

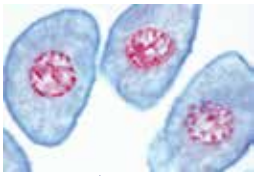
As541e **Lilium, ovary** t.s., very young, showing the developing tissue before the formation of the megaspore mother cell. Abundant mitotic figures can be observed
As5412f **Lilium, ovary** t.s., with megaspore mother cell
As542f • **Lilium, ovary** t.s., showing uninucleate embryosac with megaspore mother cell
As543g **Lilium, ovary** t.s., uninucleate embryosac with first (heterotypic) division of megaspore mother cell *
As544h **Lilium, ovary** t.s., binucleate embryosac *
As545k **Lilium, ovary** t.s., showing second (homeotypic) division with two division figures *
As546h **Lilium, ovary** t.s., first four-nucleate stage *
As547h **Lilium, ovary** t.s., showing migration of three nuclei to the chalazal end of the embryosac while one nucleus remains in the micropylar end
As5472k **Lilium, ovary** t.s., showing third division after the three chalazal nuclei have fused *
As548g • **Lilium, ovary** t.s., second four-nucleate stage, a vacuole can be seen between the nuclei
As549i **Lilium, ovary** t.s., showing fourth division *
As550g **Lilium, ovary** t.s., showing the stage of eight-nucleate embryosac for general study, not all nuclei present
As551k • **Lilium, ovary** t.s., eight-nucleate embryosac showing all the nuclei in one or more serial sections *
As5514k **Lilium, ovary** t.s., embryosac showing double fertilization in one or more serial sections *

Ovaries, formation of ovules and embryos (monocot)

As560d • **Lilium,** ovary t.s., showing arrangement of ovules and all structures for general study
As561d • **Lilium,** ovary l.s., showing arrangement of ovules and all structures for general study
As553f **Lilium,** ovary t.s., early embryonic stage
As554f • **Lilium.** ovary t.s., mature embryo
As555f • **Lilium,** ovary t.s., mature seed with embryo and endosperm
As571d • **Tulipa,** tulip, t.s. of ovary showing arrangement of ovules and all structures for general study
As572d • **Tulipa,** l.s. of ovary showing arrangement of ovules
As573d **Tulipa,** l.s. of ovary showing development of embryos
As574d **Iris,** t.s. of ovary showing arrangement of ovules
As575e **Iris,** t.s. of ovary showing later stage of embryo and endosperm
As582d **Fritillaria,** fritillary, ovary with embryosac t.s.
As584d **Hyacinthus,** ovary t.s.
As586d **Epipactis,** orchid, ovary with ovules t.s.
As564d **Ovary,** t.s. showing orthotropic attachment of ovules
As565d **Ovary,** t.s. showing anatropic attachment of ovules
As566d **Ovary,** t.s. showing kampylotropic attachment of ovules
As568s **Ovary types,** composite slide with four t.s. through various typical types of ovaries

Ovaries, formation of ovules and embryos (dicot)

As662d **Helleborus,** l.s. of atrope ovary
As664d • **Hyoscyamus,** t.s. of young ovary
As665d • **Hyoscyamus,** t.s. of older ovary
As663d **Impatiens,** t.s. of ovary
As615d **Lathraea,** toothwort, ovary of a parasitic plant t.s.
As6151d **Lathraea,** t.s. of young ovary
As6152d **Lathraea,** t.s. of elder ovary
As614d **Monotropa,** Indian pipe, ovary t.s. with developing embryosacs
As616d **Rosa,** rose, ovary t.s.
As6132d • **Solanum,** potato, t.s. of ovary with formation of embryos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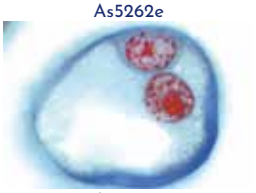
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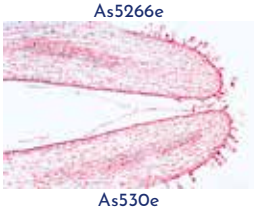
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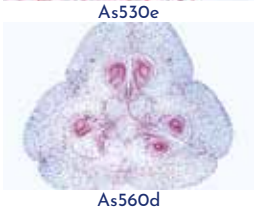
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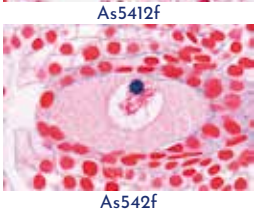
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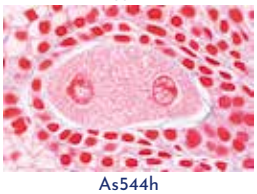
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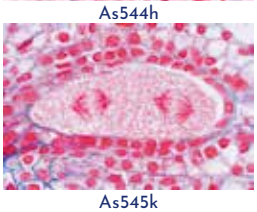
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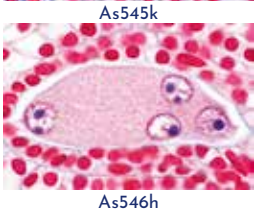
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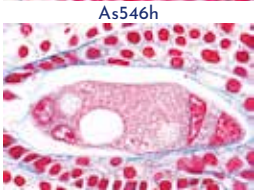
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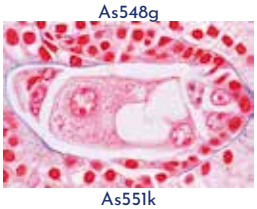
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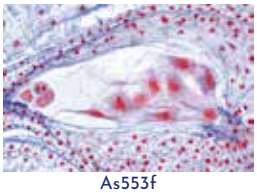
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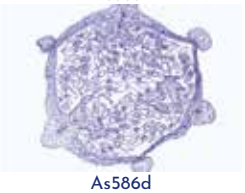
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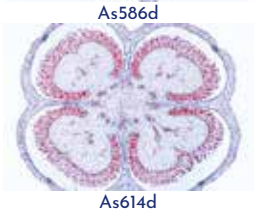
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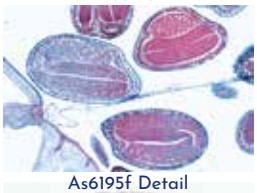
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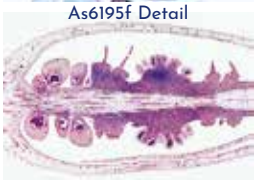
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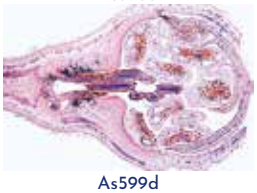
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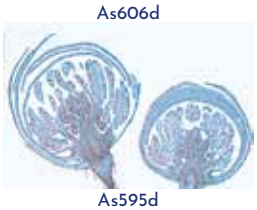

As595d

As619d • **Capsella bursa pastoris,** shepherd's purse, l.s. of ovule with embryos in situ for general study
As6192f **Capsella,** l.s. of embryo in precotyledon stage
As6193f **Capsella,** l.s. of embryo in early cotyledon stage
As6194f **Capsella,** l.s. of embryo in later cotyledon stage
As6195f **Capsella,** l.s. of embryo with curving cotyledons (mature)

Flowers and floral diagrams (monocot)

As501e **Monocot and dicot flower buds** t.s. on same slide for comparison
As511d • **Lilium candidum,** lily, t.s. of flower bud showing floral diagram of a monocot
As512d • **Lilium,** l.s. of flower bud
As653d **Galanthus,** snowdrop, t.s. of flower
As5778d **Secale,** rye, t.s. of a typical gramineous flower
As5798d **Zea,** t.s. of male flower
As588d **Anthurium,** flamingo plant, pedicel with flowers t.s.
As590e **Arum maculatum,** cuckoopint, l.s. of flower, insect trap
As657d **Arum maculatum,** t.s. of flower bud showing ovary

Flowers and floral diagrams (dicot)

As651d • **Bellis,** l.s. of a composite flower bud
As652d **Caltha palustris,** l.s. of flower
As658d **Cheirantus,** wallflower, t.s. of flower bud with marginal-parietale placentation
As593d • **Corylus avellana,** hazel, diclinous male flower l.s.
As594d • **Corylus avellana,** diclinous female flower l.s.
As6551d **Cucurbita,** pumpkin, t.s. of female flower
As654d **Linum,** flax, t.s. of flower
As601d • **Lycopersicum,** tomato, t.s. of flower bud shows floral diagram and axile placentation
As602d • **Lycopersicum,** l.s. of flower bud
As6521d **Magnolia,** t.s. of flower bud showing anthers with microspore mother cells
As606d • **Papaver,** poppy, t.s. of flower shows parietal placentation
As607d • **Papaver,** poppy, t.s. of older flower, formation of embryos
As599d **Pyrus malus,** apple, flower bud with hypogynous ovary l.s.
As6561d **Primula,** primose, t.s. of flower
As600d **Prunus avium,** cherry, flower bud with perigynous ovary l.s.
As595d **Ranunculus,** buttercup, l.s. of flower
As659d **Rhododendron,** t.s. of flower showing bud scales
As603d **Ribes,** currant, l.s. of flower bud
As6522d **Senecio,** t.s. of a composite flower
As613d • **Solanum tuberosum,** potato, t.s. flower bud for floral diagram
As604d • **Taraxacum,** dandelion, l.s. of composite flower with tubular florets and ligulate florets
As605d • **Taraxacum,** t.s. of composite flower

Simple fruits

As576d • **Iris,** t.s. of mature seed
As639d **Cruzifera sp.,** mustard or other, t.s. of silique with seed
As627c • **Cocos nucifera,** coconut, endosperm t.s.
As631d • **Lycopersicum,** tomato, young fruit t.s.
As632d **Prunus domestica,** plum, young drupe (stone fruit) t.s.
As634d **Juglans regia,** walnut, young drupe (stone fruit) t.s.
As6375d **Corylus avellana,** hazelnut, young stone fruit t.s.
As640d **Citrus,** lemon, young fruit t.s.
As644d **Aesculus hippocastanum,** chestnut, young fruit l.s.

Aggregate fruits

As596d **Ranunculus,** l.s. of fruit
As597d **Ranunculus,** t.s. of fruit
As633d • **Pyrus malus,** apple, young pome t.s., a fleshy, many seeded fruit
As6165d **Rosa,** syncarpous fruit l.s.
As641d **Rubus idaeus,** raspberry, young aggregate fruit l.s.
As642d **Fragaria,** strawberry, young aggregate fruit l.s.
As6035d **Ribes,** l.s. of a simple berry fruit
As643d **Morus,** mulberry, young multiple fruit l.s.
As645e **Ficus carica,** fig, young fruit t.s.

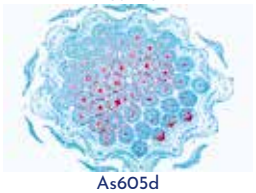
Seeds

As578d • **Triticum,** wheat, grain (seed), t.s. showing embryo and endosperm
As579e • **Triticum,** grain (seed), sagittal l.s. showing embryo and endosperm
As580d • **Zea mays,** corn, grain (seed) l.s. showing embryo and endosperm
As6641d • **Zea mays,** young corn cob t.s.
As5809e **Zea mays or Triticum,** germinating seed l.s.
As581d **Secale,** rye, grain (seed) t.s.
As6621d **Asparagus,** t.s. of seed
As585d • **Hyacinthus,** mature seed t.s.
As623d • **Helianthus,** sunflower, t.s. of achene fruit
As638d • **Phaseolus,** bean, t.s. of pod showing pericarp and seed
As622d **Tropaeolum,** nasturtium. semen (seed) t.s.
As635d **Amygdalus,** almond, endosperm t.s.
As636d **Myristica,** nutmeg, endosperm t.s.
As661c • **Ricinus,** t.s. of seed showing aleurone grains in endosperm with cotyledons
As628d • **Juglans,** walnut, mesocarp with stone cells t.s.
As629b • **Populus,** poplar, hairs from seed w.m.

Ultrathin Sections *

While the section thickness of normal histological specimens is 5– 10 mm, the thickness of semi-thin sections is only around 1.5 mm. Such sections produced on special microtomes are ideal for special examinations of cellular and tissue fine structures at higher magnifications.
- Available on request.


As604d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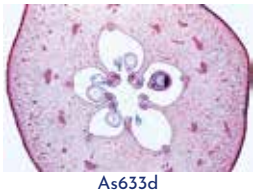
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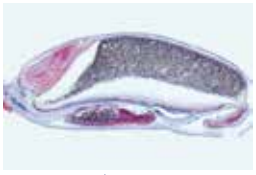
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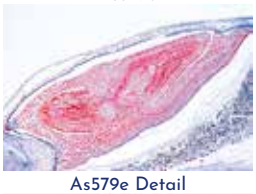
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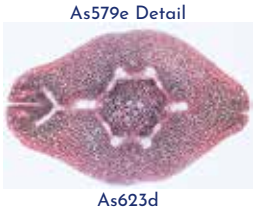
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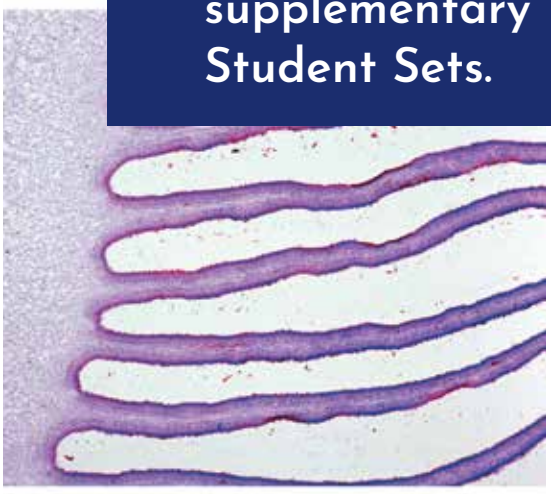
Multimedia-Packages and CD-ROM for Teachers and Students

We offer a range of 51 basic and supplementary Teacher Packages and Student Sets.



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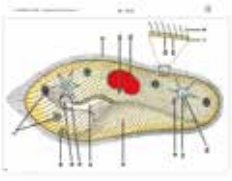
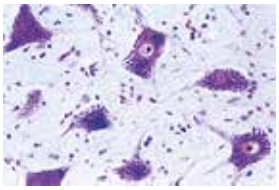
The teacher packages comprise all necessary media for classroom work:

1. Set of selected prepared **microscope slides in plastic box**. Prepared Microscope Slides are made in our laboratories under rigourous scientific control. They are the product of long experience combined with the most up to date techniques.
2. Set of **overhead transparencies**, large size, full color. Overhead Transparencies immediately show, on the screen, the details of the specimen required for demonstration at the most suitable magnification. The student subsequently finds it easier to locate the relevant part of the microscopic slide under the microscope. The transparencies are printed by a special process and excel by reason of their high projection quality.
3. Set of **sketch- and worksheets** with drawings for all slides. The Sketch- and Work Sheets serve to facilitate seeing his way through the prepared microscope slides and finding the detail important in the lesson. They start processes of learning and understanding by comparing microscope slides with the diagrammatic drawings, thus to identify and label the details relevant in the lesson. They allow completing or colouring the drawings according to own observations, and finally the sheets can be used for tests. Teacher may take photocopies of the sheets for the number of students.
4. **Textbook** with detailed description of all slides, drawings and transparencies. The Textbooks are intended to help you make more effective use of our teaching material both in the classroom and during individual study. They provide a description of the morphological structures involved, making it considerably easier to look for and find the relevant spots in the microscope slides. They also furnish information regarding systematic and physiological relationships and general biological principles, as well as stimulating classroom interpretation and didactic use of the observations made.
5. Special **cardboard box** for storing and packing.

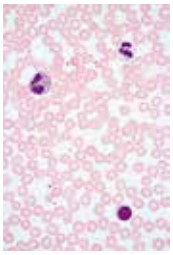
The number of student sets should correspond to the number of students in a class. The student sets comprise:

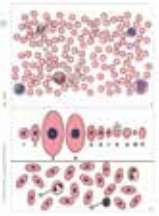
1. Set of selected prepared microscope slides in plastic box (the same as the teacher slides)
2. Textbook with detailed description of all slides
3. Special cardboard box for storing and packing

The CD-ROMs can be ordered together with the multimedia packages. We are currently developing an e-learning platform for you. Owners of previously purchased multimedia packages for teachers and students can purchase all CD-ROMs retrospectively.


Multimedia-Packages and CD-ROM for Teachers and Students





SME-01 MULTIMEDIA TEACHER PACKAGE
Teaching Series for Elementary Science

Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard bo

1. Letter „e" - 2. Leg of house fly w.m. - 3. Wing scales of butterfly - 4. Human blood smear - 5. Large plant cells in the marrow of elderberry t.s. - 6. Colored threads w.m.

SSE-01 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-01
Elementary Science

SME-02 MULTIMEDIA TEACHER PACKAGE
Protozoa

Basic Package of 8 items

Comprising: 8 Microscope Slides in Plastic Box, 4 OHP Color Transparencies, 8 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Amoeba proteus, showing nucleus and pseudopodia - 2. Paramecium, a ciliate found in hay infusions - 3. Euglena, a common green flagellate - 4. Ceratium, dinoflagellates - 5. Vorticella, a staked ciliate. - 6. Radiolaria, different forms - 7. Monocystis, sporozoa in earthworm seminal vesicle - 8. Trypanosoma, blood flagellate causing sleeping sickness, blood smear

SSE-02 MULTIMEDIA STUDENT SET
Comprising: 8 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-02
Protozoa

SME-03 MULTIMEDIA TEACHER PACKAGE
Invertebrates

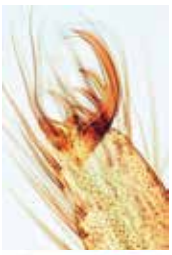
Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 4 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Marine sponge (Grantia), t.s. - 2. Hydra, fresh-water polyp, t.s. of body - 3. Earthworm (Lumbricus), t.s. showing intestine, body wall, muscles - 4. Water flea (Daphnia), small fresh water crustaceans w.m. - 5. Araneus, spider, leg with comb w.m. - 6. Starfish (Asterias), arm with tube feet, t.s

SSE-03 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-03
Invertebrates



SME-04 MULTIMEDIA TEACHER PACKAGE
Invertebrates

Supplementary Package of 12 items

Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Hydra, fresh-water polyp, w.m. - 2. Commercial sponge (Euspongia), skeleton of horny fibres - 3. Laomedea, w.m. of colony, vegetative and reproductive polyps - 4. Sea Anemone (Actinia), t.s. of the body - 5. Planaria, t.s. for general structure - 6. Tapeworm (Taenia), proglottid t.s., intestinal parasite - 7. Cyclops sp., copepode, w.m. - 8. Crayfish (Astacus), intestine, t.s. - 9. Dermanyssus gallinae, chicken mite, w.m. - 10. Clam (Mya arenaria), gills. t.s - 11. Echinus, young sea urchin, t.s. - 12. Amphioxus, Branchiostoma, typical t.s. region of gills and intestine

SSE-04 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-04
Invertebrates

SME-05 MULTIMEDIA TEACHER PACKAGE
Insects

Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Musca domestica, housefly, leaking-sucking mouth parts w.m - 2. Apis mellifica, honey bee, anterior and posterior wings w.m. - 3. Musca domestica, house fly, leg with pulvilli w.m. - 4. Pieris, butterfly, portion of wings with scales w.m. - 5. Trachea from insect w.m. - 6. Spiracle from insect w.m.

SSE-05 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-05
Insects

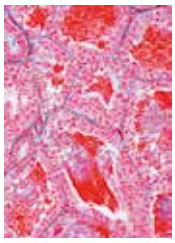
SME-06 MULTIMEDIA TEACHER PACKAGE
Insects, Supplementary Package of 12 items

Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Culex pipiens, mosquito, piercing sucking mouth parts w.m. - 2. Apis mellifica, posterior leg with pollen basket w.m. - 3. Drosophila, fruit fly, w.m. of adult - 4. Culex pipiens, mosquito, w.m. of larva - 5. Apis mellifica, honey bee, mouth parts of worker t.s. - 6. Pieris, butterfly, clubbed antenna w.m. - 7. Aphidae, plant lice adults and larvae w.m - 8. Pieris, butterfly, walking leg w.m. - 9. Apis mellifica, honey bee, sting and poison sac w.m. - 10. Musca domestica. house fly, wing w.m - 11. Drosophila, fruit fly, sagittal l.s. for general insect anatomy - 12. Apis mellifica, head with compound eyes and brain t.s.

SSD-06 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-06
Insects

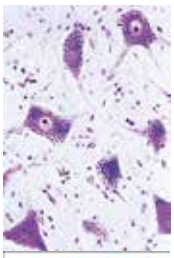



SMD-07 MULTIMEDIA-TEACHER PACKAGE:
Frog Histology (Rana)
Basic Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Frog, simple sac-like lung t.s. - 2. Frog, blood smear, shows nucleated red corpuscles - 3. Frog, stomach t.s., glandular epithelium - 4. Frog, small intestine t.s., folds - 5. Frog, large intestine (colon) t.s., goblet cells - 6. Frog, liver t.s., showing liver parenchyma cells- 7. Frog, ovary t.s. shows follicle development, yolk - 8. Frog, testis t.s. showing spermatogenesis - 9. Frog, heart l.s. of the entire organ - 10. Frog, tongue t.s., papillae, glands, muscles - 11. Frog, skin t.s., skin glands, epidermis, pigment cells - 12. Frog, brain t.s. showing nerve cells.

SSD-07 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-07
Frog Histology (Rana)

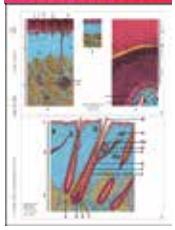



SMD-08 MULTIMEDIA-TEACHER PACKAGE:
The Animal Cell (Cytology)
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Simple animal cells in t.s. of salamander liver - 2. Squamous epithelial cells from cheek - 3. Nerve cells and fibers - 4. Bone cells, t.s. of compact bone - 5. Striated muscle cells, l.s. of skeletal muscle - 6. Blood cells, smear of human blood with red and white corpuscles

SSD-08 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-08
The Animal Cell (Cytology)

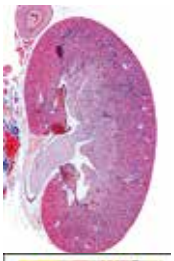
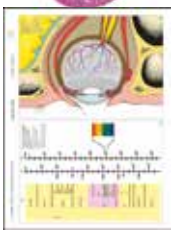



SMD-09 MULTIMEDIA-TEACHER PACKAGE:
Human and animal Histology
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box,3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Squamous epithelium, isolated cells - 2. Hyaline cartilage of calf, t.s - 3. Compact bone of cow, t.s. - 4. Striated muscles of cat, l.s - 5. Smooth muscles of cat, t.s. and l.s. - 6. Blood, human, Giemsa or Wright stained smear

SSD-09 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

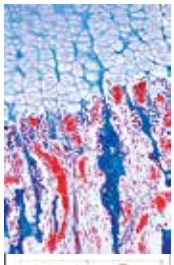
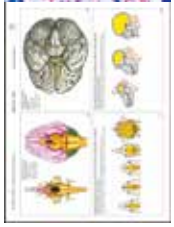
Addition: CD-ROM No. CD-SM-09
Human and animal Histology

SMD-10 MULTIMEDIA-TEACHER PACKAGE:
Human and animal Histology
Supplementary Package I of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Columnar epithelium, human gall bladder, t.s - 2. Elastic cartilage, ear, t.s. Elastic tissue stain - 3. Skin, human, from palm, t.s. showing sweat glands - 4. Lung, human t.s. showing alveoli - 5. Heart muscle, t.s. and l.s., striations, intercalated discs - 6. Stomach of cat, fundic region, t.s. - 7. Kidney, cat, t.s. showing cortex and medulla - 8. Testis, rabbit, t.s. showing spermatogenesis - 9. Ovary, rabbit, t.s. follicle development - 10. Cerebrum, human, cortex, t.s. - 11. Spinal cord, cat, t.s. for general structure - 12. Tongue, rabbit, t.s., papillae with taste buds

SSD-10 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

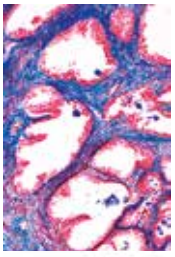
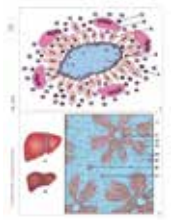
Addition: CD-ROM No. CD-SM-10
Human and animal Histology

SMD-11 MULTIMEDIA-TEACHER PACKAGE:
Human and animal Histology
Supplementary Package II of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Ciliated epithelium, trachea, t.s. - 2. Adipose tissue, t.s. - 3. Bone development (intracartilaginous), l.s. of foetal finger - 4. White fibrous tissue of cow, l.s. of tendon - 5. Artery, human, t.s., elastica stained - 6. Vein, human, t.s., elastica stained - 7. Small intestine of cat, t.s. stained for goblet cells - 8. Pancreas, human, t.s. with islets of Langerhans - 9. Liver of pig, t.s. - 10. Cerebellum, human, t.s. - 11. Thyroid gland of cow, t.s - 12. Mammary gland of cow, t.s. active stage

SSD-11 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-11
Human and animal Histology

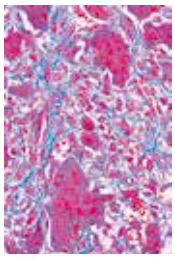
SMD-12 MULTIMEDIA-TEACHER PACKAGE:
Human diseases (Pathology)
Basic Package of 6 items

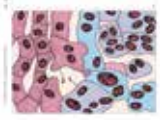
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Tuberculosis of the lung, t.s. with bacterial foci - 2. Anthracosis of lung (smokers´s lung) - 3. Struma of thyroid gland (Goiter) - 4. Acute hemorrhagic nephritis (Kidney) - 5. Cirrhosis of liver, t.s. (abuse of alcohol) - 6. Eberthella typhi (typhoid fever), smear

SSD-12 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-12
Human diseases (Pathology)





SMD-13 MULTIMEDIA-TEACHER PACKAGE: Human diseases (Pathology)

Supplementary Package of 12 items

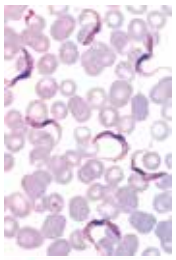
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Miliary tuberculosis of liver - 2. Influenzal pneumonia - 3. Spindle cell sarcoma - 4. Carcinoma of liver (primary) - 5. Hypertrophy of prostate - 6. Adiposis of heart - 7. Icterus hepatis - 8. Myoma of uterus - 9. Carcinoma of uterus - 10. Malaria parasites in blood (Plasmodium), smear - 11. Sleeping disease of humans, blood smear with flagellates (Trypanosoma) - 12. Pus bacteria, smear showing cocci in irregular balls

SSD-13 MULTIMEDIA STUDENT SET

Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-13 Human diseases (Pathology)




SMD-14 MULTIMEDIA-TEACHER PACKAGE: Parasites

Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Trypanosoma, blood flagellate causing sleeping sickness, blood smear - 2. Plasmodium falciparum, causing malaria tropica, human blood smear - 3. Taenia, tapeworm, proglottids in different stages t.s - 4. Ascaris lumbricoides, roundworm of human, adult female t.s. in region of gonads. - 5. Trichinella spiralis, t.s. of infected muscle with larvae - 6. Fasciola hepatica, beef liver fluke, t.s. of the body

SSD-14 MULTIMEDIA STUDENT SET

Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-14 Parasites


SMD-15 MULTIMEDIA-TEACHER PACKAGE: Parasites. Supplementary Package of 12 items

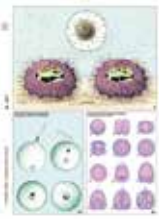
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Entamoeba histolytica, smear or section - 2. Eimeria stiedae, coccidiosis in rabbit liver, t.s. - 3. Monocystis, from earthworm seminal vesicle - 4. Fasciola hepatica, beef liver fluke, w.m. - 5. Taenia pisiformis, tapeworm, mature proglottids w.m. - 6. Enterobius vermicularis (Oxyuris), pin worm, w.m. - 7. Echinococcus granulosus, dog tapeworm, cyst wall and scolices sec. - 8. Dermanyssus, chiken mite w.m. - 9. Anopheles, malaria mosquito, mouth parts of female w.m. - 10. Culex pipiens, common mosquito, mouth parts of female w.m. - 11. Pediculus humanus, human louse, w.m. - 12. Ctenocephalus canis, dog flea, adult w.m.

SSD-15 MULTIMEDIA STUDENT SET

Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-15 Parasites

SMD-16 MULTIMEDIA-TEACHER PACKAGE: Reproduction of animals

Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Mitotic (division) stages in red bone marrow of mammal t.s. - 2. Meiotic (maturation) stages in testis of mouse t.s. - 3. Sea-urchin development, first cleavage stages of egg cells, w.m. - 4. Growing egg and yolk cells in ovary of bird, t.s. - 5. Ovary of rabbit or other mammal showing oogenesis, t.s. - 6. Sperm smear of bull showing w.m. of spermatozoa

SSD-16 MULTIMEDIA STUDENT SET

Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-16 Reproduction of animals


SMD-17 MULTIMEDIA-TEACHER PACKAGE: Embryology and development of animals

Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Frog, early tail bud stage, t.s. with neural tube, notochord - 2. Frog, young tadpole, t.s. through head - 3. Chicken, 36 hour, t.s. with neural tube, differentiation of mesoderm - 4. Chicken, 48 hour, t.s. with differentiation of mesoderm and ectoderm - 5. Chicken, 3 day, t.s. of head with primordium of brain, eyes and heart - 6. Mouse embryo, t.s. of head, development of hairs, brain, etc.

SSD-17 MULTIMEDIA STUDENT SET

Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-17 Embryology and development of animals


SMD-18 MULTIMEDIA-TEACHER PACKAGE: Embryology and development of animals, Supplementary Package of 12 items

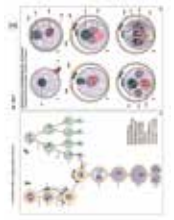
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Vinegar eels (Anguillula), various stages w.m. - 2. Ascaris megalocephala, first and second maturation divisions in oocytes - 3. Ascaris, oocytes with male and female pronuclei - 4. Mosquito (Culex), larva of insect, w.m. - 5. Frog, hatching stage, t.s. region of midbody - 6. Frog, young tadpole, t.s. thorax - 7. Frog, young tadpole, t.s. of abdomen - 8. Chicken, 3 day, t.s. through body showing amnion and serosa. - 9. Chicken, 4-5 day, t.s. through region of heart shows heart, lungs, vertebrae, spinal cord - 10. Chicken, feather development, sec. of wings - 11. Mouse embryo, t.s. of body - 12. Pig embryo, 11-12 mm, typical t.s. region of abdomen

SSD-18 MULTIMEDIA STUDENT SET

Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

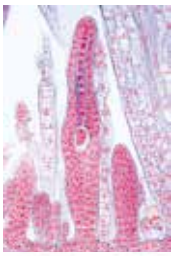
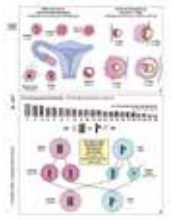
Addition: CD-ROM No. CD-SM-18 Embryology and development of animals

SMD-19 MULTIMEDIA-TEACHER PACKAGE:
Genetic slides. Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Allium cepa, onion, root tips, l.s. showing all stages of mitosis - 2. Chromosomes, human, of culture of peripheral blood, smear preparation - 3. Sea urchin, developing of eggs, w.m. of most stages up to pluteus in the same slide - 4. Ascaris megalocephala, male and female pronuclei, sec. - 5. Testis of rabbit, t.s. showing spermatogenesis in all stages - 6. Spirogyra, scalariform conjugation showing zygotes following conjugation

SSD-19 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

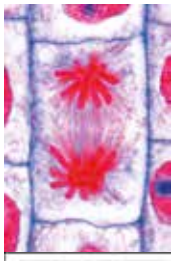
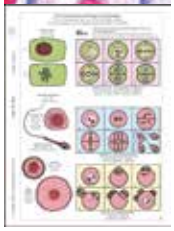
Addition: CD-ROM No. CD-SM-19
Genetic slides

SMD-20 MULTIMEDIA-TEACHER PACKAGE:
Genetic slides. Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Allium, root tips, t.s. showing polar view of mitosis, iron-hematoxyline - 2. Ovary of rabbit, l.s. follicles in various stages of development - 3. Lilium, microspore mother cells, prophase stages t.s. - 4. Paramaecium, from mass culture showing stages of binary division - 5. Rhizopus or Mucor, mold, formation of zygospores w.m. - 6. Mnium, moss, archegonium, l.s. - 7. Mnium, moss, antheridium, l.s. - 8. Pinus, young female cone at time of pollination, l.s. - 9. Pinus, male cone with pollen l.s. - 10. Lilium, stigma, l.s. showing penetrating pollen grains - 11. Drosophila genetics, adult wild type, w.m. - 12. Drosophila genetics, "barr eye" mutant, w.m.

SSD-20 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

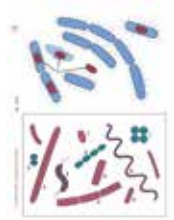
Addition: CD-ROM No. CD-SM-20
Genetic slides

SMD-21 MULTIMEDIA-TEACHER PACKAGE:
Mitosis and Meiosis (Cell division)
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Allium, root tips, l.s. showing lateral view of all stages of mitosis, iron-hematoxyline - 2. Whitefish mitosis, l.s. of embryo showing animal mitosis - 3. Testis of mouse, t.s. showing spermatogenesis in all stages - 4. Giant chromosomes from salivary gland of Chironomus, squash preparation special stained for chromomeres - 5. Lilium, microspore mother cells, prophase of first division showing meiosis, - 6. Lilium, microspore mother cells, meta- or anaphase of first division, showing mitosis

SSD-21 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

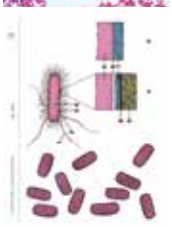
Addition: CD-ROM No. CD-SM-21
Mitosis and Meiosis (Cell division)

SMD-22 MULTIMEDIA-TEACHER PACKAGE:
Bacteria. Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Bacteria from mouth, smear with Gram positive and negative rods - 2. Typical bacteria: three smears on one slide, cocci, bacteria and spirilli are shown, carefully stained - 3. Staphylococcus aureus, pus organism - 4. Bacillus subtilis, hay bacillus, smear with bacilli and spores - 5. Escherichia coli, colon bacteria - 6. Spirillum volutans, large species from putrid water

SSD-22 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-22
Bacteria

SMD-23 MULTIMEDIA-TEACHER PACKAGE:
Bacteria. Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Streptococcus pyogenes, pus organism - 2. Sarcina lutea, chromogenic rods occurring in packets - 3. Streptococcus lactis, milk souring organism, short chains - 4. Mycobacterium tuberculosis, causing tuberculosis - 5. Corynebacterium diphtheriae, causing diphtheria - 6. Rhizobium radicicola, nitrogen fixing bacteria in root nodules - 7. Proteus vulgaris, putrefaction - 8. Eberthella typhi, causing typhoid fever - 9. Clostridium botulinum (botulism), causing food poisoning, smear - 10. Acetobacter aceti, manufacture of vinegar, smear - 11. Salmonella enteritidis, causes meat poisoning, smear - 12. Rhodospirillum rubrum, chromogenic spirilli

SSD-23 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-23
Bacteria

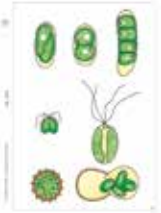

SMD-24 MULTIMEDIA-TEACHER PACKAGE:
Algae
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Nostoc, blue-green alga with heterocysts - 2. Diatoms, fresh water, recent, mixed species - 3. Spirogyra, vegetative filaments with spiral chloroplasts, w.m. - 4. Cladophora sp., branching filaments with multinucleate cells - 5. Chlamydomonas, biflagellate cells, w.m. - 6. Desmids, strewn slide showing several selected forms

SSD-24 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-24
Algae

SMD-25 MULTIMEDIA-TEACHER PACKAGE:
Algae. Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Chroococcus, a single-cell alga, w.m - 2. Oscillatoria, a blue-green filamentous alga w.m. - 3. Microcystis, irregular colonies w.m. - 4. Draparnaldia, main filaments and clusters of branches w.m. - 5. Hydrodictyon, water net, w.m. - 6. Oedogonium, a filamentous green alga with vegetative and sexual stages - 7. Volvox, spherical colonies with daughter colonies and sexual stages w.m. - 8. Dinobryon, a golden alga forming colonies w.m. - 9. Pleurococcus (Protococcus), small colonies growing on bark, w.m. - 10. Laminaria saccharina,thallus with sporangia, c.t. - 11. Fucus vesiculosus, seaweed, male conceptacle with antheridia, t.s. - 12. Fucus vesiculosus, female conceptacle with oogonia t.s.



SSD-25 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-25
Algae

SMD-26 MULTIMEDIA-TEACHER PACKAGE:
Cryptogams
Basic Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Oscillatoria, blue green alga - 2. Spirogyra sp., vegetative filaments w.m. - 3. Mucor, black mold, mycelium and sporangia - 4. Peziza, apothecium with asci t.s. - 5. Saccharomyces, yeast, budding cells - 6. Coprinus, mushroom, t.s. showing typical basidia and spores - 7. Moss stem with leaves w.m. - 8. Marchantia, liverwort, archegonia l.s. - 9. Marchantia, liverwort, antheridia l.s. - 10. Equisetum, horsetail, strobilus with spores l.s. - 11. Pteridium, bracken fern, t.s. of rhizome - 12. Aspidium (Dryopteris), fern, leaflet with sporangia and spores t.s.

SSD-26 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-26
Cryptogams

SMD-27 MULTIMEDIA-TEACHER PACKAGE:
Cryptogams
Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Nostoc, blue green alga with heterocysts - 2. Diatoms, mixed species - 3. Albugo candida, white rust of cruzifers, t.s. - 4. Penicillium, blue mold, mycelium and conidiophores - 5. Puccinia graminis, wheat rust, uredinia on wheat t.s. - 6. Psalliota, gill fungus, pileus with lamellae t.s - 7. Claviceps purpurea, ergot, stroma with perithecia l.s. - 8. Physcia, sec. through thallus of a typical lichen showing the fungus and the embedded algae - 9. Polytrichum, moss, capsule with spores t.s. - 10. Equisetum, horse tail, spores with elaters w.m. - 11. Lycopodium, clubmoss, sporophyll with spores l.s. - 12. Fern prothallium w.m.

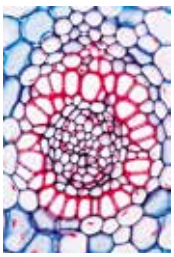
SSD-27 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-27
Cryptogams

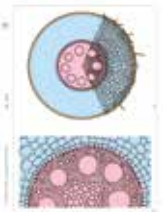
SMD-28 MULTIMEDIA-TEACHER PACKAGE:
The Plant Cell (Cytology)
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Epidermis of Allium cepa (onion), w.m. showing simple plant cells with cell walls, nuclei and cytoplasm - 2. Fruit of Pyrus (pear) t.s. showing stone cells (sclerenchyma cells) - 3. Tuber of Solanum (potato) t.s. shows cork and starch grains - 4. Cucurbita pepo (pumpkin) l.s. of stem showing vascular bundles with sieve tubes, spiral and annular vessels, sclerenchyma fibres - 5. Anthers of Lilium (lily), t.s. showing pollen sacs and pollen grains - 6. Ovary of Lilium (lily), t.s. showing arrangement of ovules and embryosac

SSD-28 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-28
The Plant Cell (Cytology)



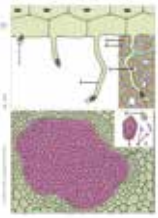
SMD-29 MULTIMEDIA-TEACHER PACKAGE:
Typical Roots of Phanerogams
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Zea mays, corn, typical monocot root t.s. - 2. Ranunculus, buttercup, typical dicot root t.s. - 3. Root tip and root hairs, t.s. to show epidermal origin of root hairs - 4. Smilax, carrion flower, t.s. of root shows thickened endodermis - 5. Elodea, Canadian waterweed, t.s. of an aquatic root - 6. Lupinus, root nodules with nitrogen fixing bacteria (Rhizobium radicicola) t.s.



SSD-29 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

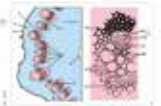
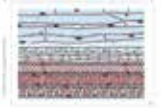
Addition: CD-ROM No. CD-SM-29
Typical Roots of Phanerogams

SMD-30 MULTIMEDIA-TEACHER PACKAGE:
Typical Roots of Phanerogams
Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Herbaceous and woody roots, two t.s. on one slide - 2. Young (primary) and older (secondary) roots, two t.s. on one slide - 3. Salix, willow, l.s. of root showing origin of lateral roots - 4. Iris, typical monocot root t.s. - 5. Medicago, alfalfa, root t.s. showing secondary growth - 6. Tilia, lime, older woody root t.s. - 7. Monstera, aerial root t.s. - 8. Taraxacum, dandelion, taproot with lactiferous vessels t.s. - 9. Fagus, beech, root with ectotrophic mycorrhiza, t.s. - 10. Neottia nidus avis, orchid, root with endotrophic mycorrhiza, l.s. - 11. Cuscuta, dodder, t.s. through stem of host showing the haustoria of the parasite - 12. Pinus, older woody root t.s.



SSD-30 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-30
Typical Roots of Phanerogams

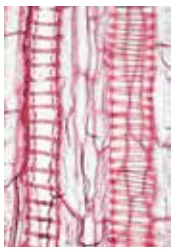




SMD-31 MULTIMEDIA-TEACHER PACKAGE:
Typical Stems of Phanerogams
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Zea mays, typical monocot stem with scattered bundles, t.s., a standard slide for general study - 2. Helianthus, sunflower, typical dicot herbaceous stem t.s. showing open vascular bundles - 3. Cucurbita, pumpkin, l.s. of stem with sieve tubes and vascular bundles - 4. Triticum, wheat, t.s. through the stem of a gramineous plant - 5. Elodea, waterweed, t.s. of aquatic stem showing primitive bundle - 6. Convallaria, lily of the valley, t.s. of rhizome with concentric vascular bundles

SSD-31 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

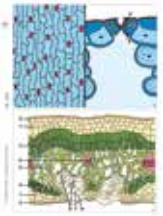
Addition: CD-ROM No. CD-SM-31
Typical Stems of Phanerogams




SMD-32 MULTIMEDIA-TEACHER PACKAGE:
Typical Stems of Phanerogams
Supplementary Package of 12 item
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Aristolochia, one year stem t.s. for general study - 2. Aristolochia, older stem t.s. - 3. Fagus, beech, three sections of wood: t.s., r.l.s., t.l.s. - 4 Tilia, lime, older woody stem with annual rings, t.s. - 5. Nymphaea, water lily, aquatic stem with idioblasts t.s. - 6. Potamogeton, pondweed, stem with aerial chambers t.s. - 7. Opuntia, cactus, succulent stem t.s. - 8. Ranunculus, buttercup, t.s. stem with open vascular bundles - 9. Coleus, t.s. of a square stem showing collenchyma clearly - 10. Hedera helix, ivy, stem with crystals t.s - 11. Clematis, young hexagonal stem t.s., collenchyma - 12. Solanum tuberosum, potato, t.s. of tuber with starch grains

SSD-32 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-32
Typical Stems of Phanerogams

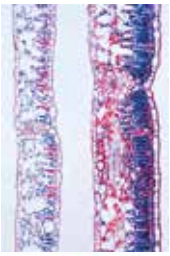



SMD-33 MULTIMEDIA-TEACHER PACKAGE:
Typical Leaves of Phanerogams
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Zea mays, corn, monocot gramineous leaf t.s. - 2. Syringa, lilac, t.s. of a typical mesophytic dicot leaf for general study - 3. Tulipa, tulip, leaf epidermis w.m., showing lstomata and guard cells - 4. Elodea, t.s. of leaf showing the simple structure of an aquatic leaf - 5. Nerium, oleander, leaf with sunken stomata t.s., showing the typical structures of a xerophytic leaf - 6. Pinus, leaves (needles), t.s. for general study of gymnosperm leaves

SSD-33 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-33
Typical Leaves of Phanerogams




SMD-34 MULTIMEDIA-TEACHER PACKAGE:
Typical Leaves of Phanerogams
Supplementary Package of 12 item
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Iris, typical isobilateral leaf t.s. - 2. Poa annua, meadow grass, leaf t.s. - 3. Ligustrum, privet, t.s. of dicot leaf - 4. Helleborus, t.s. of a typical mesophytic dicot leaf for general study - 5. Ficus elastica, India rubber plant, leaf with cystoliths t.s. - 6. Nymphaea, water lily, floating leaf of an aquatic plant with air chambers t.s. - 7. Potamogeton, pondweed, leaf t.s. - 8. Calluna, ling, revolute leaves t.s. - 9. Verbascum, mullein, branched leaf hairs w.m. - 10. Dionaea, Venus flytrap, t.s. of leaf with digestive glands - 11. Drosera, sundew, leaf with glandular hairs, t.s. - 12. Fagus, beech, leaf bud t.s. showing leaf development

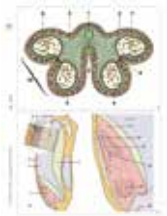
SSD-34 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-34
Blütenpflanzen, Blätter


SMD-35 MULTIMEDIA-TEACHER PACKAGE:
Flowers and Fruits
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Lilium candidum, lily, t.s. of flower bud showing floral diagram of a monocot - 2. Lycopersicum, tomato, t.s. of flower bud shows floral diagram of a dicot - 3. Lilium, anther t.s. showing pollen chambers and pollen grains - 4. Lilium, ovary t.s., showing arrangement of ovules - 5. Capsella bursa pastoris, shepherd's purse, l.s. of ovule with embryos - 6. Triticum, wheat, grain (seed), t.s. showing embryo and endosperm

SSD-35 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

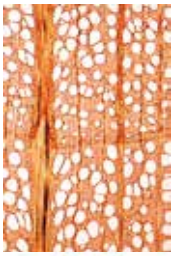
Addition: CD-ROM No. CD-SM-35
Flowers and Fruits

SMD-36 MULTIMEDIA-TEACHER PACKAGE:
Flowers and Fruits
Supplementary Package of 12 item
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Lilium, l.s. of stigma with pollen and pollen tubes - 2. Monotropa, Indian pipe, ovary t.s. with developing embryosacs - 3. Papaver, poppy, t.s. of flower shows parietal placentation - 4. Solanum tuberosum, potato, t.s. flower bud for floral diagram - 5. Taraxacum, dandelion, l.s. of composite flower - 6. Cocos nucifera, coconut, endosperm t.s. - 7. Citrus, lemon, young fruit t.s. - 8. Lycopersicum, tomato, young fruit t.s. - 9. Pyrus malus, apple, young pome t.s., a fleshy, many seeded fruit - 10. Mixed pollen types, many different species - 11. Pinus, ovule l.s. showing archegonia, for general study - 12. Pinus, male cone with pollen l.s.

SSD-36 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-36
Flowers and Fruits




SMD-37 MULTIMEDIA-TEACHER PACKAGE:
Varieties of wood
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Maple. Acer platanoides, three sections of wood - 2. Beech. Fagus silvatica, three sections of wood - 3. Pine. Pinus silvestris , three sections of wood - 4. Spruce. Picea excelsa , three sections of wood - 5. Poplar. Populus alba, three sections of wood - 6. Lime. Tilia platyphylla, three sections of wood

SSD-37 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-37
Varieties of wood

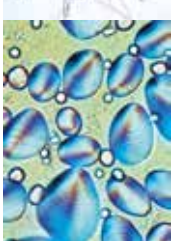

SMD-38 MULTIMEDIA-TEACHER PACKAGE:
Textile fibres, hairs and furs
Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Merino wool - 2. Cocoon silk, raw - 3. Linen (flax) - 4. American cotton - 5. Cellulose fibers - 6. Nylon fabric

SSD-38 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-38
Textile fibres, hairs and furs

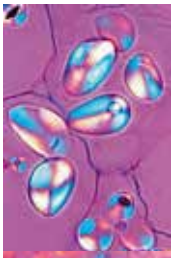
SMD-39 MULTIMEDIA-TEACHER PACKAGE:
Foodstuff and its adulteration
Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Mold in spoiled foodstuffs - 2. Sour milk, stained for bacteria - 3. Wheat flour adulterated with chalk - 4. Corn flour spoiled with spores of corn smut (Ustilago) - 5. Rye flour spoiled with moths - 6. Flour spoiled with mites (Tyroglyphus farinae)

SSD-39 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-39
Foodstuff and its adulteration



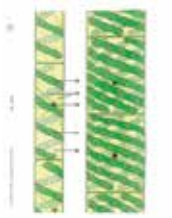

SMD-40 MULTIMEDIA-TEACHER PACKAGE:
Foodstuffs and spices under the microscope
Basic Package of 12 items

Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Rye flour - 2. Potato starch - 3. Soya meal - 4. Wheat flour - 5. Rice starch - 6. Coffee bean t.s. - 7. Black pepper, ground - 8. Paprika, ground - 9. Nutmeg t.s. - 10. Cocoa powder - 11. Tobacco, leaves t.s. - 12. Hazelnut, t.s. stained for fat

SSD-40 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

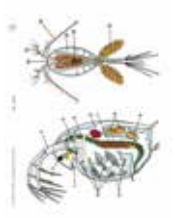
Addition: CD-ROM No. CD-SM-40
Foodstuffs and spices under the microscope

SMD-41 MULTIMEDIA-TEACHER PACKAGE:
The wonderful world in a drop of water
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Euglena, green flagellate with eyespot - 2. Paramecium, nuclei stained - 3. Daphnia and Cyclops, small crustaceans - 4. Spirogyra, green alga with spiral chloroplasts - 5. Spongilla, fresh water sponge, isolated spicules - 6. Diatomeae, diatoms, mixed species

SSD-41 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

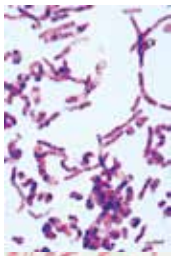
Addition: CD-ROM No. CD-SM-41
The wonderful world in a drop of water

SMD-42 MULTIMEDIA-TEACHER PACKAGE:
The wonderful world in a drop of water
Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Ceratium hirundinella, dinoflagellates - 2. Vorticella, a stalked ciliate - 3. Putrefaction causing bacteria from hay infusions - 4. Hydra, fresh water polyp, t.s. of the body - 5. Cladophora, green alga, branched filaments - 6. Eudorina, small colonies within gelatinous sheaths - 7. Microcystis, irregular colonies - 8. Rotatoria, rotifers, mixed species - 9. Planaria, fresh water flat worm, t.s. of body - 10. Plumatella, moss animal, section of colony - 11. Tubifex, a fresh water oligochaete - 12. Mixed plankton, strewn slide

SSD-42 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

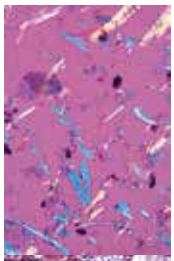
Addition: CD-ROM No. CD-SM-42
The wonderful world in a drop of water




SMD-43 MULTIMEDIA-TEACHER PACKAGE:
Identifying polluted water under the microscope
Basic Package of 6 items
Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Intestinal bacteria (Escherichia coli) from putrid water - 2. Putrefactive bacteria (Spirillum) from sludge poor in oxygen - 3. Sludge bacteria (Methanobacterium) causing sewer gas - 4. Wasserbluthe (Microcystis), blue-green alga "blooming" in stagnant water - 5. Ciliates, different species from nutrient-rich water - 6. Water mold (Saprolegnia), harmful to plants and animals

SSD-43 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-43
Identifying polluted water under the microscope



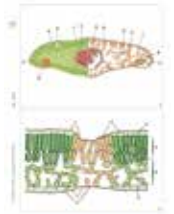

SMD-44 MULTIMEDIA-TEACHER PACKAGE:
Air Pollution and Allergens
Basic Package of 6 items

Comprising: 6 Microscope Slides in Plastic Box, 3 OHP Color Transparencies, 6 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box

1. Pollen grains of different kinds of grass - 2. Pollen grains of different kinds of conifers - 3. Mixed house dust (causing allergens) - 4. Asbestos powder (cancerogenous) - 5. Dust mite from a living room - 6. Spores of different fungi

SSD-44 MULTIMEDIA STUDENT SET
Comprising: 6 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

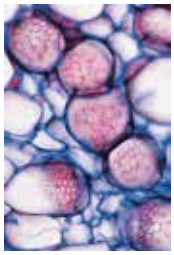
Addition: CD-ROM No. CD-SM-44
Air Pollution and Allergens

SMD-45 MULTIMEDIA-TEACHER PACKAGE:
Damages by environmental influences
Basic Package of 8 items
Comprising: 8 Microscope Slides in Plastic Box, 4 OHP Color Transparencies, 8 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
. Skin of fish injured by chemicals, t.s. - 2. Skin ulcer of an amphibian, t.s. - 3. Human lung injured with dust particles, t.s. - 4. Gall nut on oak caused by insects, t.s. - 5. Beech (Fagus), t.s. of leaves with destroyed epidermis and chloroplasts - 6. Damaged lichen, caused by air pollution - 7. Wood with anomalous narrow annual rings caused by drought, t.s. - 8. Wood destroyed by fungus

SSD-45 MULTIMEDIA STUDENT SET
Comprising: 8 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-45
Damages by environmental influences




SMD-50 MULTIMEDIA-TEACHER PACKAGE
Anatomy of Phanerogams
Basic Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Zea mays, corn, monocot root t.s. - 2. Ranunculus, buttercup, dicot root t.s. - 3. Root tip and root hairs, t.s. epidermal origin of root hairs - 4. Zea mays, monocot stem with scattered bundles, t.s. - 5. Helianthus, sunflower, dicot herbaceous stem t.s. - 6. Zea mays, corn, monocot gramineous leaf t.s. - 7. Syringa, lilac, t.s. of a typical mesophytic dicot leaf - 8. Tulipa, tulip, leaf epidermis w.m., stomata and guard cells - 9. Lilium, lily, t.s. of flower bud showing floral diagram - 10. Lilium, anther t.s. showing pollen chambers and pollen grains - 11. Lilium, ovary t.s., showing arrangement of ovules - 12. Triticum, wheat, seed t.s. embryo and endosperm

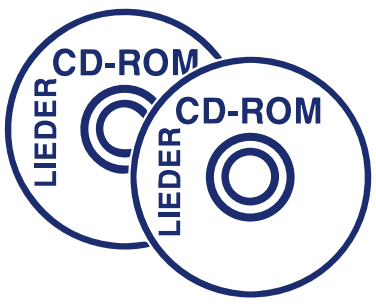
SSD-50 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-50
Anatomy of Phanerogams


SMD-51 MULTIMEDIA-TEACHER PACKAGE
Anatomy of Phanerogams
Supplementary Package of 12 items
Comprising: 12 Microscope Slides in Plastic Box, 6 OHP Color Transparencies, 12 Sketch- and Worksheets, Brochure with explanatory text, Special cardboard box
1. Herbaceous and woody roots, two t.s. on one slide - 2. Lupinus, root nodules with nitrogen fixing bacteria t.s. - 3. Fagus, beech, root with ectotrophic mycorrhiza, t.s. - 4. Aristolochia, older stem t.s. - 5. Cucurbita, pumpkin, l.s. of stem with sieve tubes and vascular bundles - 6. Solanum tuberosum, potato, t.s. of tuber with starch grains - 7. Nerium, oleander, leaf with sunken stomata t.s. xerophytic leaf - 8. Pinus, leaves (needles), t.s. - 9. Lycopersicum, tomato, t.s. of flower bud shows floral diagram - 10. Mixed pollen types, many different species - 11. Pinus, ovule l.s. showing archegonia - 12. Pinus, male cone with pollen l.s.

SSD-51 MULTIMEDIA STUDENT SET
Comprising: 12 Microscope Slides in Plastic Box, Brochure with explanatory text, Cardboard box

Addition: CD-ROM No. CD-SM-51
Anatomy of Phanerogams



MULTIMEDIA-PAKETE TEACHER PACKAGE

SME-01 Teaching Series for Elementary Science, Pack of 6 items
SME-02 Protozoa, Basic Pack of 8 items
SME-03 Invertebrates, Basic Pack of 6 items
SME-04 Invertebrates, Supplementary Pack of 12 items
SME-05 Insects, Basic Pack of 6 items
SME-06 Insects, Supplementary Pack of 12 items
SME-07 Frog Histology (Rana), Basic Pack of 12 items
SME-08 The Animal Cell (Cytology), Basic Pack of 6 items
SME-09 Human and animal Histology, Basic Pack of 6 items
SME-10 Human and animal Histology, Suppl. Pack I of 12 items
SME-11 Human and animal Histology, Suppl. Pack II of 12 items
SME-12 Human diseases (Pathology), Basic Pack of 6 items
SME-13 Human diseases (Pathology), Suppl. Pack of 12 items
SME-14 Parasites of man and animals, Basic Pack of 6 items
SME-15 Parasites of man and animals, Suppl. Pack of 12 items
SME-16 Reproduction of animals, Basic Pack of 6 items
SME-17 Embryology, Basic Pack of 6 items
SME-18 Embryology, Supplementary Pack of 12 items
SME-19 Genetis, Basic Pack of 6 items
SME-20 Genetic , Supplementary Pack of 12 items
SME-21 Mitosis and Meiosis (Cell division), Basic Pack of 6 items
SME-22 Bacteria, Basic Pack of 6 items
SME-23 Bacteria, Supplementary Pack of 12 items
SME-24 Algae, Basic Pack of 6 items
SME-25 Algae, Supplementary Pack of 12 items
SME-26 Cryptogams, Basic Pack of 12 items
SME-27 Cryptogams, Supplementary Pack of 12 items
SME-28 The Plant Cell (Cytology), Basic Pack of 6 items
SME-29 Roots of Phanerogams, Basic Pack of 6 items
SME-30 Roots of Phanerogams, Supplementary Pack of 12 items
SME-31 Stems of Phanerogams, Basic Pack of 6 items
SME-32 Stems of Phanerogams, Supplementary Pack of 12 items
SME-33 Leaves of Phanerogams, Basic Pack of 6 items
SME-34 Leaves of Phanerogams, Supplementary Pack of 12 items
SME-35 Flowers and Fruits, Basic Pack of 6 items
SME-36 Flowers and Fruits, Supplementary Pack of 12 items
SME-37 Varieties of wood, Basic Pack of 6 items
SME-38 Textile fibres, hairs and furs, Basic Pack of 6 items
SME-39 Foodstuff and its adulteration, Basic Pack of 6 items
SME-40 Foodstuffs and spices, Basic Pack of 12 items
SME-41 The world in a drop of water, Basic Pack of 6 items
SME-42 The world in a drop of water, Suppl. Pack of 12 items
SME-43 Identifying polluted water under the microscope, Basic Pack of 6 items
SME-44 Air Pollution and Allergens, Basic Pack of 6 items
SME-45 Animals and plants damaged by environmental influences, Basic Pack of 8 items
SME-50 Anatomy of Phanerogams, Basic Pack of 12 items
SME-51 Anatomy of Phanerogams, Suppl. Pack of 12 items

NEW MULTIMEDIA STUDENT SETS

SE-01 Teaching Series for Elementary Science, Set of 6 slides
SSE-02 Protozoa, Basic Set of 8 slides
SSE-03 Invertebrates, Basic Set of 6 slides
SSE-04 Invertebrates, Supplementary Set of 12 slides
SSE-05 Insects, Basic Set of 6 slides
SSE-06 Insects, Supplementary Set of 12 slides
SSE-07 Frog Histology (Rana), Basic Set of 12 slides
SSE-08 The Animal Cell (Cytology), Basic Set of 6 slides
SSE-09 Human and animal Histology, Basic Set of 6 slides
SSE-10 Human and animal Histology, Suppl. Set I of 12 slides
SSE-11 Human and animal Histology, Suppl. Set II of 12 slides
SSE-12 Human diseases (Pathology), Basic Set of 6 slides
SSE-13 Human diseases (Pathology), Suppl. Set of 12 slides
SSE-14 Parasites of man and animals, Basic Set of 6 slides
SSE-15 Parasites of man and animals, Supp. Set of 12 slides
SSE-16 Reproduction of animals, Basic Set of 6 slides
SSE-17 Embryology, Basic Set of 6 slides
SSE-18 Embryology, Supplementary Set of 12 slides
SSE-19 Genetic slides, Basic Set of 6 slides
SSE-20 Genetic slides, Supplementary Set of 12 slides
SSE-21 Mitosis and Meiosis (Cell division), Basic Set of 6 slides
SSE-22 Bacteria, Basic Set of 6 slides
SSE-23 Bacteria, Supplementary Set of 12 slides
SSE-24 Algae, Basic Set of 6 slides
SSE-25 Algae, Supplementary Set of 12 slides
SSE-26 Cryptogams, Basic Set of 12 slides
SSE-27 Cryptogams, Supplementary Set of 12 slides
SSE-28 The Plant Cell (Cytology), Basic Set of 6 slides
SSE-29 Typical Roots of Phanerogams, Basic Set of 6 slides
SSE-30 Typical Roots of Phanerogams, Suppl. Set of 12 slides
SSE-31 Typical Stems of Phanerogams, Basic Set of 6 slides
SSE-32 Typical Stems of Phanerogams, Suppl. Set of 12 slides
SSE-33 Typical Leaves of Phanerogams, Basic Set of 6 slides
SSE-34 Typical Leaves of Phanerogams, Suppl. Set of 12 slides
SSE-35 Flowers and Fruits, Basic Set of 6 slides
SSE-36 Flowers and Fruits, Supplementary Set of 12 slides
SSE-37 Varieties of wood, Basic Set of 6 slides
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SSE-45 Animals and plants damaged by environmental influences, Basic Set of 8 slides
SSE-50 Anatomy of Phanerogams, Basic Set of 12 slides
SSE-51 Anatomy of Phanerogams, Suppl. Set of 12 slides

INTERACTIVE EDUCATIONAL CD-ROM

CD-SM-01	Teaching Series for Elementary Science, CD-ROM
CD-SM-02	Protozoa, Basic CD-ROM
CD-SM-03	Invertebrates, Basic CD-ROM
CD-SM-04	Invertebrates, Supplementary CD-ROM
CD-SM-05	Insects, Basic CD-ROM
CD-SM-06	Insects, Supplementary CD-ROM
CD-SM-07	Frog Histology (Rana), Basic CD-ROM
CD-SM-08	The Animal Cell (Cytology), Basic CD-ROM
CD-SM-09	Human and animal Histology, Basic CD-ROM
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CD-SM-18	Embryology, Supplementary CD-ROM
CD-SM-19	Genetis, Basic CD-ROM
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CD-SM-41	The world in a drop of water, Basic CD-ROM
CD-SM-42	The world in a drop of water, Supplem. CD-ROM
CD-SM-43	Identifying polluted water under the microscope, Basic CD-ROM
CD-SM-44	Air Pollution and Allergens, Basic CD-ROM
CD-SM-45	Animals and plants damaged by environmental influences, Basic CD-ROM of 8 items
CD-SM-50	Anatomy of Phanerogams, Basic CD-ROM
CD-SM-51	Anatomy of Phanerogams, Supplem. CD-ROM

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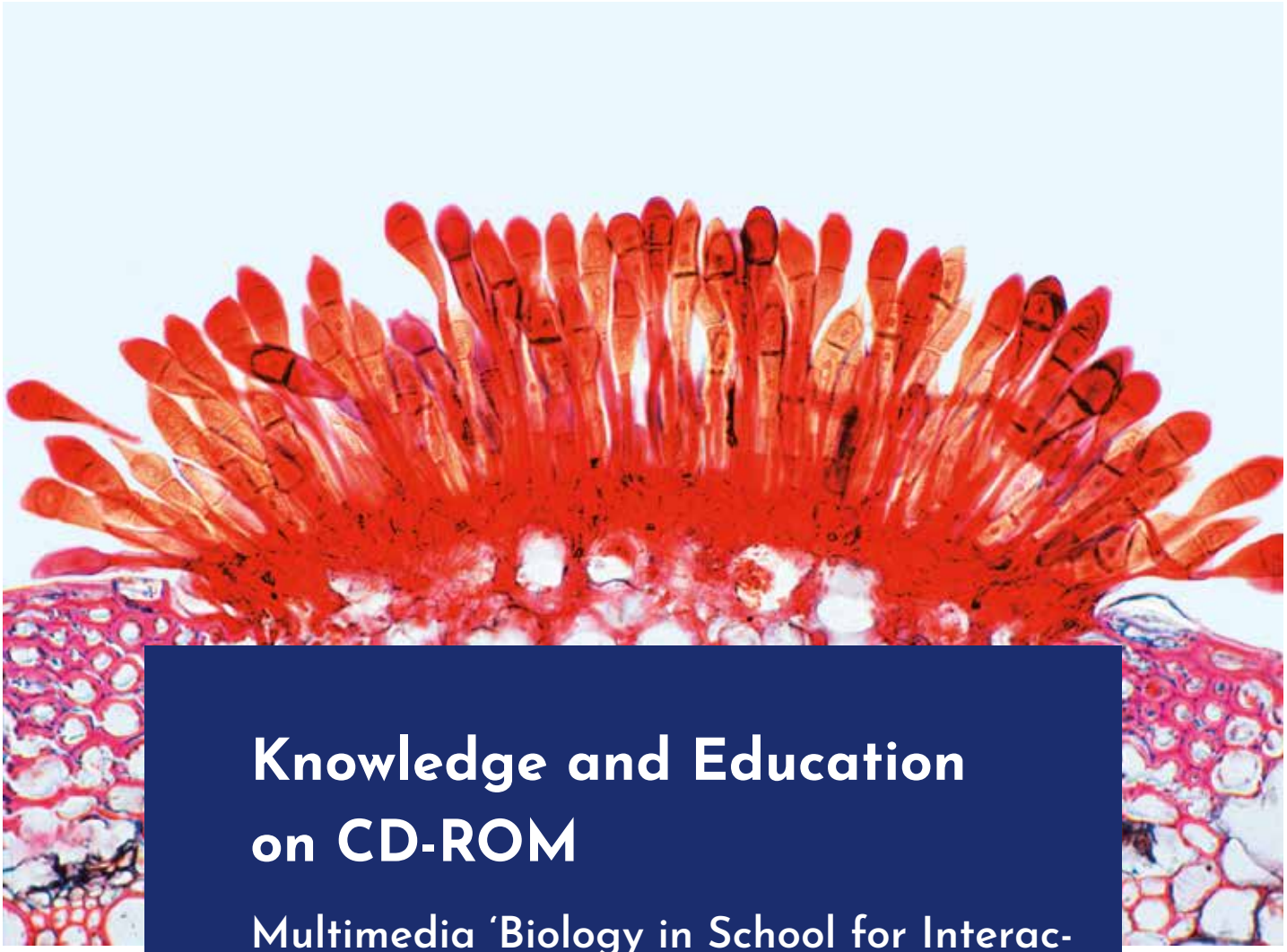

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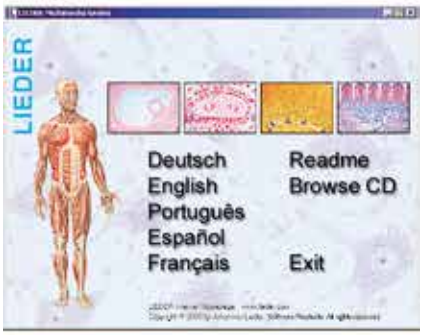
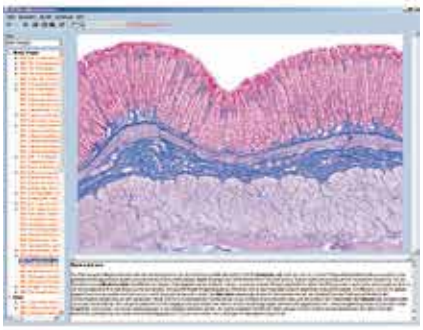
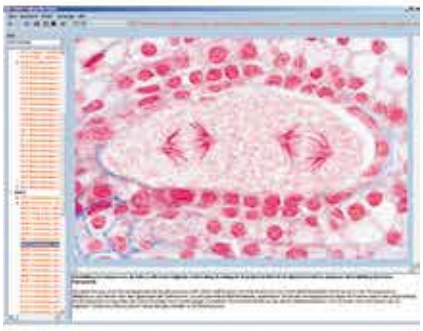
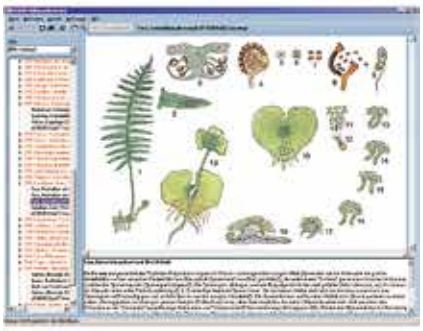
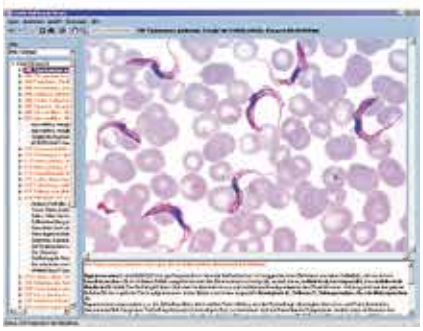
- Drawings required to explain the photomicrographs are provided with **detailed notes** in the images and explanatory texts.
- All images can be displayed in **full screen size** at any time from the running programme by simply pressing a button. A user-defined slide show is also possible.
- Our CDs contain a **test programme** with which the knowledge acquired can be tested at various levels of difficulty. A predetermined number of images are selected at random. At the end, the results are recorded and graded.
- An important component of our multimedia programmes on CD is **special accompanying material** which, in addition to viewing on screen, enables the evaluation of what has been seen and creative learning. A large number of the images are accompanied by **drawings and worksheets**, which can also be used as **supplementary material** for class tests.
- All images and texts **can be printed out.**











CD-ROM for our School Sets A, B, C and D

As part of our 'Microscopic Biology' multimedia programme, we supply four interactive CDs that are matched to our A, B, C and C school series. The basic material consists of excellent **microphotographs** of all the **prepared microscope slides** contained in the school collections in multiple magnification levels and image sections. Furthermore, a large number of **additional prepared microscope slides matching the topics** are shown, which serve to expand the existing series of specimens. **Anatomical colour plates and schematic drawings** as well as detailed texts on all individual topics serve to explain the preparations and can be printed out.

CD050 MICROSCOPIC BIOLOGY - Set A

Photomicrographs, diagrams, explanations, test program and teaching material to School Set no. A. Comprising about 240 pictures and 1175 texts

CD060 MICROSCOPIC BIOLOGY - Set B

Photomicrographs, diagrams, explanations, test program and teaching material to School Set no. B. Comprising about 570 pictures and 2835 texts

CD070 MICROSCOPIC BIOLOGY - Set C

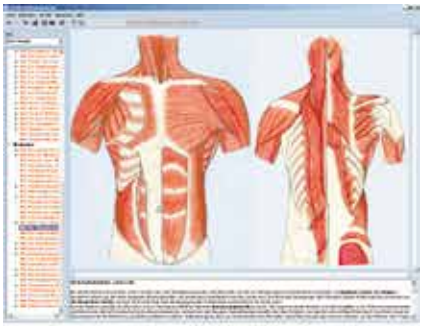
Photomicrographs, diagrams, explanations, test program and teaching material to School Set no. C. Comprising about 400 pictures and 1960 texts

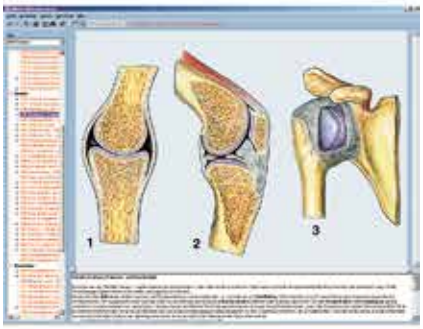
CD075 MICROSCOPIC BIOLOGY - Set D

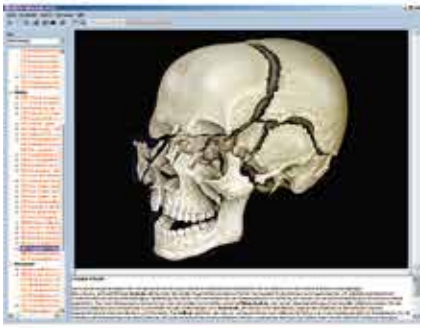
Photomicrographs, diagrams, explanations, test program and teaching material to School Set no. D. Comprising about 440 pictures and 2125 texts

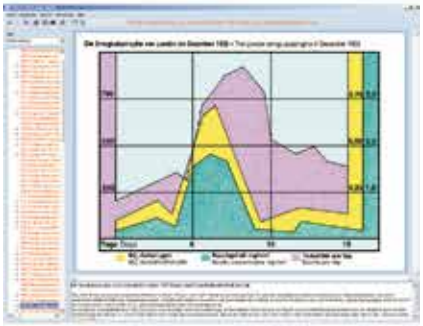
CD085 MICROSCOPIC BIOLOGY - Set A, B, C and D together.

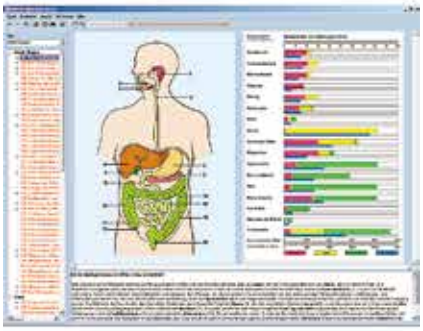
All 4 CD-ROM can be copied into one big file during installation, providing access to more than 2.200 pictures and 8.100 texts

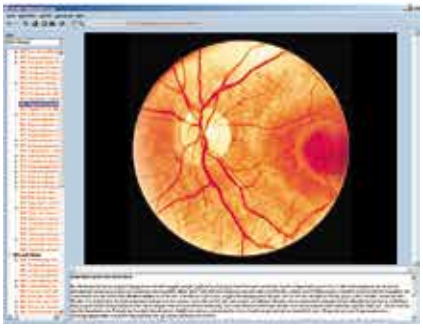












The LIEDER CD-ROM Program of Interactive CD-ROM

CD111 Human Skeleton, Musculature and Apparatus of Movement
The skeleton and musculature make up the body's support and movement apparatus. These two components work both ways: the skeleton is essential for the execution of movements and the muscles equally essential in supporting functions. The skeleton is described as the passive part of the apparatus of movement, while the muscles rank as the active part. Connective and fibrous tissue. Tendons. Cartilage. Bone cells. Haversian lamellae, interstitial lamellae. Bone tissue structure, diagram. Hollow bones. Bone marrow. The skeleton as a whole, its functional arrangement and individual parts. Skeleton, full frontal and rear views. Joints. Vertebral column. Thorax. Pectoral girdle. The limbs. Skeleton of the hand. Pelvis. Knee joint. Menisci. Skeleton of the foot. Ankle joint. The skull, front and side views. Skull dissected in its constituent bones. X-ray pictures of a bone dislocation and of a bone fracture. Full front and rear views of human musculature with twelve partial views of muscles. Fine structure of muscles. Capillary blood vessels in the muscles. The sensory and motor innervation of muscles (muscle spindles and motor end plates). Muscle efficiency. Pronation and supination muscles.

CD112 Feeding Organs and Metabolism in the Human Body
Proteins, carbohydrates and fats as components of our nutrition. Minerals and vitamins. Nutriment entails foodstuff intake, digestion and resorption. Health through a balanced diet. Mouth, gullet and esophagus. Tooth forms. Tooth development. Tooth renewal. Milk-teeth and permanent teeth. Cavity-causing bacteria. Salivary glands: structure, location and function. Human stomach, cardia, fundus, pylorus. Function of the gastric glands. Intestine and digestion process. Location and points of support of the digestive organs. Intestine wall layers, villi, crypts, glands, fine structure of the intestinal villus. Human large intestine (colon). Digestive enzymes as organic catalysts. Constructive metabolism (anabolism) and destructive metabolism (catabolism, conversion to energy) Function of human liver and pancreas. The liver's glandular character and its function. Affections of the pancreas , function of islets of Langerhans. Insulin and diabetes. Function of human urinary organs: kidneys, ureter and urinary bladder. Detoxification of the body by the kidneys as a fundamental, vital process. The human body water and salt budget.

CD113 The Human Respiratory and Circulatory Systems, the Human Heart
The pathways through which oxygen reaches the cells varies from organism to organism. In the case of unicellular beings, oxygen diffuses directly from the environment into the cell. In the case of higher organisms, including humans, a transportation system in the body distributes oxygen taken from the environment by a specialized organ (gills, lungs). Nose and nostrils. The larynx as respiratory and voice organ. Windpipe (trachea). Lung position and structure. Alveoli. Blood irrigation. Gaseous exchange. Volume of air respired. Regulation of breathing. Lung diseases. Damage of the breathing organs caused by environmental factors. Blood as mediator between the cells in the body and the environment. Using the circulatory pathways, blood transports different substances: nutrients, respiratory gases, intermediate and end products of metabolism, active substances and substances of the immune system. Blood components. Blood groups. Blood clotting. Antibodies. Rhesus intolerance. Lymphatic system. The human immune system and its functions. Anatomy of the heart, cardiac valves, heart muscles, functions and impulses. Electrocardiogram. Blood circulation. Arteries, veins and capillaries. Regulation of blood pressure, measuring blood pressure. Exchange of substances between capillaries and tissues.

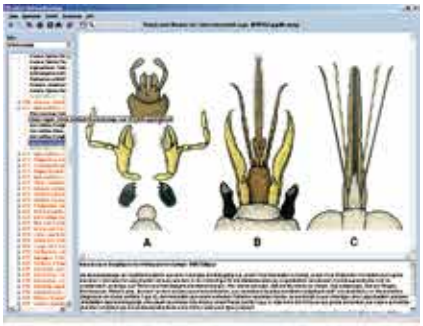
CD114 Nervous System and Transmission of Information Part I
Introductory CD for the nervous system. View of the entire human nervous system. Occurrence of the typical nerve cells in the human nervous system. Fine structure of a neuron, composition of the nerve, motor end plates, glial cells, nerve cells and nerve tissue. Neuron, ganglion, centers, reflex arcs, automatism. Embryonic development of the human nervous system. Neural plate, neural groove, formation and closure of the neural tube. Description of the development of different nervous systems of invertebrates and vertebrates facilitates understanding of the human nervous system. Formation of the neopallium from concentric growth rings. Phylogenetic tree of mammalian brain convolutions. Connection between brain sensory and motor nerves and various body areas. Development of the thalamus into a relay station. Progressive concentration and differentiation in the brain, component parts and their relation to each other. Increase in organizational complexity.

CD115 Nervous System and Transmission of Information Part II
The human central, peripheral and autonomic nervous system. Spinal cord: structure and function. Function of gray and white matter. Diagram of reflex connections. Examination of human reflexes and of diseases affecting the nervous system: polio, syphilis, sclerosis, paraplegia. Embryonic development and hierarchical structure of the brain. Structure and function of brain stem, cerebrum and cerebellum. Course of typical sensory and motor tracts. Perception, conduction and transmission of information. Conscious and unconscious movement controls. The brain is simultaneously connecting and controlling organ: for that reason, information perception, conduction and transmission are treated in a special section: resting potential at the axon sheath and its change. Transmission of information over the synaptic gap. Types of synapse. Stimulus propagation along the axon. The brain's blood supply: as the controlling organ of our body is the brain the biggest consumer of energy. The blood-brain barrier. Brain stem, hindbrain and cerebellum. Brain lesions (diving accident, stroke). The autonomic nervous system, antagonistic effect between the sympathetic and parasympathetic part. Regulation of body temperature. Control of the emptying of the urinary bladder, transmitter and inhibiting substances at synapses and motor end plates.

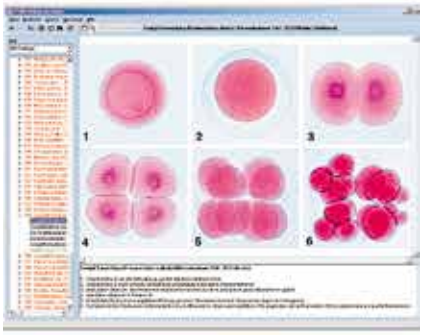
CD116 Sense Organs as a Window to the World
The sense organs have the task of furnishing information to the individual about himself and his environment. The ability to perceive stimuli and react to them is, together with the capacity for movement, nourishing oneself and reproducing, one of the primordial characteristics of living protoplasm. Even amoebae react to touch and light, as well as to chemical and temperature stimuli. Over the course of evolution, first some individual cells and then complex organ systems specialized in perceiving and processing stimuli. The nature of light. Eye and retina structure. Accommodation and adaptation. Image formation, movement vision, spatial vision (depth perception). Connection mechanisms in the retina and the brain. The physiological-psychological components of visual perception. Ocular affections. Optical illusions. Color vision and color blindness. Colors and psyche. Ear and hearing. Formation of sound waves. Development and structure of the human ear. Middle ear, inner ear, cochlea, organ of Corti. Directional hearing, hearing centers. Structure of the labyrinth, perception of rotation and spatial orientation. The chemical senses. The sense of smell. Location of the olfactory region. Nose conchas and olfactory epithelium. The sense of taste. The tongue's tasting areas. Papilla foliata, vallate papilla and fungiform papilla, fine structure. The skin as organ of touch. touch corpuscles, warmth and cold receptors, sense of temperature and thermal receptors. Pressure receptors. Sensitivity differences caused by touch stimulation. Conscious awareness of the position and muscle movements. Muscle spindle and Golgi tendon apparatus. Processing of self-awareness information.

CD117 Reproduction and Sex Instruction
Reproduction serves for the preservation of the species. The number of germ cells must balance losses caused by environmental factors (predators, climate, catastrophes), so that the number of reproductive individuals remains constant within certain parameters. The CD provides a vivid introduction into the biology of reproduction

from unicellular organisms through to mammals, providing detailed representations of human reproduction and furnishing other teaching material for sexual instruction. Sexual and asexual reproduction. Fertilization of the ovum and fusion of both haploid nuclei. The different types of egg cells and the corresponding types of cleavage. Gastrulation, neurulation, formation of germ layers. Examples of organ development. Structure and function of male and female sexual organs. Testis, epididymis, spermatogenesis, spermatozoa. Structure of the uterus wall. Menstruation cycle and fertilization. Changes in uterine lining (endometrium). Ovulation, admission of the ovum into the fallopian tube, fertilization, development in the fallopian tube and embedding in the endometrium. Growth of the foetus in the uterus. Embryonic and maternal circulation. Foetus in the uterus, placenta, umbilical cord, amnion. Developed foetus in the womb. Start of the birth process, entrance of the amniotic sac into the birthing canal and birth are described.

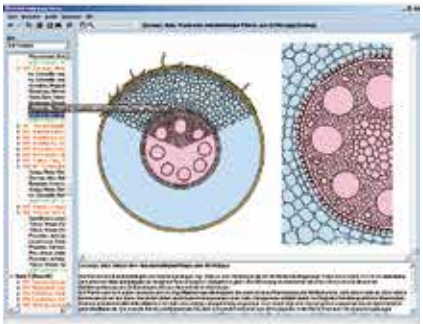


CD118 Hormones, Hormone System and Control
Hormones are substances produced chiefly by the endocrine glands. They are brought by the blood stream to the areas of the body where they exert their effect and influence through ferments the most important vital processes, such as metabolism, development and growth. They adapt the body to different environmental conditions and safeguard the preservation of the species. Alterations of hormone budgets can have serious physical and psychological consequences. Nature and function of hormones. Thyroxin, adrenaline, insulin, sexual hormones, hormones of the hypophysis. Effects of castration. Human dwarfism, gigantism, acromegaly and obesity. The thymus. Development of hormone glands. Control of hormone release. Interaction between releasing and gonadotropic hormone. Feedback control of peripheral hormones. Influence on gene activity, protein synthesis, neurosecretion, second messenger, cascade mechanism. Dovetailed operation of different hormones, inhibiting and stimulating factors. Synthetic hormones. Regulation of blood sugar content. Stress, heart infarct, animal production, anabolica, pills, insect hormones, plant hormones, auxin.

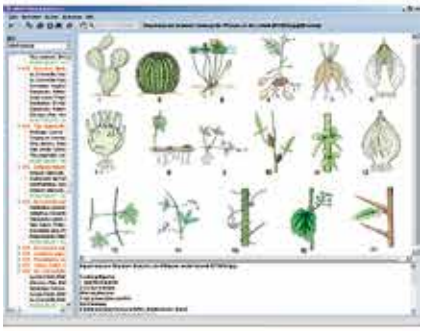


CD120 Cytology and Molecular Biology
In cytology and molecular biology, cell nuclei and chromosomes are conspicuous structures. Their role in cellular activity, their function and importance in heredity and cell division, as well as aspects of molecular biology will all be discussed. This CD offers a wide range of images and text covering the multiple types of nuclei and chromosomes, including images of mitosis and polyploidy. Typical animal cell and typical plant cell. Living nuclei, nuclear forms and functions. Giant chromosomes. Polyploid nuclei. Fine structure of cell nucleus. Structure of chromosomes. Mitosis. Individuality of chromosomes. Chromosome structure, gene location (loci), reduction division, crossover and chiasmata, gene expansion and arrangement, replication. Proving the material structure of the gene. Structural properties of DNA. Identical replication as a cause of hereditary constancy. DNA, RNA and protein synthesis as causes of character formation. Genetic code and molecular mechanisms in mutations. Didactic guiding concepts: relations between structure and function on the molecular level. Explanation of genetic observations through molecular properties and reactions. The findings illustrated through the hypotheses, methods and experiments that led to those findings.

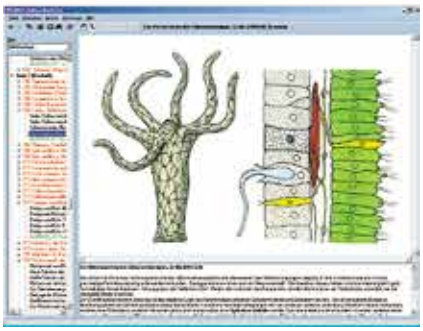
CD124 Cell Division (Mitosis and Meiosis)
A fundamental feature of all living creatures is that their organism grows. The actual growth of multicellular organisms results from the increase in the number of cells. Cell divisions make it possible for a single fertilized egg cell to give rise to millions and billions of cells. In the process, chromatin, as carrier of hereditary information, is duplicated, then halved in a highly accurate manner and then transferred to both daughter cells. The complex process of meiosis, the reduction division. Through meiosis not only is the number of chromosomes halved, but also the utterly important rearrangement of chromosome sets and the exchange of segments („crossing over" process) both take place. The process of cell division is explained through classical examples of known animals and plants. Fine structure of the cell and its nucleus. The sequence of a normal cell division (mitosis) in chronological steps. Resting nucleus. Contraction, division and separation of the daughter chromosomes. Recombination of hereditary traits and reduction in the number of chromosomes through meiosis. Primordial sex cells. Entering of a sperm in the egg cell (ovum). Prophase, first and second meiosis. Dismissal of the sperm's flagellum (tail). Mixing of male and female chromosome sets. Translation of chromosomes to egg nucleus. Mature egg cell with male and female pronuclei. Fertilization, cleavage, embryo formation. Schematic representation of all phases. The slides, colored by means of a special staining technique, depict the individual cell structures in contrasting colors.



CD125 Mendelian Laws, Modification and Mutation
In order to establish the fact that heredity is governed by laws, it is necessary to mate living beings that exhibit certain differences from each other. The first experiments in this regard were performed by Augustinian priest Gregor Mendel in the 1860's on the garden of his monastery in Brünn. He crossed different strains of peas and kept track of hereditary transmission of particular characteristics in hundreds of plants over a number of generations. He thus found significant number rules and could thereby gain fundamental insights into the nature of heredity. The term „variability" groups all those alterations in living beings that, on account of not being hereditary, fall within the category of „modificability". By contrast, alterations that can be passed on through heredity all called mutations. There is no doubt that changes in the hereditary makeup, i.e. mutations, made evolution possible in the first place.

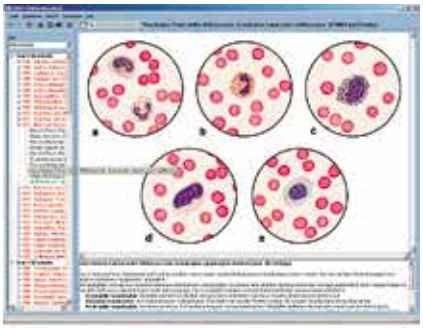


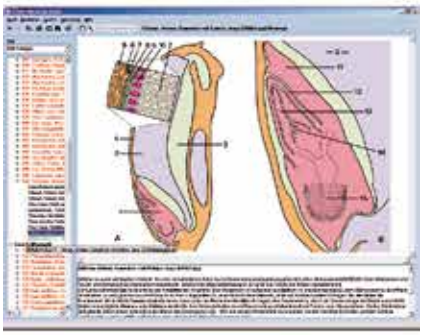
CD126 Heredity and Genetics of Man, Part I
The basis of both CD's in this series is the range of newest findings in the field of human genetics. As an introduction, the basic knowledge on formal genetics is first imparted, illustrated and explained using many examples from medical genetics. Detailed description of hereditary transmission: Autosomal dominant inheritance, autosomal recessive mode of inheritance, X-chromosomal inheritance, multifactorial and mitochondrian inheritance. **Part 2** shows the different types of human tissue cultures, sex chromatin in both normal and pathological numbers of gonosomes through the analysis of Barr bodies, drumsticks and F-bodies. Analysis of metaphase chromosomes by various banding techniques. Chromosomal aberrations and their phenotypic consequences. Secondary chromosomal aberrations following exposure to clastogens and repair defects. Examples from tumour cytogenetics.

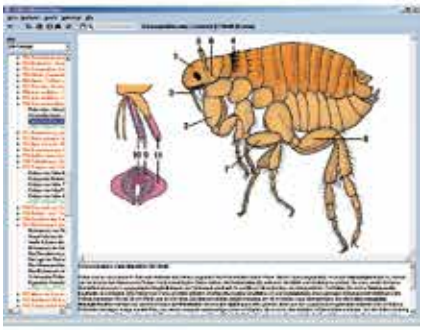


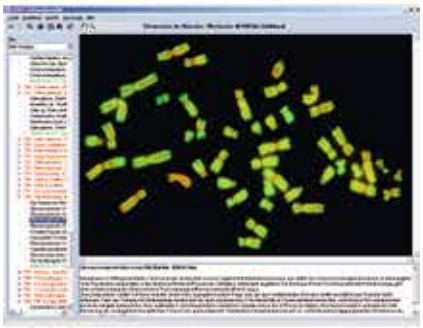
CD127 Heredity and Genetics of Man, Part II
Introduction to the principles of molecular genetics. The focus lies on the application of new techniques in medical genetics and in genetic counseling. Furthermore, subject matters such as population genetics, mutations, imprinting, blood group systems and appearance of tumors will be discussed. Subject matters in the last section include principles of genetic counseling and prenatal diagnostics, biopsy of chorionic villi, amniocentesis (fetal blood sampling). Reasons for seeking genetic counseling, effects of damaging to the fetus, risk calculation, consanguinity, genetics of behavior, and many examples derived from findings in research on twins and the genetic trees of trait bearers. New, extraordinarily high-quality images facilitate visual instruction, while detailed accompanying texts place this series at the highest level of modern teaching standards.

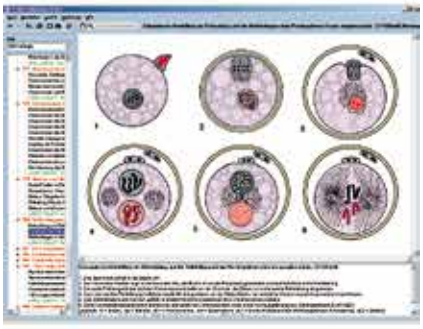
CD128 The Origin of Life and Evolution
An unique CD of life-science. Evolution's road from „no-life" to life - stellar, chemical and organic evolution. Temporal course of evolution. Formation of celestial bodies and rise of chemical elements. Apparition of prokaryotes. Abiotic synthesis of amino acids, oligopeptids, polypeptides, purine and pyrimidine bases and nucleic acid sequences. Polynucleotid aggregates. Evolutionary stages of metabolism: fermenting, breathing, photosynthesizing prokaryotes. Primordial soup. Hypercycle according to EIGEN. Precambrian evidences of life. Evolution from prokaryotes to the plant and animal kingdoms. Spontaneous generation theories and findings. Phylogenetic

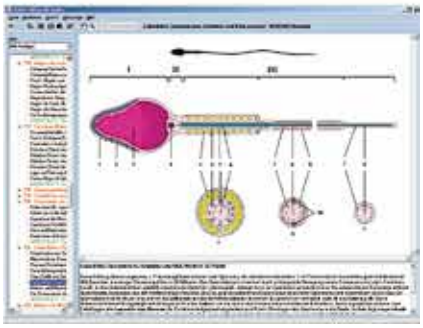












schema for the five organic phyla. Endosymbiont hypothesis. Rise of multicellular organisms. Theory of gastraea, notoreunalia-gastroneuralia and coelom. Conquest of land. The saurians. Geological times. The „geologic clock". Foundations, mechanisms and course of the evolution of the plant and animal kingdoms. Evolutionary pointers. Morphological homologies. Bridging species. The Archaeopteryx. Evolution in terms of geography, ontogeny, biochemistry, and animal behavior. Parallel evolution. Biogenetic law according to HAECKEL. The theories of Lamarck and Darwin. Natural selection and selection induced by man. Isolation. Gene shift. Adaptive radiation. Continental drift. Principles of speciation. Ontogenic spirals. Genetic landscape. Cultural development of man, evolution of languages. Tables of geologic formations. Recreation of prehistoric landscapes.

CD129 Evolution in Examples
This CD provides exceptionally instructive graphic material on morphologic and anatomical aspects shedding light on evolution and phylogenetics in the animal kingdom. Three fundamental physical manifestations are covered: stepwise increase in organizational complexity, commonality of basic physical structures and the existence of rudimentary organs. Starting with the work of Charles Darwin, studies of species formation on isolated volcanic archipelagos have become master examples of research in evolution. The fauna in isolated habitats, such as the Galapagos islands, plays a particularly important role as a source of indirect evidence on the workings of evolution. The combined effect of isolation, selection, occupation of niches, gene drift and mutation can be appreciated in a most graphic manner. Taking the unique flora of the Canary islands as an example, such evolutionary events are reviewed as promoter effects, preservation of paleoendemic plants, the effects of separation and isolation, generation of species through adaptive radiation, selection and nestling-down processes, analogy and homology. The Canary islands, together with the Galapagos islands and the Hawaii group, ranks as a „Museum of Evolution".

CD131 Embryology and Development
Those seeking to understand the physical structure of an animal must necessarily become acquainted with the development from egg cell to finished animal first. This CD shows the different stages of ontogenesis through the classical examples of sea urchin, frog and chicken, documenting the development of these animals from the egg through cleavage to germ layers to the finished organism. Precise, clear text and illustrations enable the user to quickly gain an understanding of embryology processes.

CD132 Our Environment, Threats and Protection
The relentless advance of technology in nearly all areas of life, together with consequences that more often than not exert an influence on our natural make-up, represent a steadily increasing threat to the environment. Comprehensive environmental protection is therefore urgently needed. The new school curricula reflect this need, by including chapters on „Environment, Environmental Threats, Environmental Protection". This CD attempts to provide a vivid support to such classroom work. Based on representative examples in the areas of Landscape, Soil, Water and Air, it shows which activities threaten the make-up of our natural environment and how the resulting perils can be confronted.

CD133 Our Waters, Pollution, Protection and Recycling
In these days, it is scarcely possible to bathe safely in lakes, streams and rivers because of the steadily increasing contamination of surface waters with waste and sewage. In addition, technological demands also put a strain on our „aquatic landscape". This entirely revised CD provides useful examples and deals with the resulting perils, as well as with general questions regarding contamination and purification of bodies of open water. The meaning of the analytical controls applied is discussed, together with wastewater purification methods, nature-tailored development of water bodies and lake rehabilitation measures. Bodies of water and streams in the cultural landscape. Water testing and water monitoring. Nature-tailored development. Degrees of water quality. Straightening of river courses. Ground water table decrease. Introduction of wastewater. Saprobic index. Eutrophication. Acidification. Biocide enrichment. Feeding chain. Dying water. Production of drinking water. Lake cleaning and rehabilitation. Water treatment plants: structure and function. Fully biological activated-sludge water clarification plant.

CD134 The Forest as a Habitat
An intact, healthy landscape should boast a forest kept in as nearly a natural state as possible, with the corresponding variety in its moss, herb, shrub and tree layers still intact; this is surely not the case in most forests existing today. Woodlands are rightly dubbed „green lungs" because of their oxygen output through photosynthesis. A forest, with its typical plant cover, is also a habitat for many animals. The importance of woods for man resides mostly in their water storage and air purification capabilities. Damaging a forest, therefore, constitutes a major environmental threat. The forest as an ecosystem, forest animals and plants, forest layers, forests through the seasons, forest functions, forests and residential areas, air exchange cycle, the forests as bulwark against weather, protecting forest animals, rejuvenating the forest, offenses against forest law, consequences of deforestation, threats affecting woodlands, erosion, effects of acid rain, dying forests, bioindicators, and related subjects.

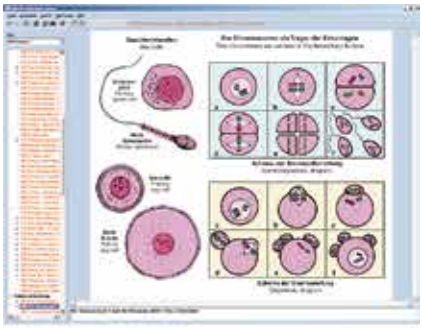
CD135 Crop Pests and Controls
Since man started to practice agriculture, he had to „defend" his crops against damaging organisms. Often, a large part, if not all, of a harvest is lost to harmful plants or pests, mostly caused by different types of fungi. For their multiplication and propagation, these fungi produce colossal amounts of extremely resistant spores. Exact knowledge of the way of life of these harmful plants is necessary to combat them effectively. The pictures, showing crops affected by pests, will be of interest to hobby gardeners and farmers alike. The CD deals also with a very promising aspect of global environmental protection: biologic pest control. Using well-known, easy to follow examples, the subject is explained and its goal made more accessible.

CD138 Biotopes und Ecosystems
Habitats left in their natural state are becoming increasingly rare. Using selected examples, these habitats' wealth of species, the problems of preserving them and the importance for the overall ecological framework even of small biotopes are documented and discussed. This CD aims at presenting the animal and plant populations of these habitats using typical examples, dealing with their adaptations and their place in the ecosystem. Nearly all photographs were taken in situ, in order to preserve authenticity. The accompanying texts provide detailed explanations on the biology of each species and the emergence and ecology of each habitat. Animal and plant population of a fishpond and a puddle. tarn, moor, timber forest, mountain meadows, shallow coastal waters.

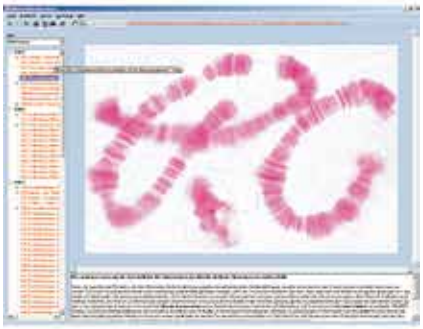
CD151 Histology of Man and Mammals
The body of every animal consists of an array of many organs, each of which must perform certain functions within the organism as a whole. The closer study of these organs calls for the preparation of very thin slices of tissue. These slices, when seen through the microscope, show that organs are made of great numbers of wildly differing cells and tissues which, thanks to special staining techniques, can be told apart by the different colors they adopt. Cells. Epithelial tissue. Support tissue. Teeth. Muscle tissue. Nerve tissue. Digestive organs. Glands. Respiratory organs. Blood and blood vessels. Lymphatic organs. Urinary and excretory organs. Sexual organs. Spermatogenesis. Oogenesis. Endocrine glands. Scalp and hair. Sense organs. Central nervous system.

CD152 Anatomy of Phanerogams
Most terrestrial plants anchor themselves to the ground using roots that also take up water and nutrients that the plant needs. The shoot above the ground, called stem, serves simultaneously to produce and support leaves and branches and to transport the assimilation products processed in the leaves to the plant's storage organs.

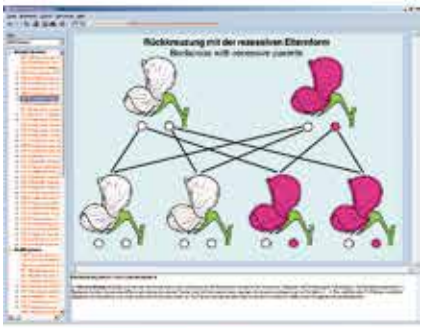
Cells and cell organelles. Plastids. Nuclear division and cell division. Vacuole and cell wall. Spherosomes. Storage areas in the cell. Meristem, parenchyma, aerenchyma, epidermis. Trichomes and emergences. Supporting tissue. Conducting tissue. Vascular bundles and their arrangement in the stem. Secondary growth of the stem. Wood and bast secondary tissue. Vegetative apex. Leaf formation. Stomata. Leaf stalk. Leaf formation and habitat. The root. Secondary growth of the root. Symbiosis. Flowers. Meiotic nuclear division in pollen mother cells. Structure of the ovary. Development of the embryo sac. Pollen tube. Double fertilization. Embryo and endosperm. Seed and fruit.



CD153 Anatomy of Cryptogams
While flowering plants (Phanerogamae) show many similarities in structure and reproduction, the non-flowering plants (Cryptogamae) constitute an extraordinarily diverse group. Members of this group are bacteria, blue algae, algae, fungi, lichen, moss and ferns. Bacteria and blue algae make up the Schizophyta and exhibit the greatest and deepest differences compared to all other plants: they lack cell organelles enclosed by plasma membranes, such as cellular nuclei, mitochondria or plastids. Furthermore, their cellular wall stands out for its particular structure. Bacteria and blue algae are referred to also as prokaryotes, as against eukaryotes (living beings with real cellular nuclei), to which all other plants and also animals and humans belong. Bacteria. Blue algae (Cyanophyceae). Fire algae (Fire Algae). Euglenophyta flagellates. Green algae (Chlorophyta). Conjugatophyceae. Charophyceae. Yellow-green algae (Xanthophyta). Golden algae. Diatomea. Brown algae (Phaeophyta). Red algae (Rhodophyta). Fungi. Slime mold (Myxomycete). mildew. Ascomycetes. Basidiomycetes. Fungi imperfecti. Lichens. Moss. Liverwort. Musci. Ferns, steles, stem, root, reproduction, sporiangia. Spermatophyta, reproduction.



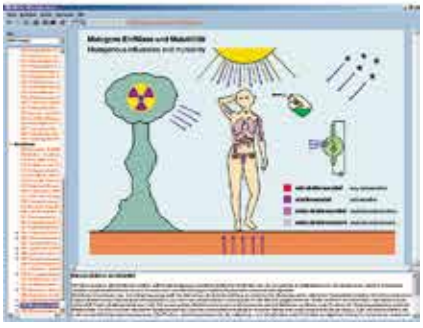
CD154 Human Parasites and Diseases
Animals obtain their nourishment by manifold adaptations. One extreme method is parasitism, whereby the quest for nourishment is left to the host while the parasite, as an uninvited guest, taps its nourishment directly from its host's living body. A great number of animals live as parasites entirely or during a certain stage of their development. Even in our times, the damage caused to humans and animals by pests and parasites is quite significant. The microscopic vectors of the sleeping sickness and malaria turn vast areas in Africa unfit for human settlement. Among us, many common affections caused by parasitic worms in the body diminish notoriously the capacities of those affected. Parasites are highly specialized organisms that are superbly adapted to their way of life; their study is in more than one way of particular interest. Humoral and cellular reactions. Trypanosomes and Leishmanias, multiflagellates. Entamoebae. Toxoplasms and sarcosporidians. Limax amoebas. Malaria parasites. Babesias. Trematodes. Tapeworms. Nematodes. Tongue worms. Ticks and mites. Lice and bedbugs. Mosquitos. Fleas. Helminth eggs and larvae. Protozoan cysts. Many epidemic and infectious diseases have been by now eradicated or are easier to treat than in the past. But there are still disease factors against which nearly all weapons are ineffective. Many types of bacteria, such as pus bacteria, are becoming increasingly resistant against previously effective antibiotics. Microscopic images show the extent of the damage caused to an organ or the degree of bacterial replenishment. The processes followed by an infection and the reaction of the body thereto are many and diverse. The change shown by the organs or the individual cells provide indications regarding the situation of the disease.



CD155 Zoology in the Classroom (New enlarged version no. 2.0)
Morphology, the study of the structure of organisms and of the relationship among their constituent organs, together with taxonomy, the science dealing with the relationships among organisms and their classification into a hierarchical system, are closely associated. Without morphology and taxonomy, biology could not be conducted in a meaningful way. When taught separately, both are tedious subjects for nearly every student. But if the teacher puts structure, function and relationship into a meaningful context, analyzes these factors and shows how a taxonomic unit propagates throughout the available habitats, i.e. when radiation takes place, and when it finally becomes evident that a certain „blueprint" has been „invented", these otherwise dry subjects gain life and become interesting. This CD offers some interesting insights into some problems regarding structure and function within the context of animal taxonomy. The CD contains a wealth of color photographs, illustrations and detailed diagrams of basic body structures of the animal classes, as well as micro and macrophotographs that may be enlarged to full-screen size or printed at the touch of a button.

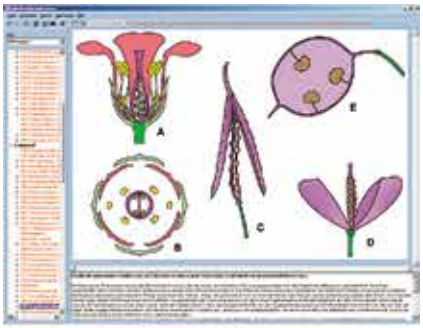
CD156 Botany in the Classroom (New enlarged version no. 2.0)
The purpose of this CD is the same as that of CD155, but focused on botany. Plant-derived foodstuffs form the basis of human nourishment. Given that modern students enjoy ever diminishing opportunities to observe or take part in sowing, cultivating, harvesting and utilization of crops, this CD attempts to fill that void. The most important crops are listed, noting their flowering periods. Pictures of plants and data on their provenance, history, cultivation and utilization provide the teacher a wealth of material for a varied and interesting botany lesson.

CD157 The World of Insects (New enlarged version no. 2.0)
With over 1 million species, arthropods are by far the largest animal group on this planet. They include insects, spiders, millipedes and crustaceans. They share such characteristics as segmented legs and a hard external skeleton made of chitin, which encloses the entire body like an armor and serves both as protection and support. Many microscope enthusiasts started their hobby observing small insects and insect parts. That is easy to understand, considering that insects are ubiquitous and easy to catch. This CD reveals the enormous variety of insects and their fine structures using selected examples.



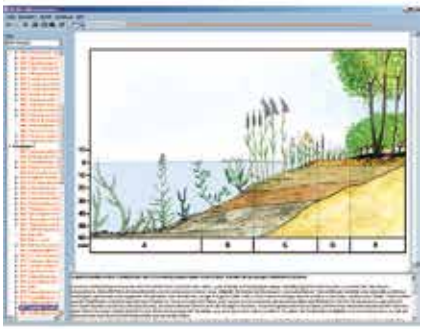
CD158 The World of Butterflies
Butterflies (Lepidoptera) constitute, after beetles, hymenopterans and dipterans, the fourth largest insect group, with over 100,000 species. The most conspicuous group is that of the butterflies, which includes the swallow-tailed, white, mottled, blue and large-headed butterfly families. The large wings are covered by iridescent chitin scales that often create bright, beautiful patterns. The mouthparts form a sucking trunk that enables the insect to draw flower nectar and other fluid nourishment. Both the occurrence and variety of existing species has decreased markedly in the past 50 years. Among the main reasons are the elimination of many plants that man considers weeds but are a source of nourishment for butterflies, together with the widespread use of insecticides in forestry and agriculture. Insecticides are supposed to target only „damaging" insects, but butterflies are killed along as well. The technologizing and intensification of agriculture and the general burdening of the environment with poisons contribute to the disappearance of our butterfly populations. This CD shows the variety of butterflies still with us, which could be preserved through appropriate protection measures.

CD159 Edible and Poisonous Mushrooms
In order to understand mushrooms better, one must take into consideration that the actual plants grow hidden from view, in a saprophytic or parasitic manner and rarely in a symbiosis (as mycorrhizae) with other plants. The „mushrooms" that we take home with us are only the fruiting bodies that the plants grow in order to preserve the species. All these fruiting bodies, as different in appearance as they may be, are in essence a more or less clearly manifested hymenium in which spores will be formed. High-quality color pictures show selected samples in situ. In order to facilitate their recognition, all mushrooms were pictured from the side, from above and from underneath. The accompanying interpretation text provides information on their occurrence and possible use, explaining in detail the many aspects that may lead to confusion in their identification.

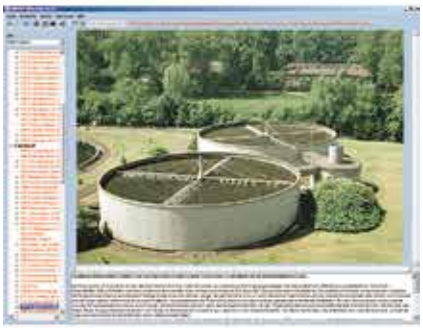


CD160 Healing and Poisonous Plants
Man found early on that certain plants contain substances that reduce pain and help sick people heal. Such healing plants were the first „medicaments" available to man. As pharmacy, chemistry and molecular biology progressed, a wealth of other healing substances were discovered, but healing plants will still hold a firm place in future medicine, homeopathy and folk medicine. The knowledge on the effects and utilization of healing plants has been passed on for generations, and it ought not to stop now. The second part of this CD teaches how to identify plants rich in certain substances that even in very small amounts act as circulatory, nerve or metabolic poisons, i.e., poisonous plants. Poisons have always exerted a powerful fascination on man. In light of the fact that many of these substances act as powerful stimulants before exerting their damaging poisonous effects, they have been also used as magic potions. Soon it was discovered that minute quantities of these poisons had also a healing effect. The CD shows many pictures of both healing and poisonous plants systematically ordered according to their respective families.

CD161 Biology of Flowers and Fruits
One of the identifying features of higher plants is the occurrence of flowers and fruits, whose complex structure under the microscope makes for interesting observations. Some plants, such as conifers, build male and female germinal elements in different flowers. The formation of seeds and fruits is determined by the different modes of dispersal, such as by means of edible fruit flesh or of dehydration-resistant grains. Flower biology or ecology examine and describe the interactions occurring in the pollination process between flowers and their non-living and living environment. Among the external forces that make pollen dispersal possible are wind, water and transportation by animals. Of these three, pollination through animals ranks as the uppermost method, being the most effective and common of all.

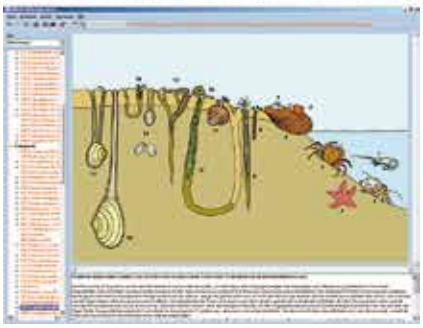


CD162 Art Forms in Nature – The Realm of the Infinitesimal
Sometimes, when looking through the microscope, veritable art forms created by Nature unfold before the eyes. When studying the regular structural organization of many living beings, such as radiolarians or diatomeas, the question arises of how could Nature create such forms without a ruler and a compass. Even the symmetrical structure of an externally unimposing plant stem appears as an aesthetic pattern of cavities. This CD of photographs of the realm of the infinitesimal, selected for their aesthetic appeal, is sure to provide much viewing pleasure.



CD163 Life in Water
The fascinating underwater world first reveals its diversity when seen under the microscope. The photographs of this CD unveil the multitude of interesting living organisms that can be found in a single drop of water taken from a pond. It is like a window into a new, wonderful world: the fascinating, improbably rich realm of the smallest living beings. The astonishment caused by things invisible to the naked eye and the joy of watching these tiny creations of Nature provide the basis and stimulus for a lively schoolroom teaching experience. Simultaneously, these small creatures constitute the first link in a feeding chain which leads through small crustaceans and ever larger water animals to humans. The interaction between the tiniest organisms and fishes is sensitive even to small habitat alterations, such as changes in water temperature or in oxygen content.

CD164 The Wonder of the Animal Cell (New enlarged version no. 2.0)
The cell is the basic element of all living organisms. In unicellular organisms, a single cell performs all those vital processes for which multicellular organisms have developed specialized cells: muscle cells can contract, glandular cells secrete substances, sensory cells perceive stimuli and transform them into impulses, nerve cells conduct impulses, connective tissue cells produce an intercellular substance, red blood cells transport oxygen, white blood cells fight pathogens, sex cells insure reproduction and propagation of species. The multiplication of cells results from their division. To increase their effectiveness, cells form tissues. Different tissues work together to perform certain tasks and thereby form an organ. This CD introduces in a graphically clear manner into the variety of cells and tissues occurring in the animal and human body.



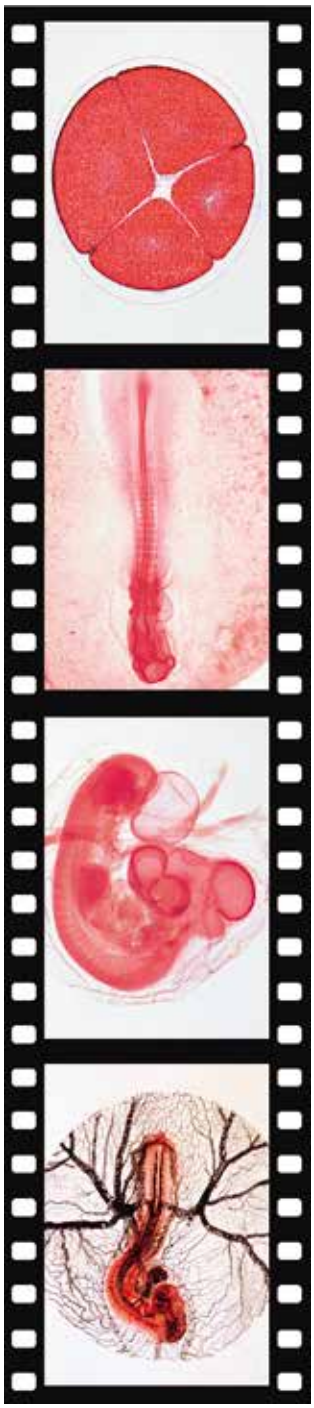
CD165 The Wonder of the Plant Cell (New enlarged version no. 2.0)
Few things in living nature are so multifaceted as the forms that plant cells can adopt. Depending on their function, they can be symmetrical and smooth-walled filling cells, repeatedly-branched trichomes, star-shaped, ring-shaped, corkscrew-shaped or reticular vessel cells, shut-off cells, storage cells with substances including crystals, woody cells, pollen cells with superficial features characteristic to each plant, etc. Even the leafless plants stand out for their multiplicity of forms: unicellular and multicellular green algae, blue algae, golden algae, fire algae, and particularly the diatomea, with their wildly varying shell forms possessing a remarkable aesthetic appeal.

CD140 The Structure of Matter, Part I: Fundamentals
„The Structure of Matter" offers an introduction into the fundamentals of chemistry and physics, mineralogy and petrology, crystallography and crystal optics, chemistry of crystals and fundamental structures, quantum mechanics and high-energy physics. The focus of physics research is a fundamental particle hierarchy going from atoms to quarks and leptons. Even the entire cosmos has become a gigantic laboratory; once the laws governing subatomic particle behavior and interactions are understood, the origin of the universe will become that much clearer. This new CD offers students the possibility of bringing the fascination of this research field into the daily school program. A special effort was made to bring home the focal point of these studies in a visual manner. The accompanying texts furnish a wealth of reliable facts and data, the respective contents complementing each another; they have been crafted in a brief, precise language and are not „overloaded" with terminology. Contents: Structure of the atom, elemental particles, atomic nuclei and structure of the atomic mantle. Using selected examples, the evolution from ancient ideas to current findings regarding the fine structure of matter is reviewed. Energy, matter, interactions: an attempt to visualize obscure processes taking place in the domain of elemental components of matter through their possible interactions. Classes of matter, properties of matter, chemical bond. Laws and relationships linking the physical and the chemical properties of matter. Model representations of atomic structure and chemical bonds. Crystal symmetry, properties of minerals, research into structure. Correlation between elemental particle lattice arrangement and macrosymmetry in crystallized matter. Macrophysical properties as criteria for determination of minerals. Principles of X-ray structural analysis and its methods.

CD141 The Structure of Matter, Part II: Petrography and Mineralogy
This second CD deals with the morphology and structure of solids occurring naturally, the world of minerals and stones, divided into four sections: Mineralogy of elements and bonds, mineralogy of silicates, structure of stones and characterization of gems and precious stones. The illustrations and images were selected taking care that only those depicting objects of typical and common occurrence were included. The degree of enlargement was also kept to the minimum, so that the depicted objects appear as close to their natural size as possible; enlargements beyond natural size contain a note to that effect. The accompanying texts are brief and to the point, limiting themselves to the fundamental features of the subjects under discussion. A glossary is also included with the purpose of facilitating the understanding of the extensive terminology and synonyms pertaining to this field of study.

On Request!

Color Projection Slides after Prof. Walter Mergenthaler Photomicrographs



Our Color Slide Series are designed for modern teaching. They cover all requirements for teaching in secondary schools, high schools and colleges as well as in elementary schools. These visual aids will be invaluable in preparing students for the recognised examinations.

The series of human biology are of great value in the training of nurses, medical technicians and for the students of physiotherapy and physical education. The study of the human body is the underlaying theme of the series which is usually the most important section of the school biology syllabus. This bias is also emphasised in the selection of anatomical and histological materials.

The series of 35 mm slides consist of color pictures for histology and anatomy of the human body, color diagrams to illustrate the anatomical structures, color photomicrographs, human photographs, electron and scanning electron micrographs, X-ray photographs, drawings, diagrams, tables etc.
The color pictures and diagrams have been prepared by university illustrators specialising in this field. In order to obtain maximum quality most of the slides delivered are ORIGINAL EXPOSURES, i.e. they are individually photographed from the specimen.

The LIEDER series of projection slides will offer a complete range of slides covering all respects of school teaching in biology, physics and chemistry.

LIEDER Color Photomicrographs for projection (on 35 mm film) are taken from selected prepared microscope slides. They immediately show, on the screen, the details of the specimen required for demonstration at the most suitable magnification. The student subsequently find it easier to locate the relevant part of a prepared slide under the microscope.

In order to obtain maximum quality all the transparencies delivered are ORIGINAL EXPOSURES i.e. each LIEDER color photomicrograph is individually photographed from the specimen. Consequently, there is no loss of quality which could arise from a copying process.

High quality photomicrographs can only be made from excellent, carefully selected microscope specimens. Every specimen used in the production of our photomicrographs has been either specially made or selected from many hundreds of preparations.

Similar high standards must, of course, be applied to the selection and use of the photomicrographic apparatus. Our color photomicrographs are taken through microscopes with automatic cameras of the most advanced technique. These instruments are equipped with highly corrected optical systems, including flat field apochromatic objectives.

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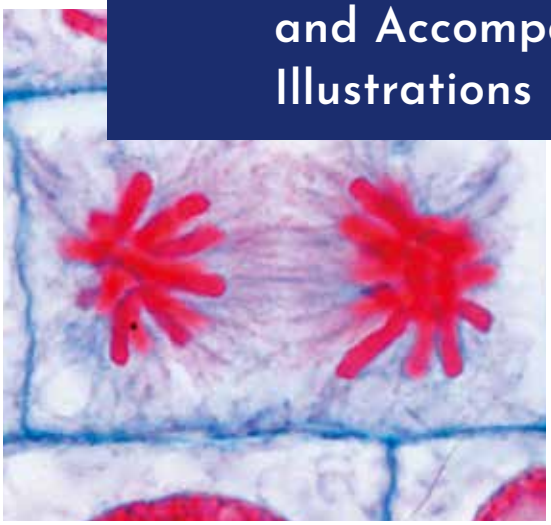
Drawing and Worksheets, Copy Templates, Overhead Transparencies and Accompanying Booklet with Illustrations

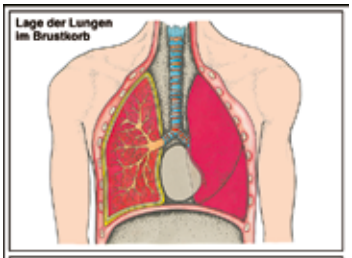


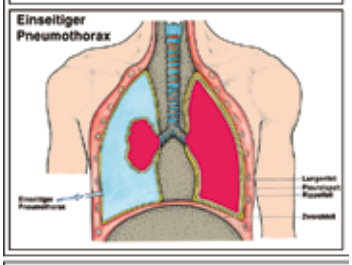
On Request!

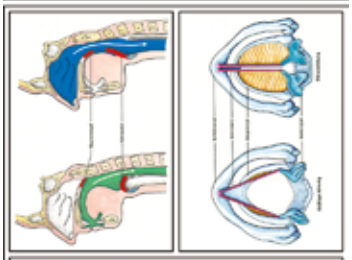
Color Overhead Transparencies as modern visual aids become more and more part of biology, physics and chemistry teaching programs. Therefore we have created comprehensive range of Transparency Atlases of outstanding quality.

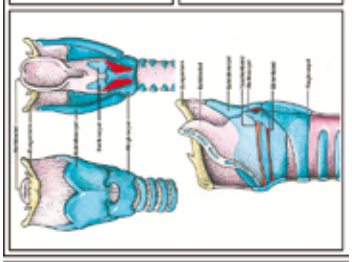
The atlases consist of large-format transparency sheets (size 22 x 28 cm) comprising a great variety of beautiful drawings, diagrams, tables, anatomical pictures, brilliant micro- and macro-photographs, electron and X-ray photographs, impressive life cycles, human photographs, landscape photographs, scenes, test data and results, etc.

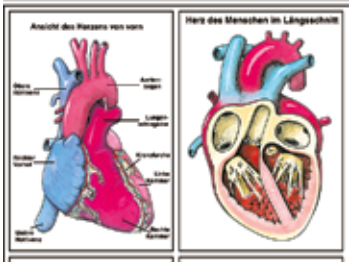
- Each Transparency atlas is accompanied by a comprehensive interpretation text giving a detailed description of all pictures, based on the latest scientific findings (available in different languages).
- Our multi-colored transparencies are printed by a special process and excel by reason of their high projection quality.
- Transparencies and texts are held in a strong plastic file with ring mechanism.
- Sketch and work-sheets with semidiagrammatic designs and texts. Teacher may take photocopies from the sheets and use for classroom work and tests.

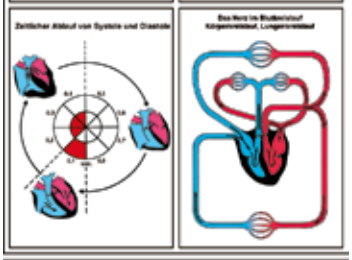


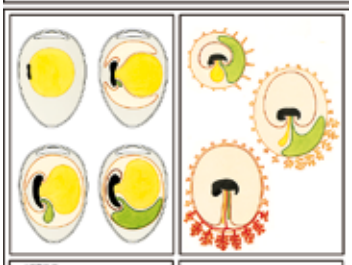


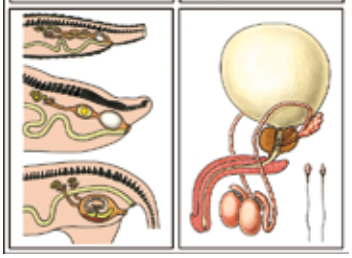












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8235E **Protecting Crops from Damage and Diseases.** Plant diseases of economic importance, plant pests, destructive weeds and animals. Plant protection: mechanical, chemical, biological and biotechnical treatments. – Atlas of 30 transparencies with 101 pictures and accompanying textbook with illustrations. In plastic folder.

8238E **Ecosystems.** Natural biological communities become rarer and rarer. Their abundance of species, the problems of their preservation as well as their importance for the whole ecological structure are treated in these atlas on hand and documented by characteristic examples. – Atlas of 42 transparencies with 205 pictures and accompanying textbook with illustrations. In plastic folder.

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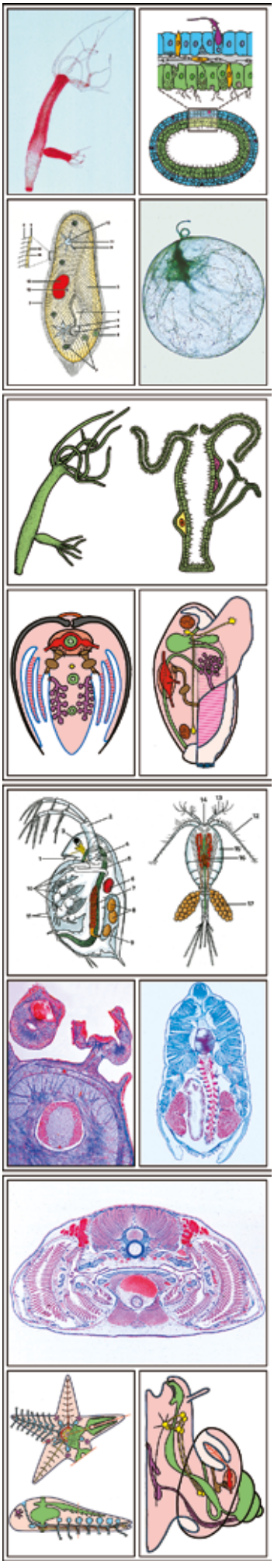


Drawing Sheets for Human Biology

with Transparencies and Explanatory Comments for the Teacher

Compilation: Prof. Walter Mergenthaler, OStD Heribert Schmid, Gym. Prof. Eberhard Weismann

Part I Motion: Skeleton, Muscular System, Apparatus of Motion	**12 sheets**
Part II Metabolism: Nutrition, Respiration, Circulatory System, Excretion	**20 sheets**
Part III Control System: Sense Organs, Nervous System, Hormones, Information	**19 sheets**
Part IV Genetics: Reproduction, Embryonic Development, Transmission	**24 sheets**

Drawing is an indispensable part of biology lessons. It creates clear ideas and records what has been observed. However, there is usually not enough time in class to make complete student drawing sheets.
Using our worksheets makes it possible to save time and draw successfully and promotes visual model-based thinking in particular.

Drawing Sheets
- outstanding layout of the drawings by university illustrators
- on strong paper size 21 x 29 cm, suitable also as copy to produce sheets in the quantity of the class
- prepared for drawing in other important details, for lettering and for colouring according to the instructions of the teacher
- are furnished as loose leaves in a file for an independant programming of the lesson by individual selection.

Overhead Transparencies
- for projection and working with the overhead-projector by the teacher
- in its contents identical with the drawing sheets of the students
- the application of a strong, hard-wearing carrier foil warrants great durability
- no problems with the use of felt-tip pens, and therefore additional details can be drawed in and important things can be pointed out by colour
- keeping in a stable plastic file with ring mechanism
- every single transparency is kept in a clear-view wrap, therefore taking out of transparencies is very easy without opening of the ring mechanism.

Explanatory Comments
- bring off a general introduction into the different subjects
- comprehensive description of each drawing sheets and transparencies
- ideas and impulses for creation of vivid lessons
- reproductions of all drawing sheets, but completely drawn and supplied with legends as pattern for the making of the drawing sheets
- instruction for the working out of the sheets by the students

The reproductions of the drawing sheets in this catalogue are strongly reduced. The original size of the drawing sheets and overhead transparencies is 21 x 29 cm.

Transparencies, each in a stable plastic file with ring mechanism. Drawing sheets and transparencies are kept single in clear-view wraps for a simple taking out of the file.

Part I Motion: Skeleton, Muscular System, Apparatus of Motion

1. The skeleton, entire view
2. The vertebral column
3. The joints
4. The hip joint
5. The skeleton of the foot
6. The skull
7. The skeleton muscles, front side
8 The skeleton muscles, back side
9. The muscles of head and neck
10. The muscles of arm and shoulder
11. The muscles of the leg
12. Examples for movement

Part I, version A: Catalog No. M1A
Part I, version B (Media Package): Catalog No. M1B

Part II Metabolism: Nutrition, Respiration, Circulatory System, Excretion

1. Nutritive substances
2. Organs of the digestive system
3. The teeth
4. Salivary glands, esophagus
5. The stomach
6. The intestine
7. The digestion
8. The liver
9. The nose
10. The larynx
11. Trachea and lungs
12. The respiratory mechanism
13. The blood circulation
14. The heart
15. The blood vessels
16. The blood
17. The circulatory functions
18. The urinary organs
19. Fine structure of the kidney
20. The skin. Metabolism scheme

Part II, version A: Catalog No. M2A
Part II, version B (Media Package): Catalog No. M2B

Part III Control System: Sensitive Organs, Nervous System, Hormones, Information

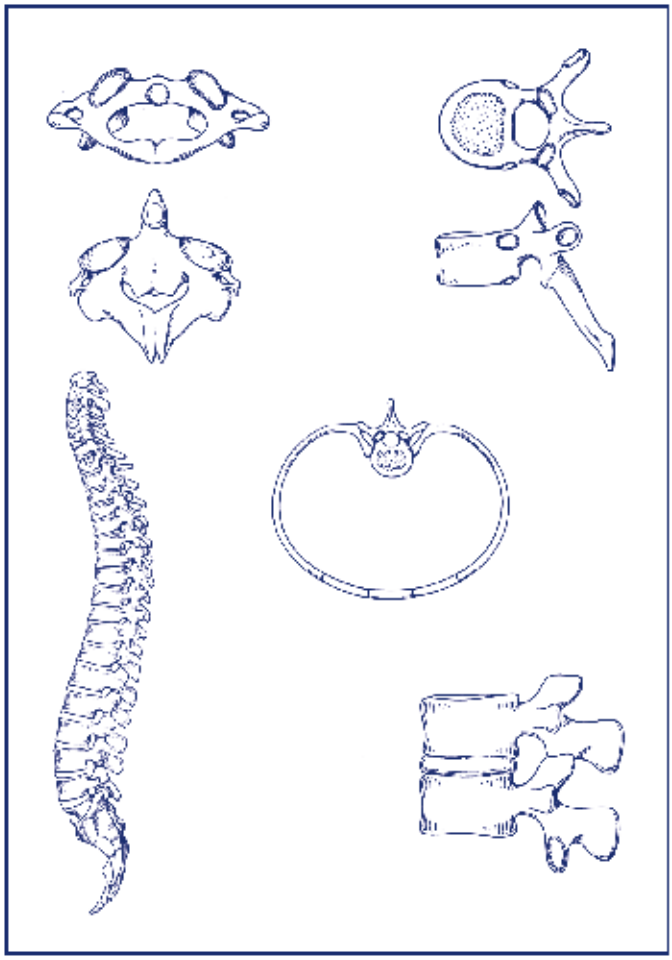
1. The eye
2. The accomodation
3. Auxiliary organs of the eye
4. Ear and hearing
5. The senses of equilibrium
6. The senses of smell and taste
7. The nervous tissue
8. The nervous system
9. The spinal cord
10. Paths of the spinal cord
11. The patellar reflex
12. One's own reflexes, foreign reflexes
13. Paths of central nervous system
14. The brain
15. Brain stem and cerebellum
16. The cerebrum
17. The autonomous nervous system
18. Autonomic reflexes
19. The hormonal glands

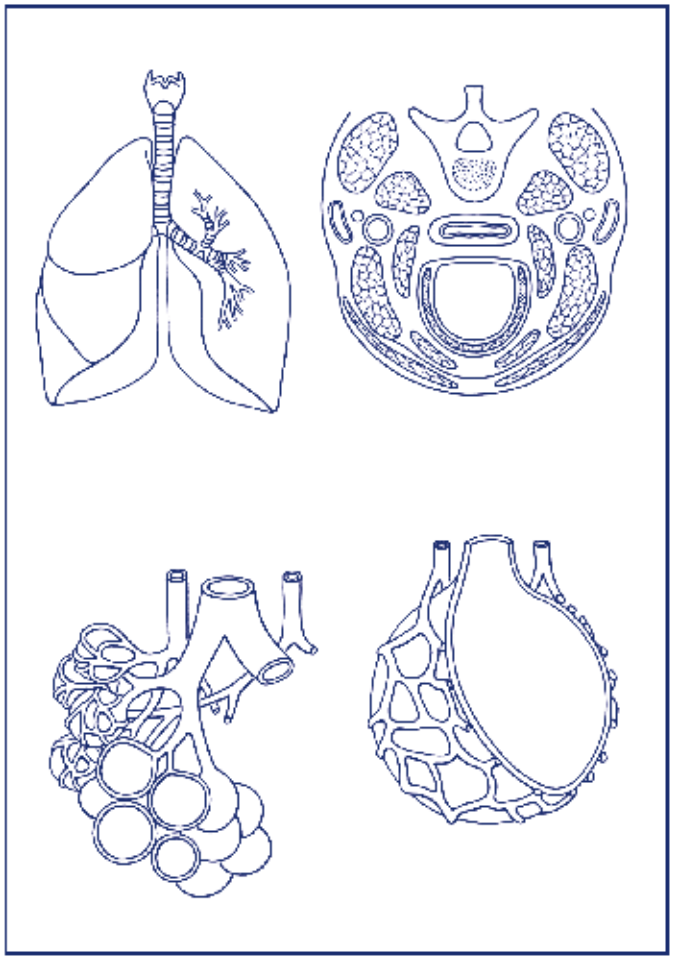
Part III, version A: Catalog No. M3A
Part III, version B (Media Package): Catalog No. M3B

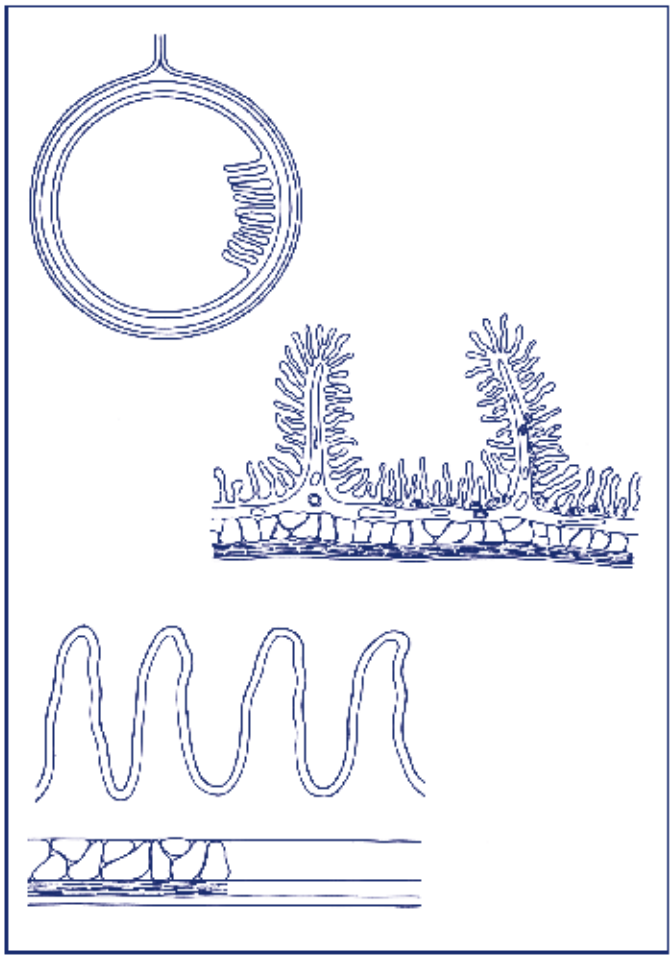
Part IV Genetics: Reproduction, Embryonic Development, Hereditary Transmission

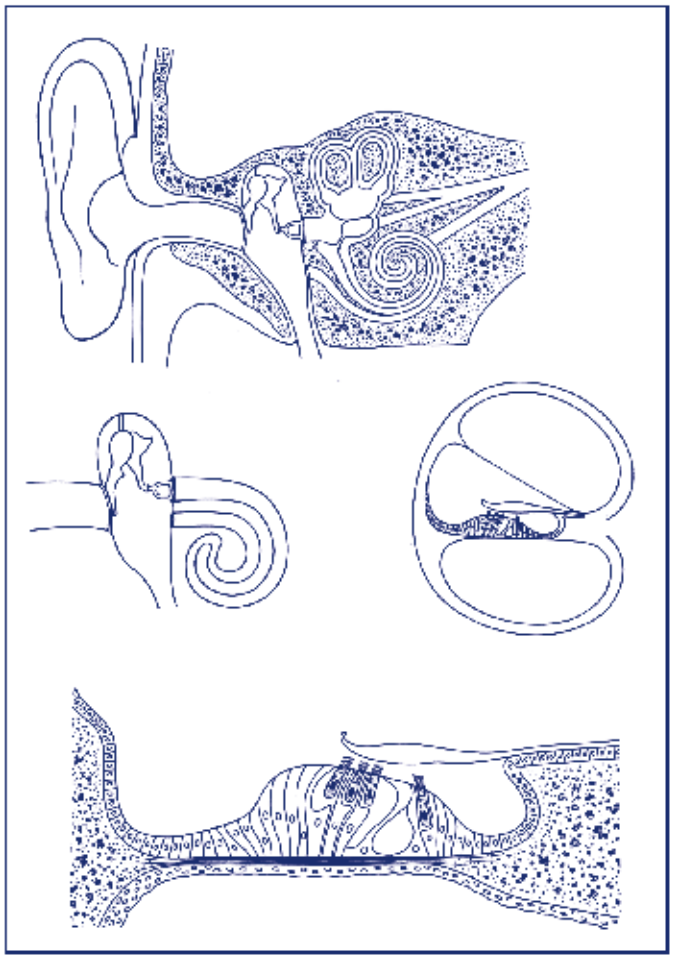
1. The reproductive organs of the man
2. The formation of sperm cells (spermatogenesis)
3. The reproductive organs of the woman
4. The maturation of oocyte (oogenesis)
5. The menstrual cycle of the woman
6. The fertilization of the egg, first development in the fallopian tube and imbedding in the uterus
7. The embryonic development until the 15th day
8. The embryonic development until the end of the 4th week
9. The embryonic development until the birth
10. The placenta
11. The process of birth
12. The coming about of twins
13. The intermediate inheritance of marvel of Peru
14. The dominant-recessive inheritance in pea-races
15. Dihybrid crossing of two pea-races
16. Other dihybrid crossings
17. Genetic distribution of numerous characteristics
18. Common family inheritance
19. The chromosomes as carriers of the hereditary factors
20. Hereditary transmission of the sex and sex-linked inheritance
21. Courses of inheritance of dominant characteristics of man
22. Courses of inheritance of recessive characteristics of man
23. Mutations with men
24. Chromosomes and genes

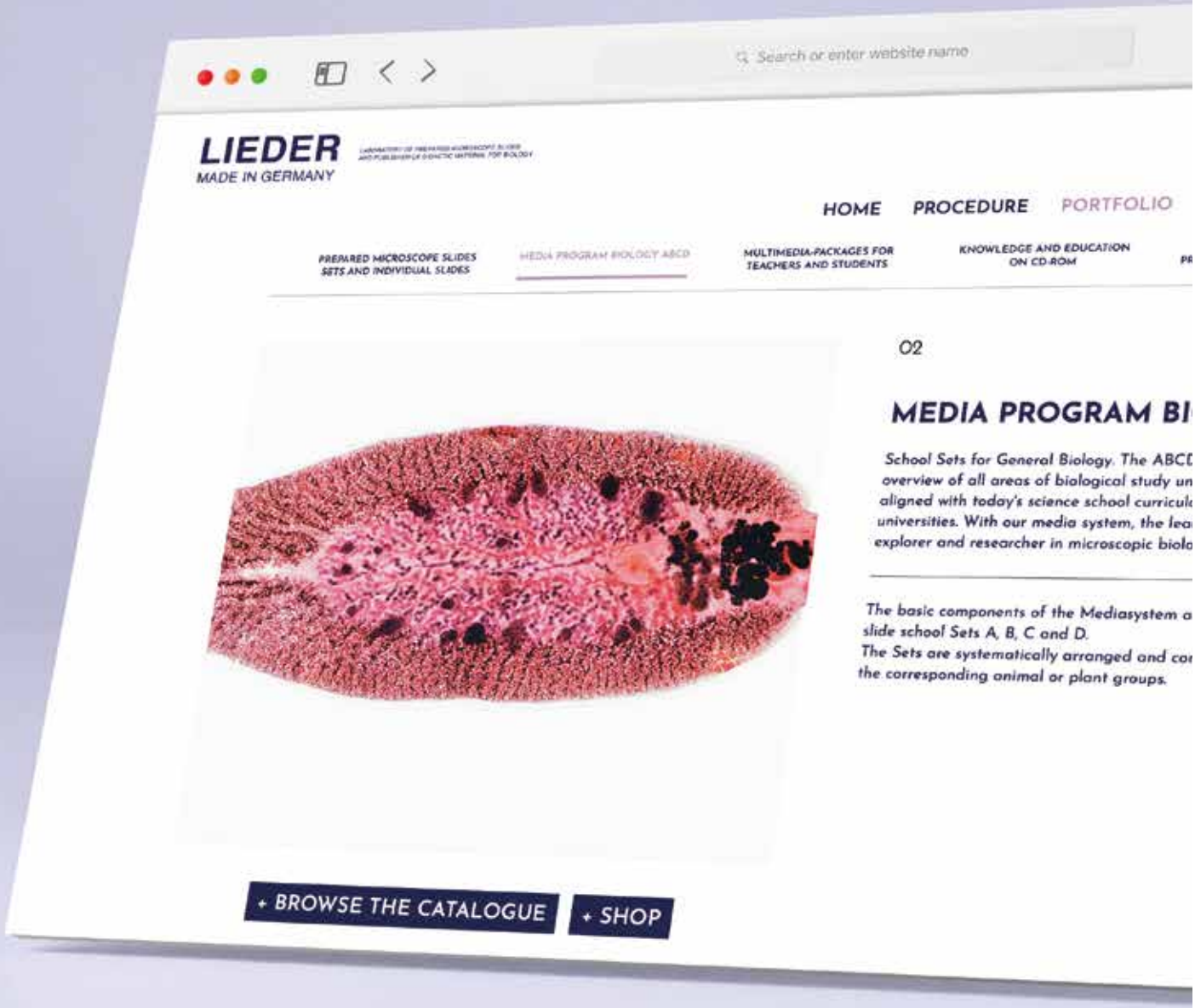
Part IV, version A: Catalog No. M4A
Part IV, version B (Media Package): Catalog No. M4B
Special prices if the complete Parts I to IV are ordered:
Parts I to IV, version A: Catalog No. MA
Parts I to IV, version B (Media Package): Catalog No. MB











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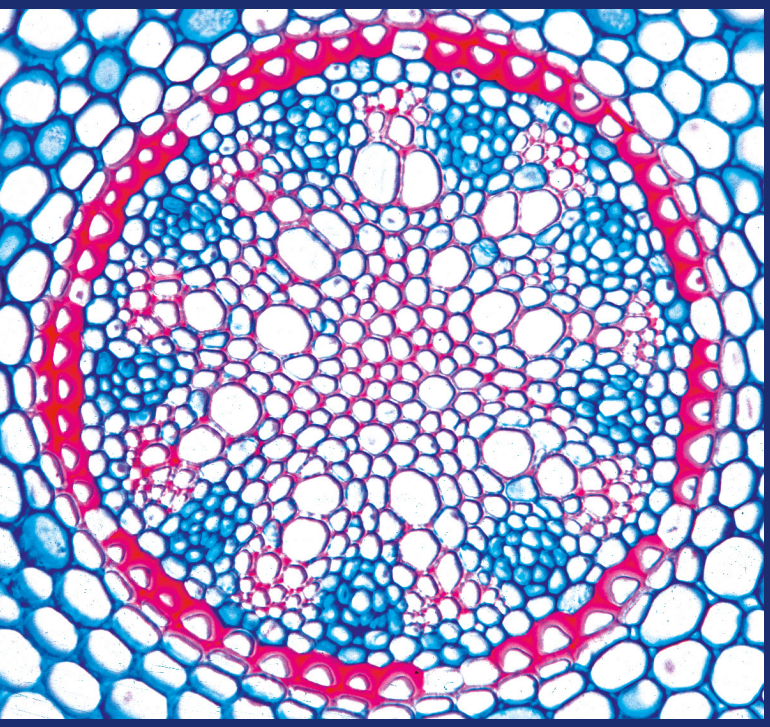

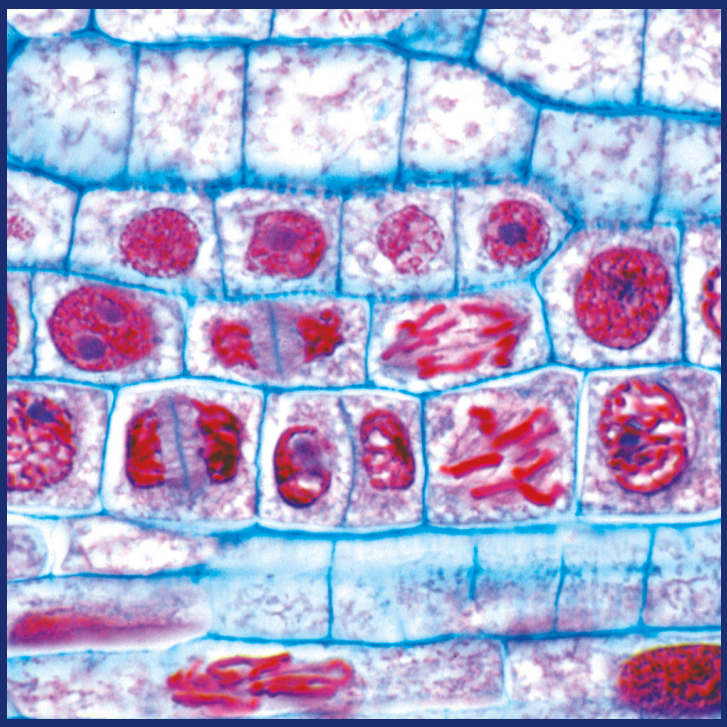

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