



### Fungi and Lichen

20 Microscope Slides

Phycomycetes 1(c). *Mucor mucedo*, w.m. of hyphae showing sporangia 2(d). *Rhizopus nigricans*, w.m. of hyphae with developing zygotes (d). *Synchytrium endobioticum*, potato black wart, t.s. of infected tissue 4(c). *Plasmodiophora*, t.s. of cabbage rot Ascomycetes 5(c). *Claviceps purpurea*, t.s. of sclerotium 6(c). *Tuber rufum*, truffle, t.s. of fruiting body showing asci 7(c). *Peziza* sp., cup-fungus, t.s. of fruiting body with asci 8(d). *Erysiphe* sp., mildew, t.s. of leaf with perithecia 9(d). *Penicillium* sp., blue mold on orange-rind, t.s. of hyphae with conidiophores 10(c). *Aspergillus glaucum*, brown-mold, w.m. of hyphae with sporangia 11(b). *Saccharomyces* sp., yeast, budding, w.m. 12(d). *Taphrina pruni* (*Exoascus pruni*), plum pockets, t.s. with haustoria and asci Basidiomycetes 13(d). *Puccinia graminis*, t.s. of uredinia on wheat 14(d). *Puccinia graminis*, wheat rust, t.s. of aecidia on infected barberry leaf 15(d). *Ustilago zeae*, corn smut, infected tissue, t.s. 16(c). *Psalliota* sp., mushroom, l.s. through pileus and lamellae 17(c). *Boletus edulis*, pore fungus, l.s. through pores 18(c). *Lycoperdon gemmatum*, puff-ball, t.s. of fruiting body lichens 19(d). *Xanthoria*, lichen, t.s. of thallus showing hyphae with symbiotic algae 20(d). *Xanthoria*, t.s. of apothecium.

9982-1003971

### Bryophyta (Liverworts and Mosses)

15 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003972

### Bryophyta (Liverworts and Mosses)

15 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003973

### Arrangement and Types of Vascular Bundles

13 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1004255

### Angiospermae I. Gymnospermae

15 Microscope Slides

1(e). *Ephedra*, male cone l.s. 2(f). *Ephedra*, female cone at pollination time l.s. 3(c). *Ginkgo*, young sprout, t.s. 4(c). *Ginkgo*, leaf t.s. 5(c). *Pinus*, pine, young root 6(c). *Pinus*, pine, first year stem 7(e). *Pinus*, pine, bud showing vascular anatomy and origin of leaves l.s. 8(d). *Pinus*, pine, wood, transverse, radial and tangential sections 9(c). *Pinus*, pine, needles (leaves) t.s. 10(b). *Pinus*, pine, w.m. of mature pollen grains 11(d). *Pinus*, pine, male cone l.s. 12(d). *Pinus*, pine, young female cone l.s. 13(c). *Larix*, larch, t.s. of needles (leaves) t.s. 14(d). *Larix*, larch, male cone l.s. 15(e). *Larix*, larch, female cone with ovules l.s.

9982-1003974

### Angiospermae II. Cells and Tissues

20 Microscope Slides

1(c). Epidermal cells of *Allium* (onion), flat mount shows typical plant cells with nuclei, cytoplasm and cell walls 2(d). Mitosis, l.s. from *Allium* root tips showing all stages of plant mitosis 3(f). Meiosis, t.s. of *Lilium* anthers showing different stages of meiosis 4(d). Stem apex and meristematic tissue of *Asparagus* l.s. 5(d). Chloroplasts, w.m. of leaf of *Elodea* or *Spinacea* showing detail of large chloroplasts 6(c). Chromoplasts, t.s. of root of *Daucus* (carrot) 7(c). Aleurone grains, t.s. of *Ricinus* endosperm 8(b). Starch grains, different kinds mixed w.m. 9(d). Fat, t.s. of endosperm of *Corylus* (hazel) stained for fat 10(d). Inulin crystals, t.s. of tuber of *Dahlia* 11(d). Acid tannic, t.s. bark of *Rosa* 12(b). Calcium oxalate crystals in w.m. of dry *Allium* scale 13(d). Annular and spiral vessels, isolated and w.m. 14(c). Wood cells, macerated and w.m. 15(c). Lactiferous vessels, l.s. stem of *Euphorbia* (spurge) 16(b). Cork cells, t.s. bark of *Quercus suber* (oak) 17(b). Scale-like stellate hairs, isolated from *Elaeagnus* (olive tree) 18(c). Lysigenous oil glands, t.s. rind of *Citrus* fruit 19(b). Parenchyma cells, t.s. of marrow of *Sambucus* (elderberry) 20(d). Stone cells, t.s. fruit of *Pyrus* (pear).

9982-1003975

### Angiospermae III. Roots

15 Microscope Slides

1(d). *Allium cepa*, onion, root tips, l.s. showing all stages of mitosis 2(c). *Zea mays*, corn, t.s. of typical monocot root 3(c). *Iris*, t.s. of typical monocot root 4(c). *Ranunculus*, buttercup, t.s. of a typical dicot root 5(c). *Sarothamnus*, broom, t.s. through woody root 6(c). *Taraxacum*, dandelion, t.s. through tap root showing lactiferous ducts 7(d). *Vicia faba*, bean, root nodule t.s. nitrogen fixing bacteria 8(d). *Ranunculus ficaria*, tuber during fall season, t.s. showing starch 9(d). *Alnus*, alder, t.s. of tuber showing actinomycetes 10(d). *Neottia*, orchid, t.s. of root with endotrophic mycorrhiza 11(d). *Cuscuta*, dodder, on host, t.s. haustorium 12(d). Root hairs, w.m. of root tip, root cap and root hairs 13(d). *Zea mays*, root tip, median l.s. showing central pith, cap and starch 14(c). *Monstera*, aerial root t.s. 15(c). *Elodea*, Canadian waterweed, t.s. of an aquatic root.

9982-1003976

### Angiospermae IV. Stems

20 Microscope Slides

1(c). *Canna*, t.s. of typical monocot stem with scattered bundles 2(f). *Aristolochia*, t.s. of one year, two years stem and older stem, all 3 on one slide 3(e). Dicot and monocot stem, t.s. of *Helianthus* and *Canna* 4(e). Dicot and monocot stem, t.s. of *Ranunculus* and *Zea* 5(e). *Tilia*, lime, two t.s. of stems, first year and two years 6(d). *Fagus silvatica*, beech, three sections of wood, t.s., r.l.s., t.l.s. 7(d). *Fraxinus excelsior*, ash, three sections of wood, t.s., r.l.s., t.l.s. 8(c). *Quercus*, oak, t.s. of stem showing cambium and bark 9(c). *Sambucus*, elder, t.s. of bark showing lenticells 10(c). *Linum*, flax, t.s. of stem showing husk fibres 11(b). *Linum*, flax, isolated husk fibres, w.m. 12(d). *Ranunculus*, l.s. of herbaceous stem 13(d). *Cucurbita pepo*, l.s. of stem with sieve tubes 14(d). Sieve plates in top view, t.s. of *Cucurbita* stem 15(c). *Lamium*, t.s. of square stem, collenchyma 16(c). *Secale*, rye, t.s. of typical grass stem 17(c). *Nymphaea*, water lily, t.s. of aquatic stem, spicular cells 18(c). *Hippuris*, t.s. of typical aquatic stem with large central pith 19(d). *Urtica*, nettle, stinging hairs with poison ducts 20(c). *Solanum tuberosum*, potato, t.s. of tuber with starch grains and cork.

9982-1003977

## Angiospermae V. Leaves

15 Microscope Slides

1(d). Elodea, l.s. of stem tip showing apical meristem and origin of leaves 2(d). Leaves, monocot and dicot, Zea and Ranunculus, t.s. 3(c). Syringa, lilac, t.s. of typical dicot leaf 4(c). Iris, typical isobilateral leaf t.s. 5(c). Eucalyptus, a bifacial foliage leaf with schizogenous oil glands t.s. 6(d). Fagus, beech, t.s. of sun and shade leaves on one slide 7(c). Calluna, ling, t.s. of rolled leaf showing sunken stomata 8(c). Nerium oleander, t.s. of leaf showing sunken stomatal pits lined with protective hairs 9(c). Ficus elastica, rubber plant, t.s. of leaf showing cystoliths 10(c). Elodea, t.s. of leaf showing the simple structure of an aquatic leaf 11(c). Tulipa, tulip, epidermis w.m. showing stomata 12(d). Aesculus, t.s. of leaf bud with squama and embedded folded leaves 13(d). Drosera, sundew, w.m. of leaf with glandular hairs 14(d). Nepenthes, t.s. of pitcher with glands 15(d). Utricularia, bladderwort, w.m. of bladder.

9982-1003978

## Angiospermae VI. Flowers

15 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003979

## Angiospermae VII. Fruits and Seeds

15 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003980

## CYTOLOGY AND EMBRYOLOGY

### The Animal Cell

12 Microscope Slides

1(c). Squamous epithelium, isolated cells from human mouth 2(d). Striated muscle l.s. showing nuclei, striations 3(d). Compact bone and hyaline cartilage t.s., two sections for comparison 4(e). Nerve fibres isolated, fixed and stained by osmic acid to show myelin sheaths and Ranvier's nodes 5(d). Liver of Salamandra t.s., simple animal cells 6(f). Kidney of mouse, t.s. vital stained to demonstrate storage 7(d). Ovary of cat, t.s. showing primary, secondary, and Graafian follicles 8(d). Testis of frog, t.s. showing spermatogenesis 9(e). Salamandra larva, t.s. of skin and other organs selected to show cell division (mitosis) 10(f). Uteri of Ascaris megalocephala, t.s. stained to show meiosis with chromosomes and nuclear spindles 11(f). Salivary gland of Chironomus larva. Giant chromosomes showing large chromomeres. Stained for DNA after Feulgen 12(e). Ova from Psammechinus (sea urchin). Unfertilized ova, fertilized ova, early cleavage stages.

9982-1003981

### Connect With Us



## Plant Cell

12 Microscope Slides

1(c). Epidermis of Allium (onion), w.m. showing simple plant cells with cell walls, nuclei and cytoplasm 2(d). Root tips of Allium cepa l.s. showing cell division (mitosis) in all stages 3(e). Pollen mother cells of Lilium. Prophase of first maturation division (meiosis) 4(f). Pollen mother cells of Lilium. Metaphase and anaphase of first maturation division 5(c). Wood of Tilia macerated and w.m. 6(d). Fruit of Pyrus (pear) t.s. showing stone cells 7(c). Tuber of Solanum (potato) t.s. shows cork and starch grains 8(d). Cucurbita pepo (pumpkin) l.s. of stem showing vascular bundles with sieve tubes, spiral and annular vessels 9(c). Ricinus endosperm t.s. showing aleurone grains 10(d). Anthers of Lilium (lily), t.s. pollen sacs and pollen grains 11(d). Ovary of Lilium (lily), t.s. arrangement of ovules and embryosac 12(e). Spirogyra showing conjugation stages and zygotes.

9982-1003982

## Set of Genetic Slides

25 Microscope Slides

1(d). Allium, root tips, l.s. showing all stages of mitosis 2(e). Eschscholtzia, stigma, w.m. showing penetrating pollen 3(e). Lilium, microspore mother cells, first division, leptotene to zygotene 4(e). Lilium, first division, diakinesis to telophase 5(f). Lilium, second division, interkinesis to tetrad stage 6(f). Polytrichum, moss, archegonium, w.m. 7(f). Polytrichum, moss, archegonium, l.s. 8(e). Spirogyra scalariform conjugation showing zygotes following conjugation 9(d). Sea urchin, developing of eggs, w.m. of most stages up to pluteus 10(f). Giant chromosomes from salivary gland of Chironomus, squash preparation stained for chromomeres 11(f). Giant chromosomes, section 12(e). Ascaris, fertilisation of eggs, t.s. 13(f). Ascaris, male and female pronuclei, t.s. 14(f). Ascaris, meiosis and early cleavage, t.s. 15(e). Testis of crayfish, t.s. showing meiosis 16(d). Testis of mouse, t.s. showing spermatogenesis 17(d). Ovary of rabbit, l.s. showing follicles in various stages 18(f). Embryology of fish, l.s. of embryo showing animal mitosis 19(h). Chromosomes, human, female, of culture of peripheral blood 20(i). Chromosomes, human, male, of culture of peripheral blood 21(f). Drosophila genetics, adult wild type, w.m. 22(f). Drosophila genetics, "barr eye" mutant, w.m. 23(f). Drosophila genetics, "brown eye" mutant, w.m. 24(f). Drosophila genetics, "vestigial wing" mutant, w.m. 25(f). Drosophila genetics, "white eye" mutant, w.m.

9982-1003983

## Sea Urchin Embryology (Psammechinus miliaris)

12 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003984

## Frog Embryology (Rana)

10 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003985

## Chicken Embryology (Gallus domesticus)

10 preparations with accompanying guide.

For details, please go to [www.3bscientific.com](http://www.3bscientific.com).

9982-1003986

