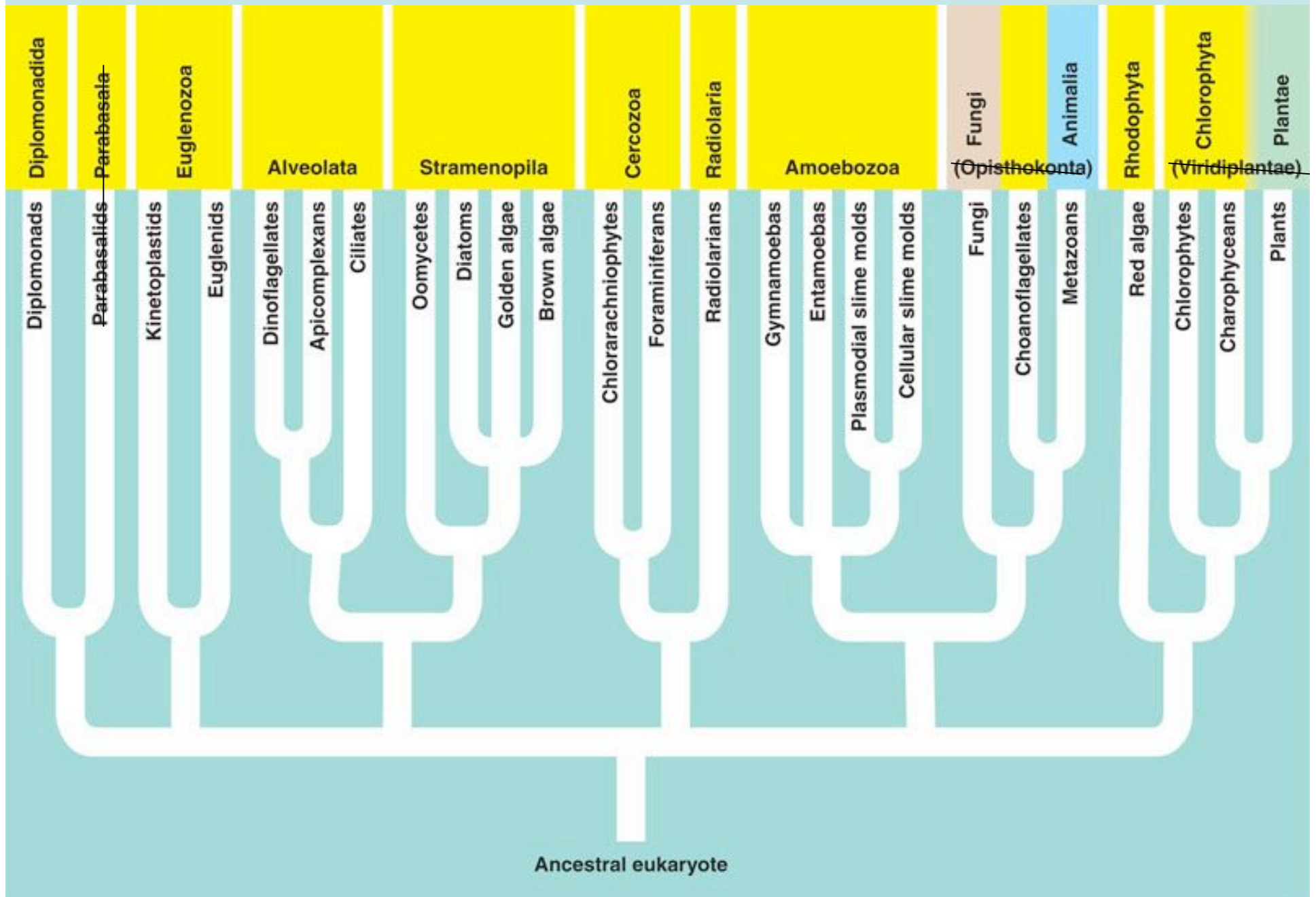
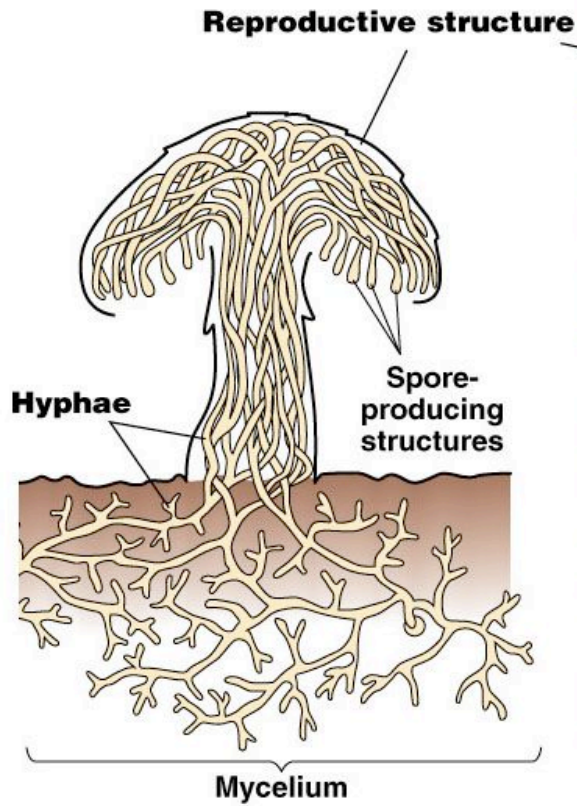


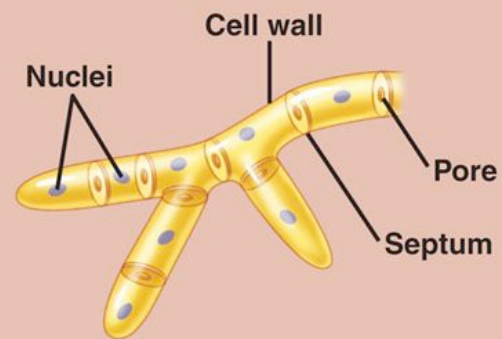
1 Phylogeny of the eukaryotes



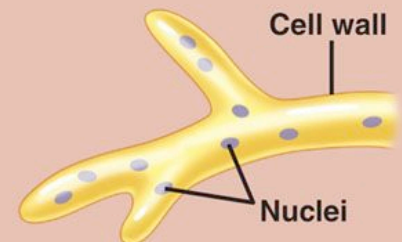
2 Structure of Fungus



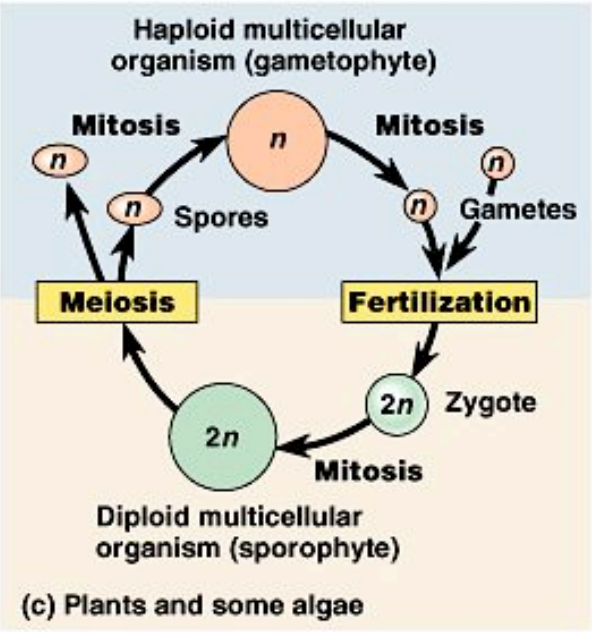
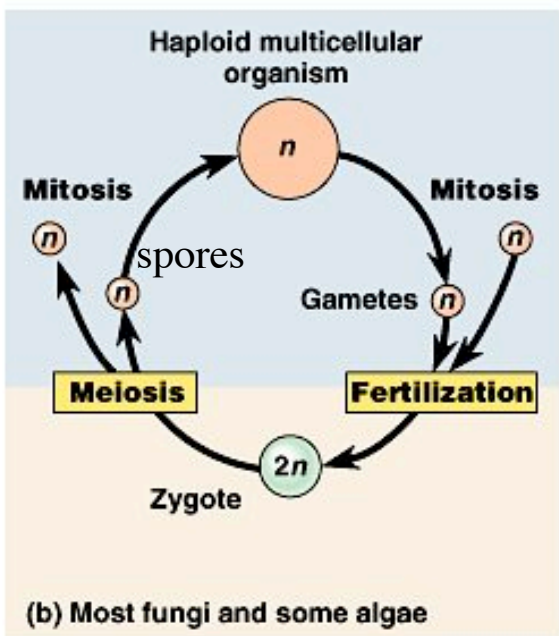
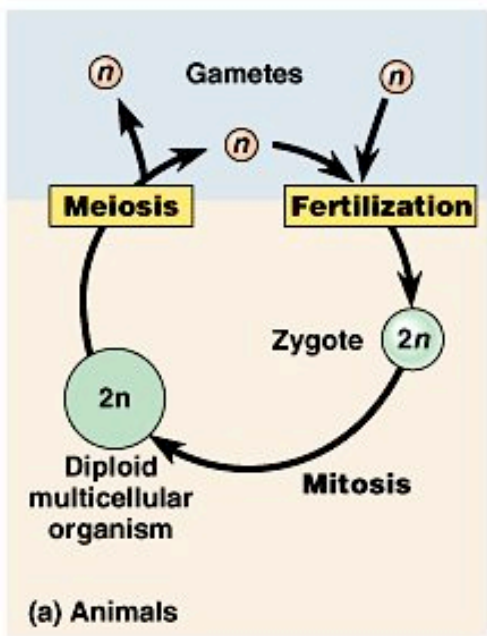
Structure of hyphae



(a) Septate hypha



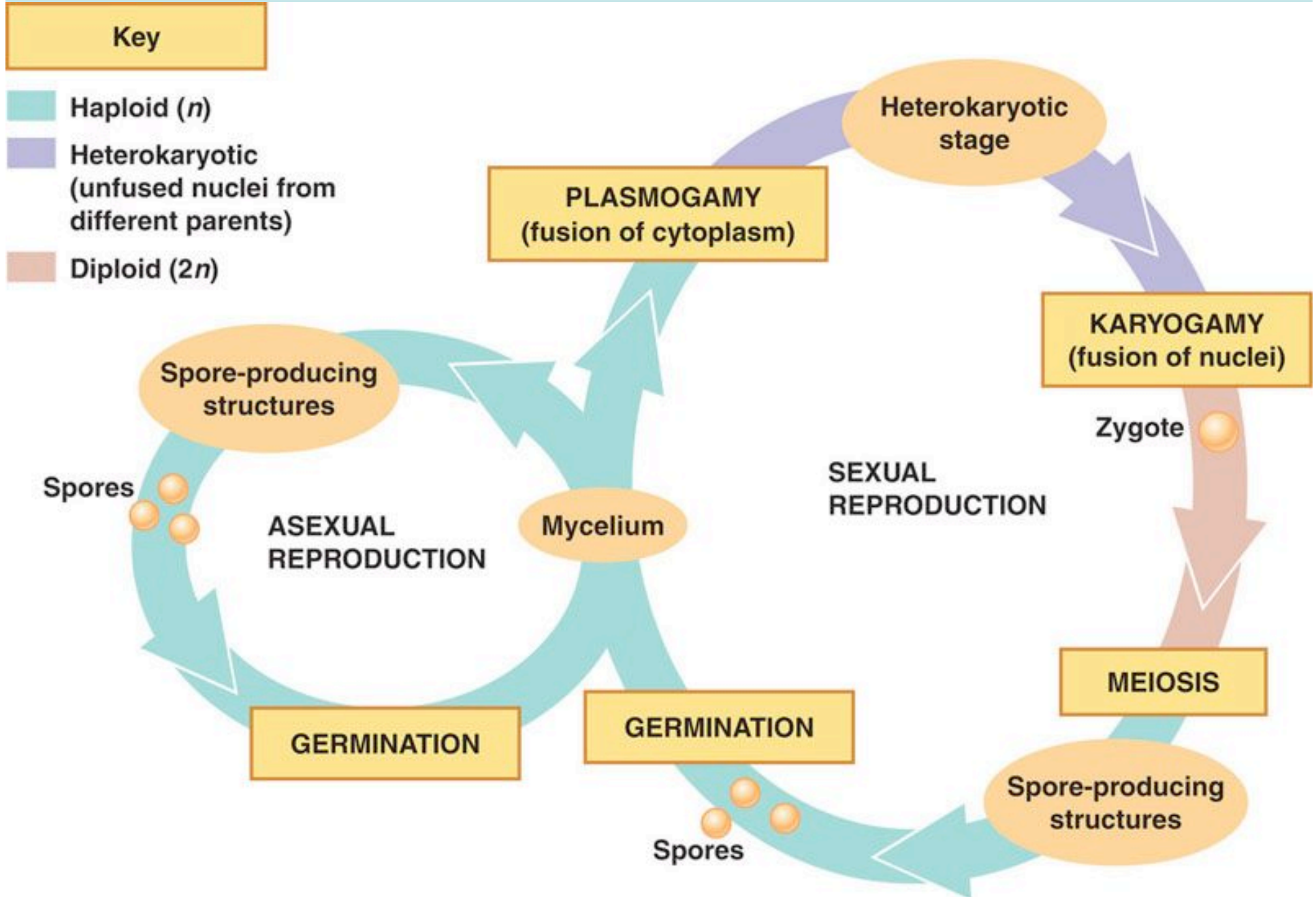
(b) Coenocytic hypha



□ Haploid
 □ Diploid

- 1n multicellular organism dominant
- meiosis produces spores
- meiosis occurs after fertilization

4 Generalized Life Cycle of Fungi



5 Phylum Zygomycota

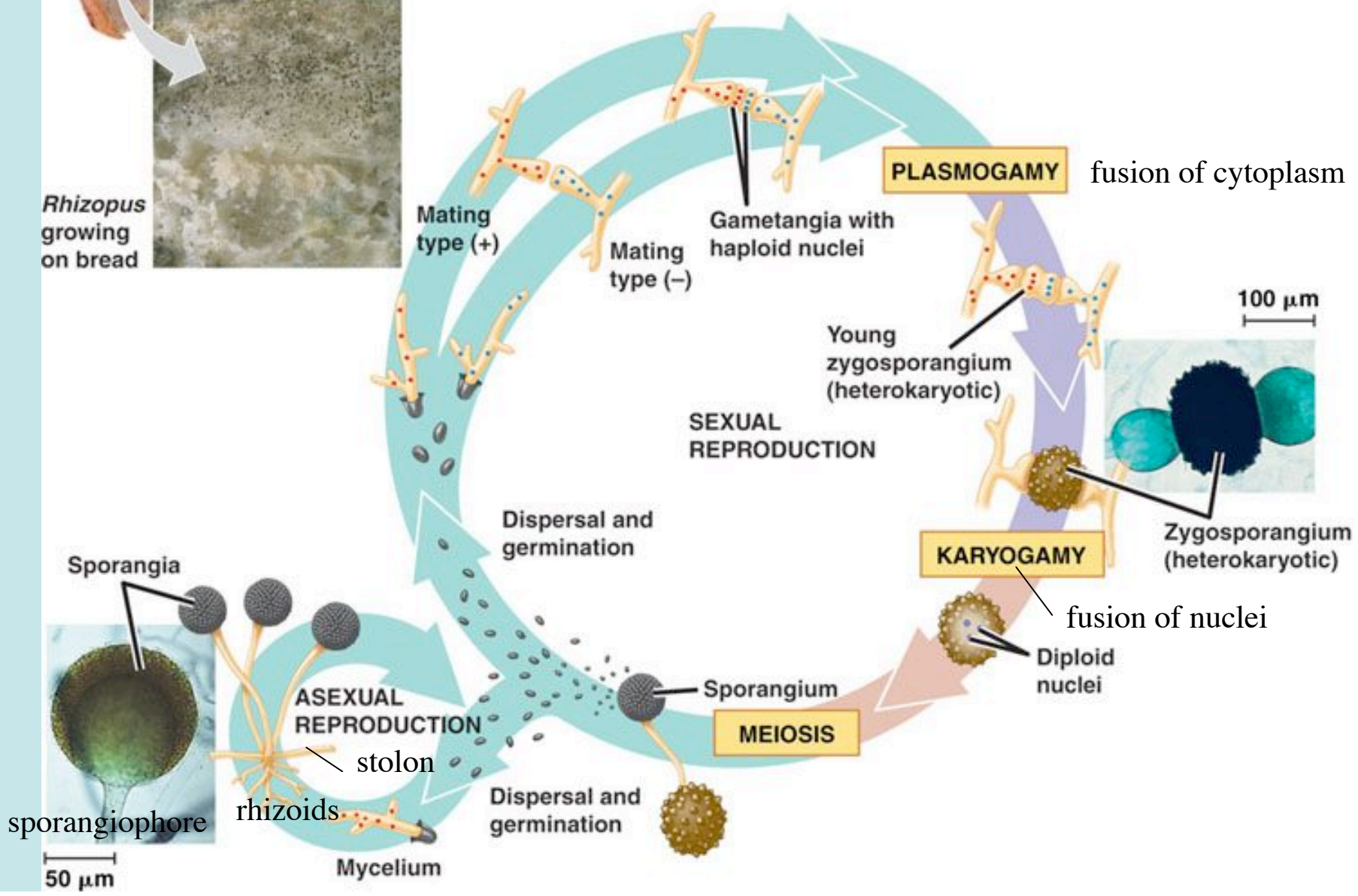


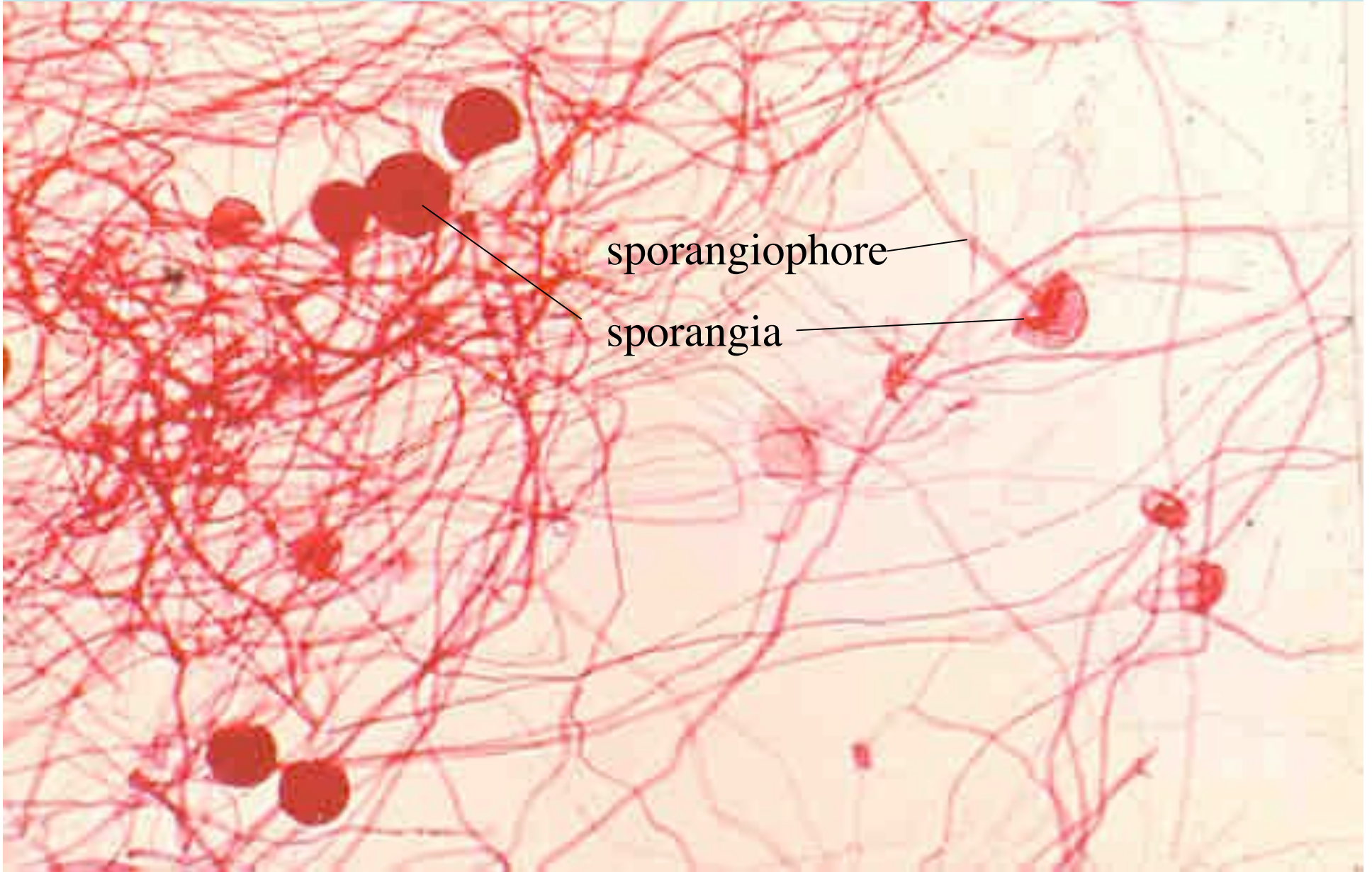
Rhizopus

Benjamin
Cummings

6 Life Cycle of Zygomycota-p.614

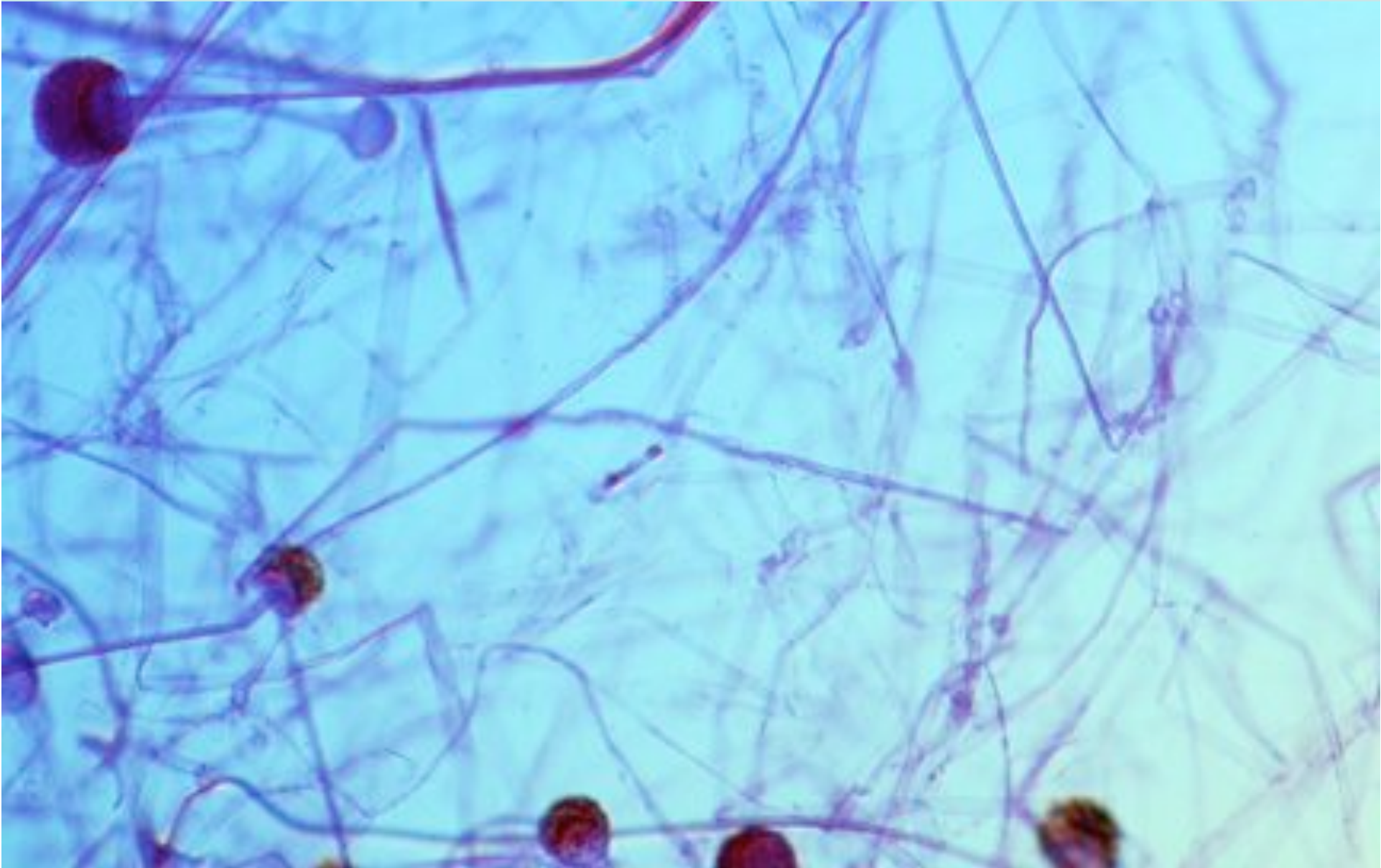
Key	
■	Haploid (n)
■	Heterokaryotic ($n + n$)
■	Diploid ($2n$)



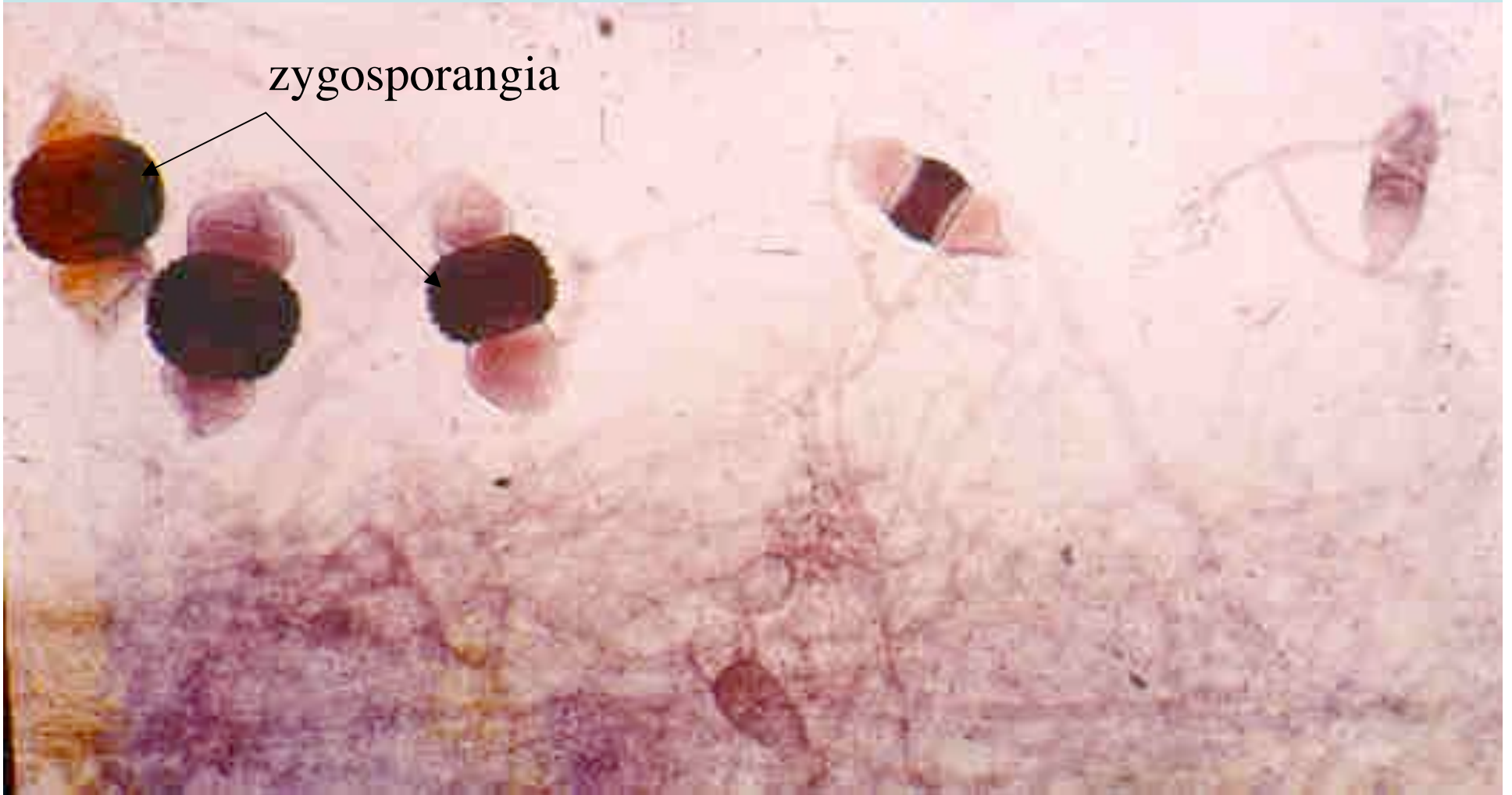


sporangiophore

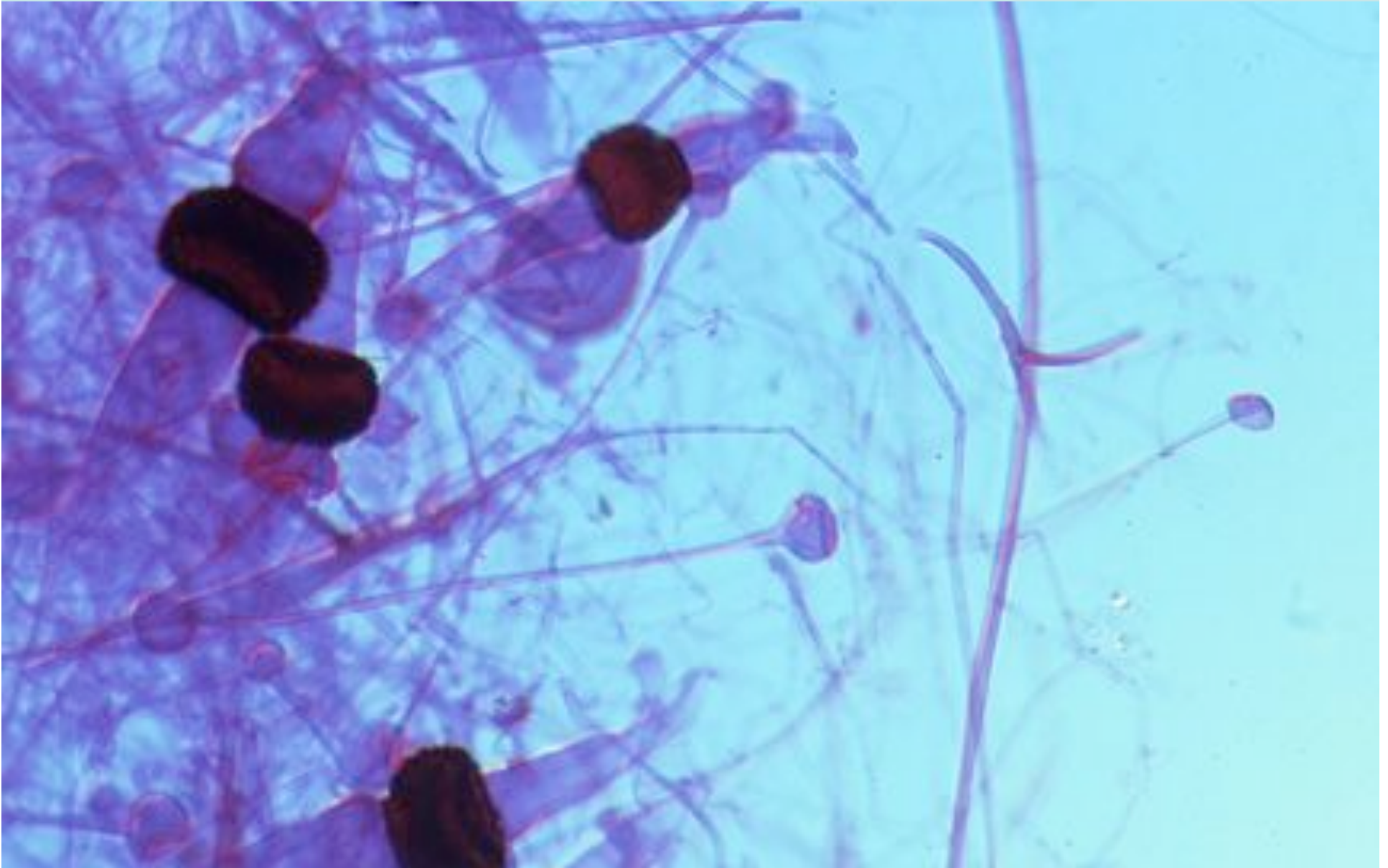
sporangia



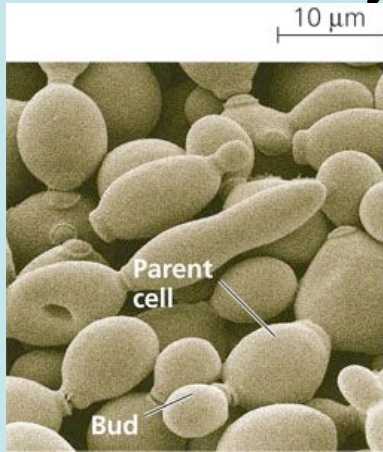
9



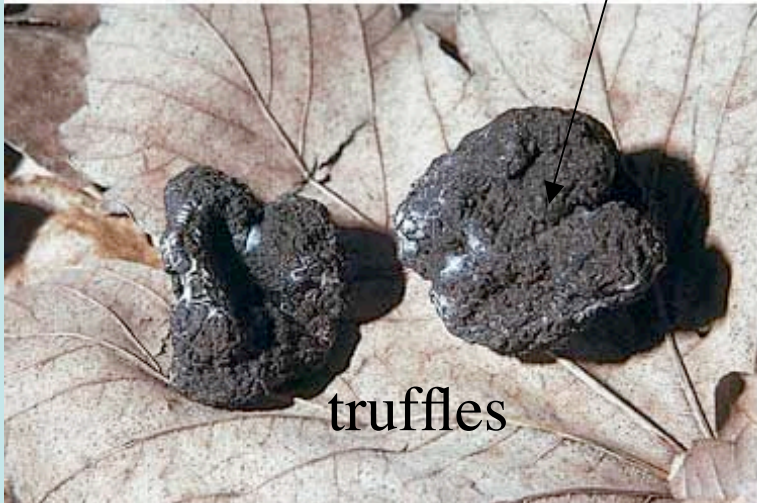
10



11 Phylum Ascomycota with ascocarps (fruiting bodies)



yeast

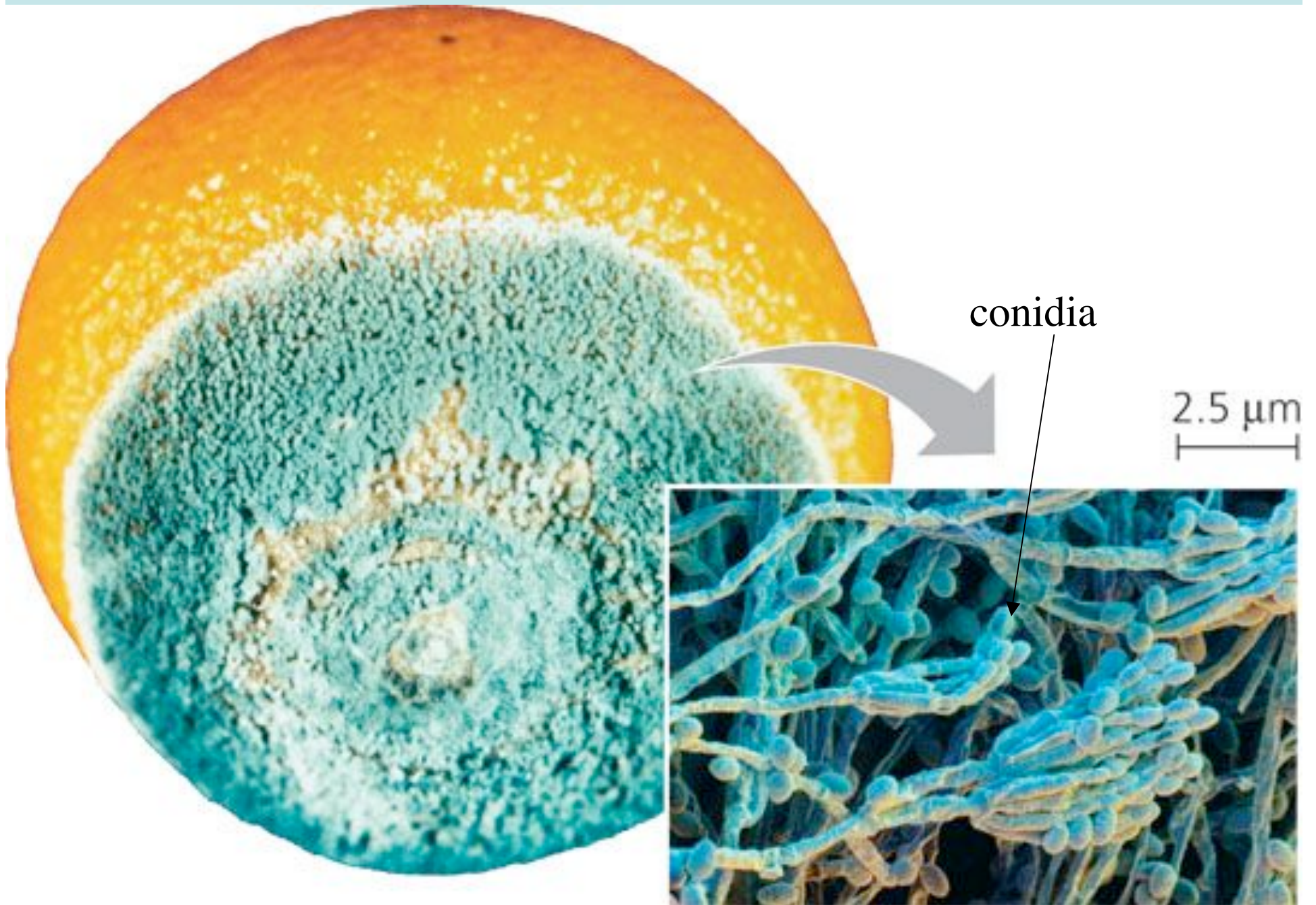


truffles

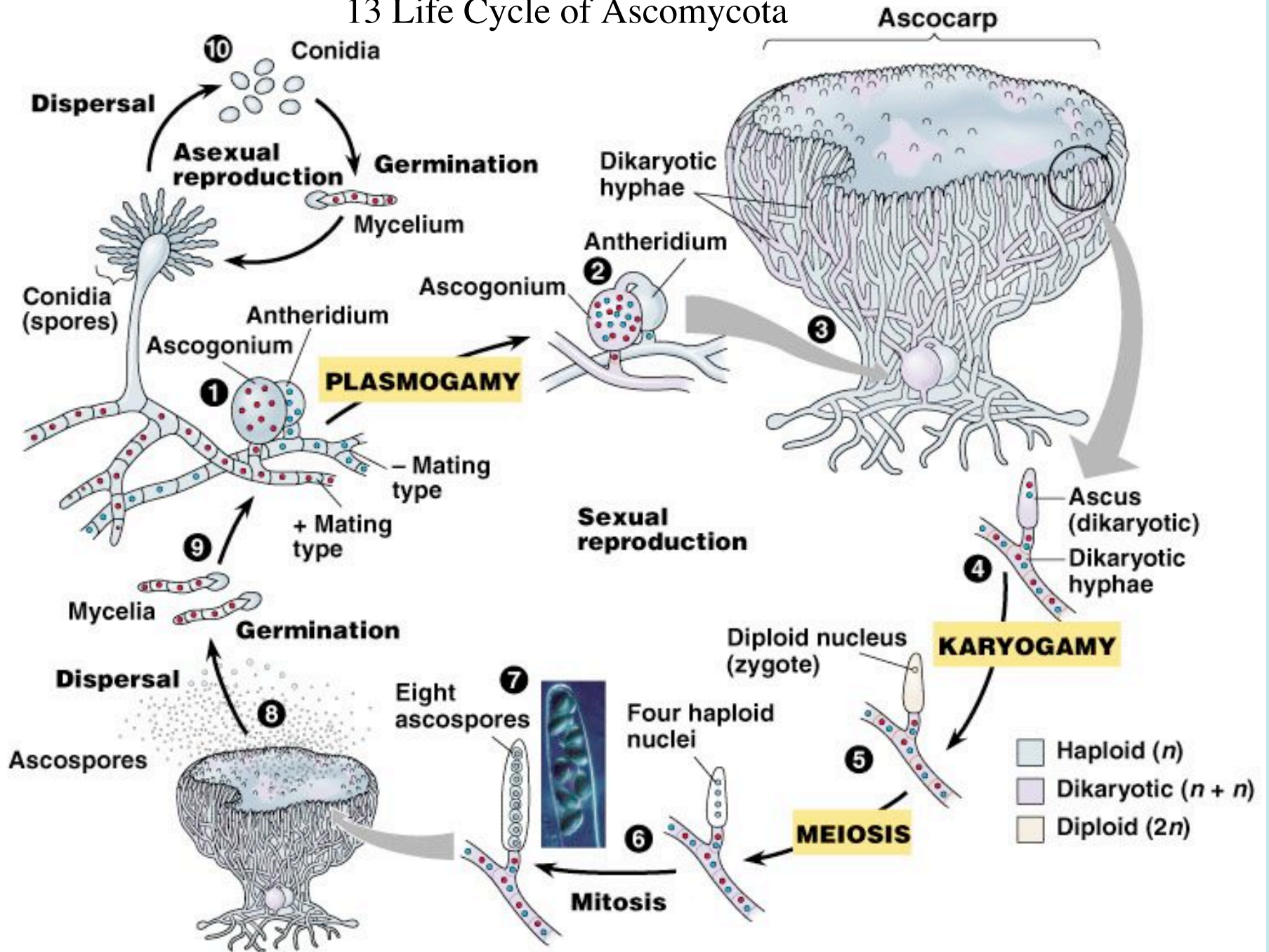


morel

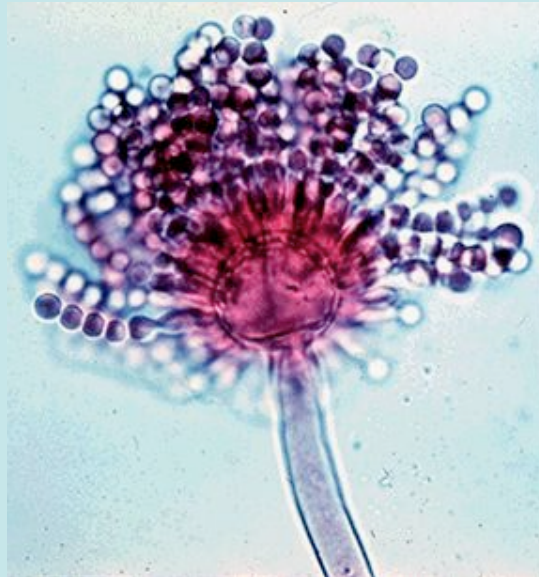
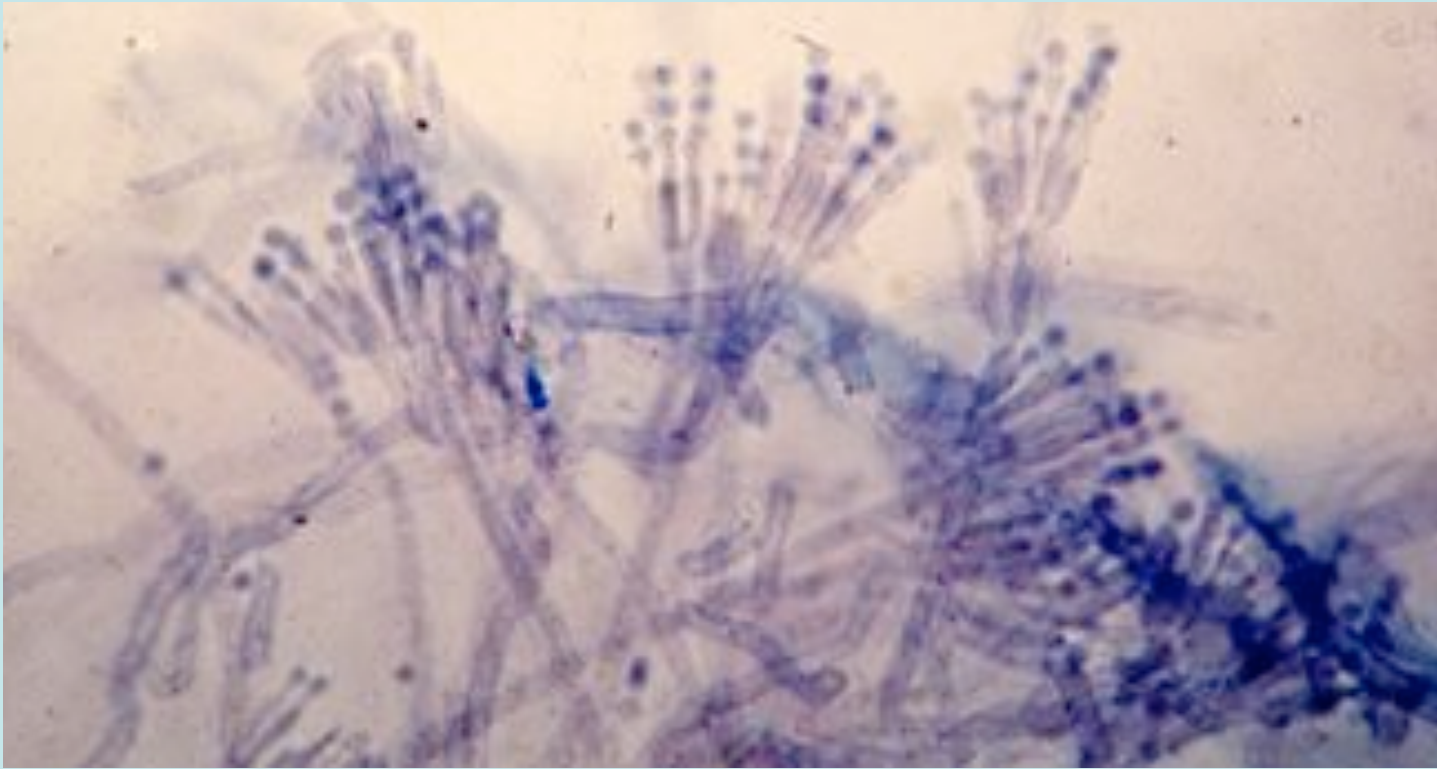
12 mold

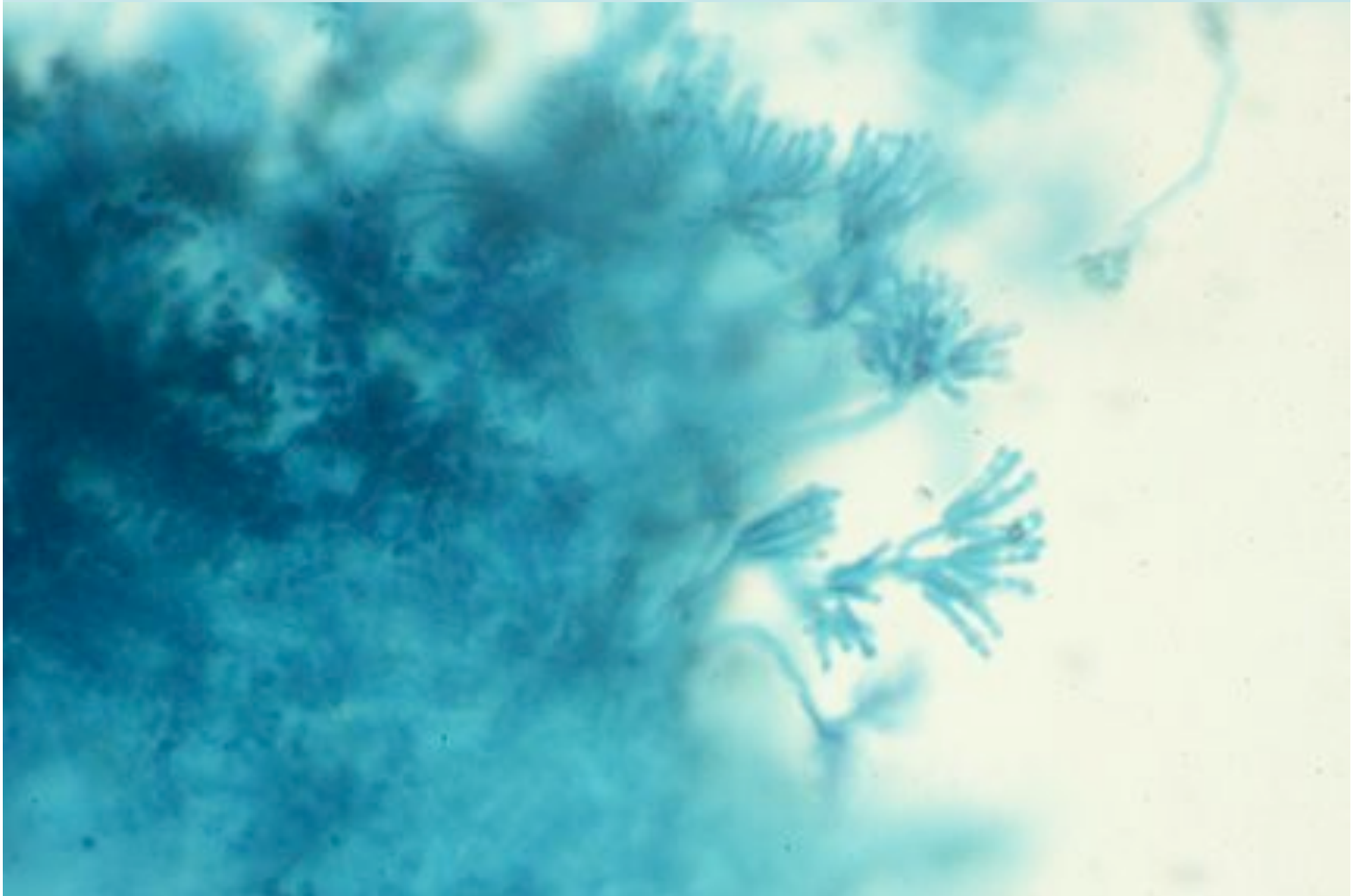


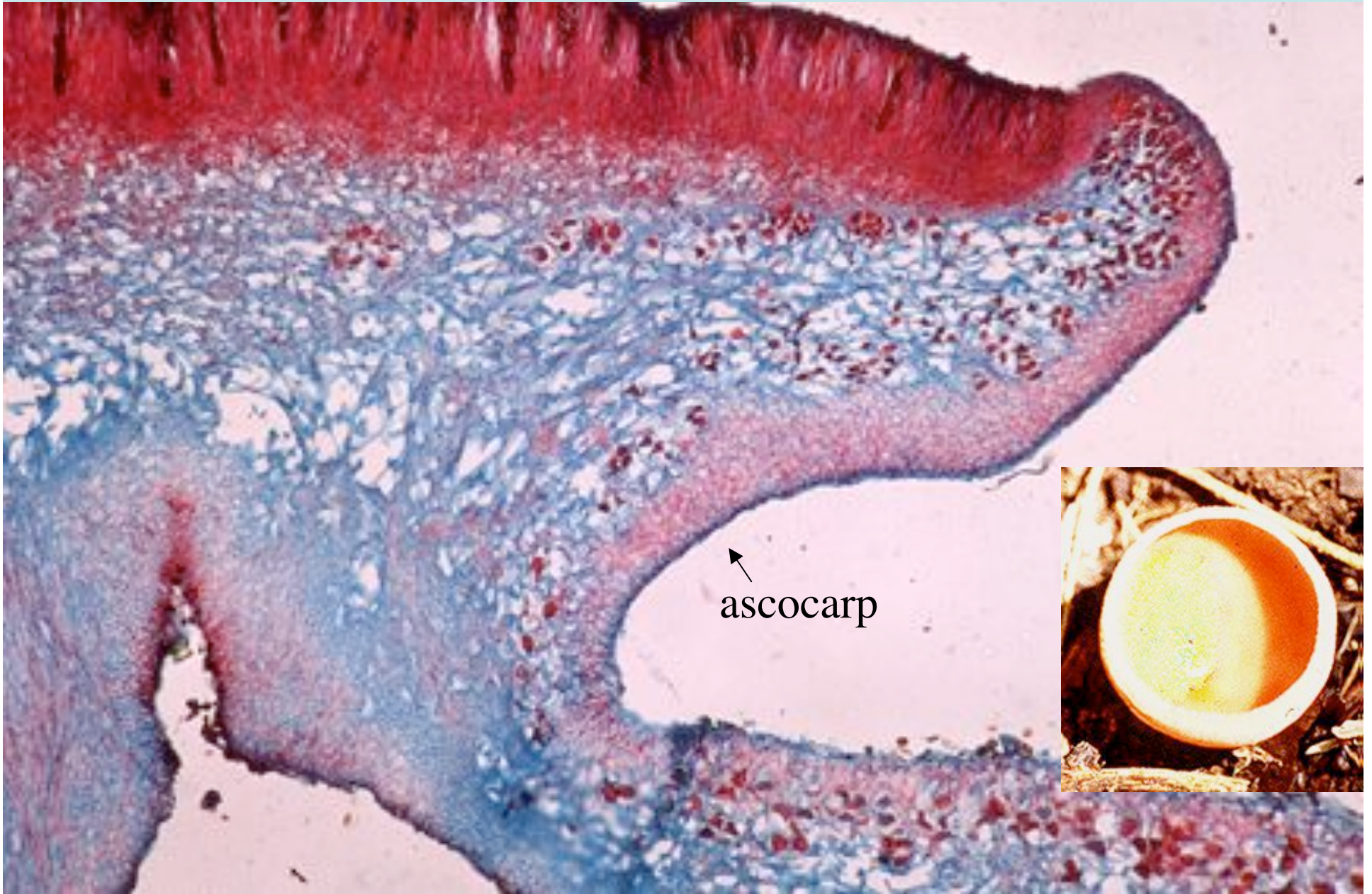
13 Life Cycle of Ascomycota



14







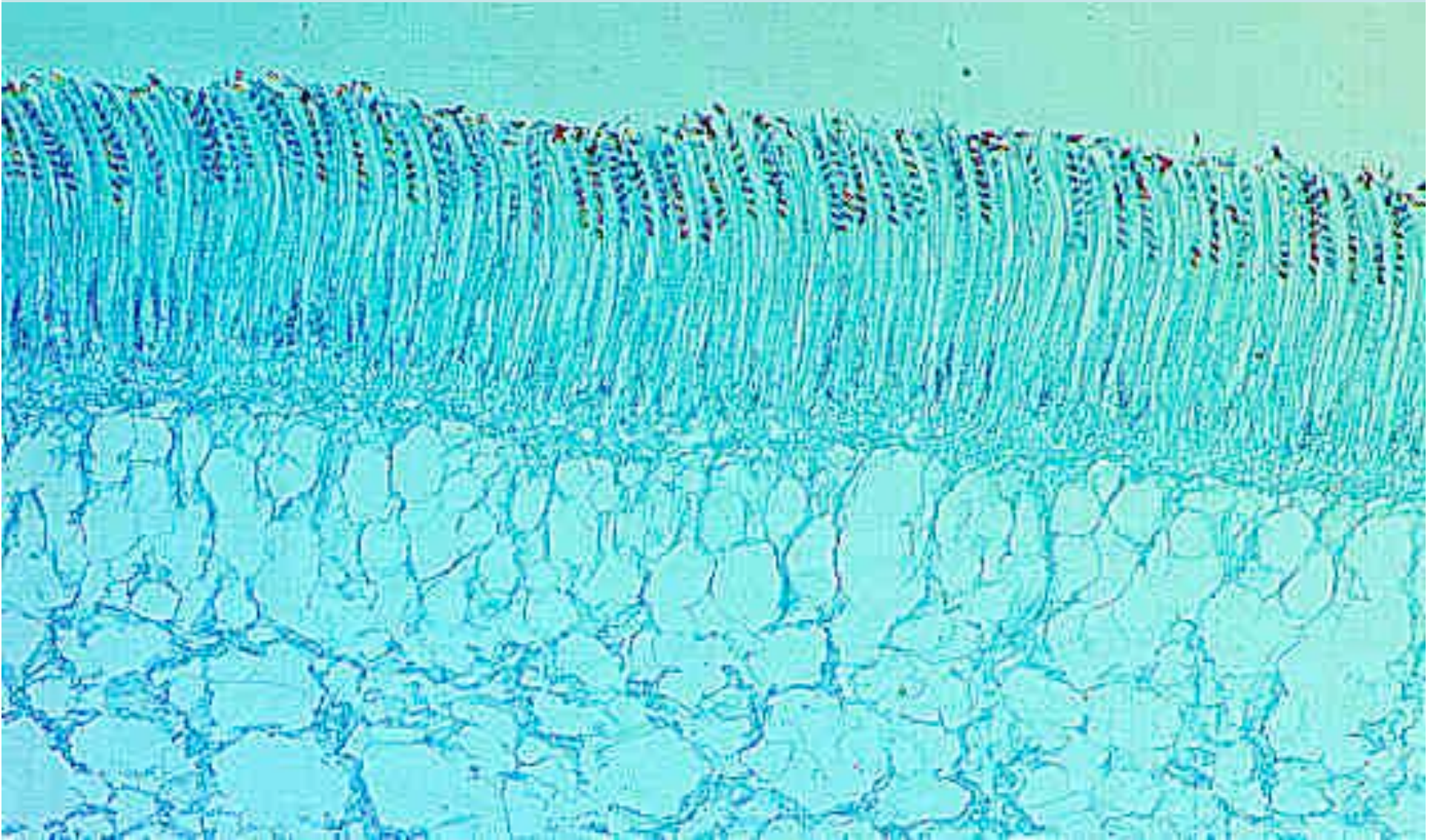
17

asci

ascospores



18



19 Phylum Basidiomycota with basidiocarps



(a) Fly agaric (*Amanita muscaria*), a common species in conifer forests in the northern hemisphere



(b) Maiden veil fungus (*Dictyophora*), a fungus with an odor like rotting meat

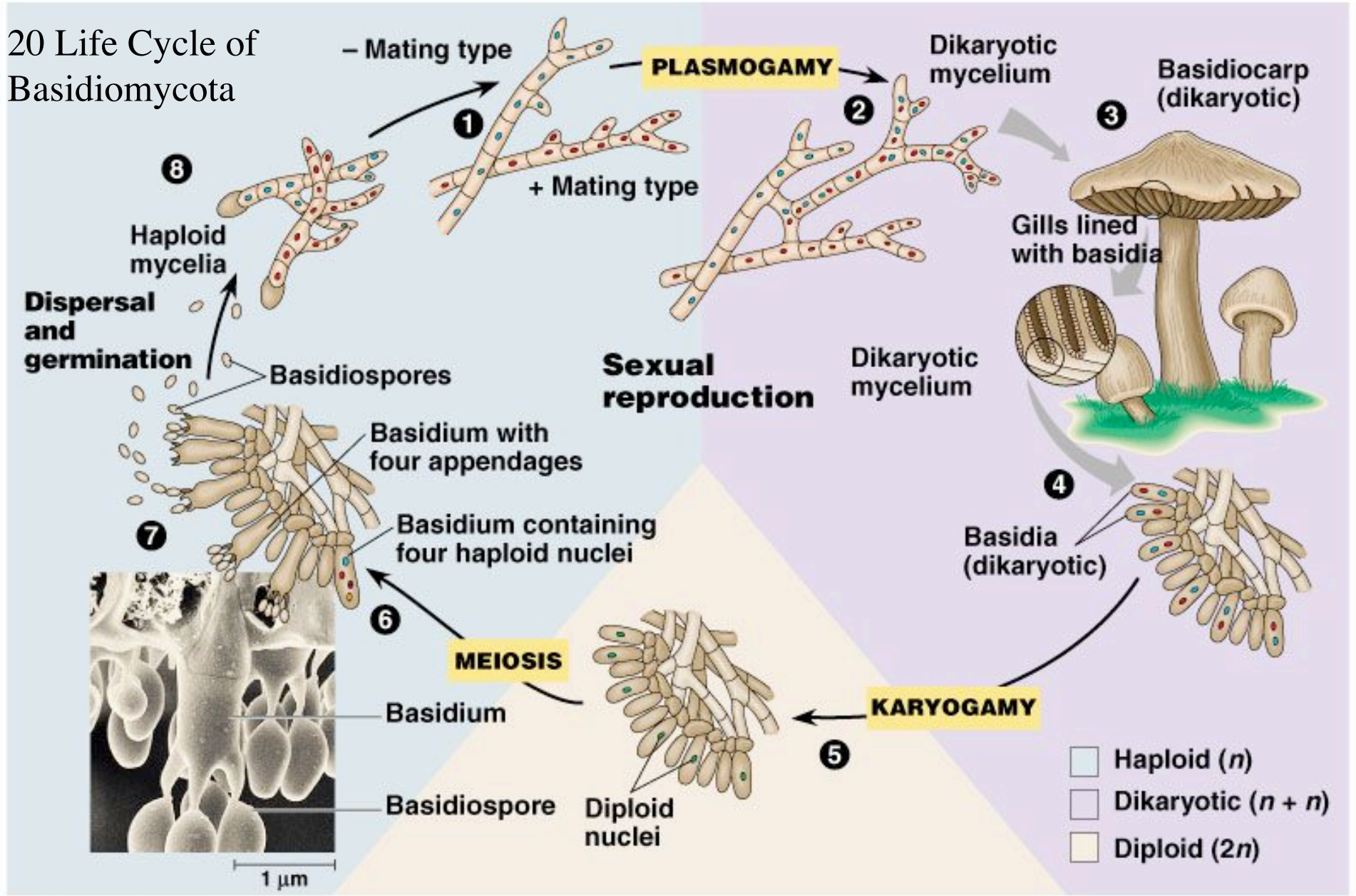


(c) Shelf fungi, important decomposers of wood

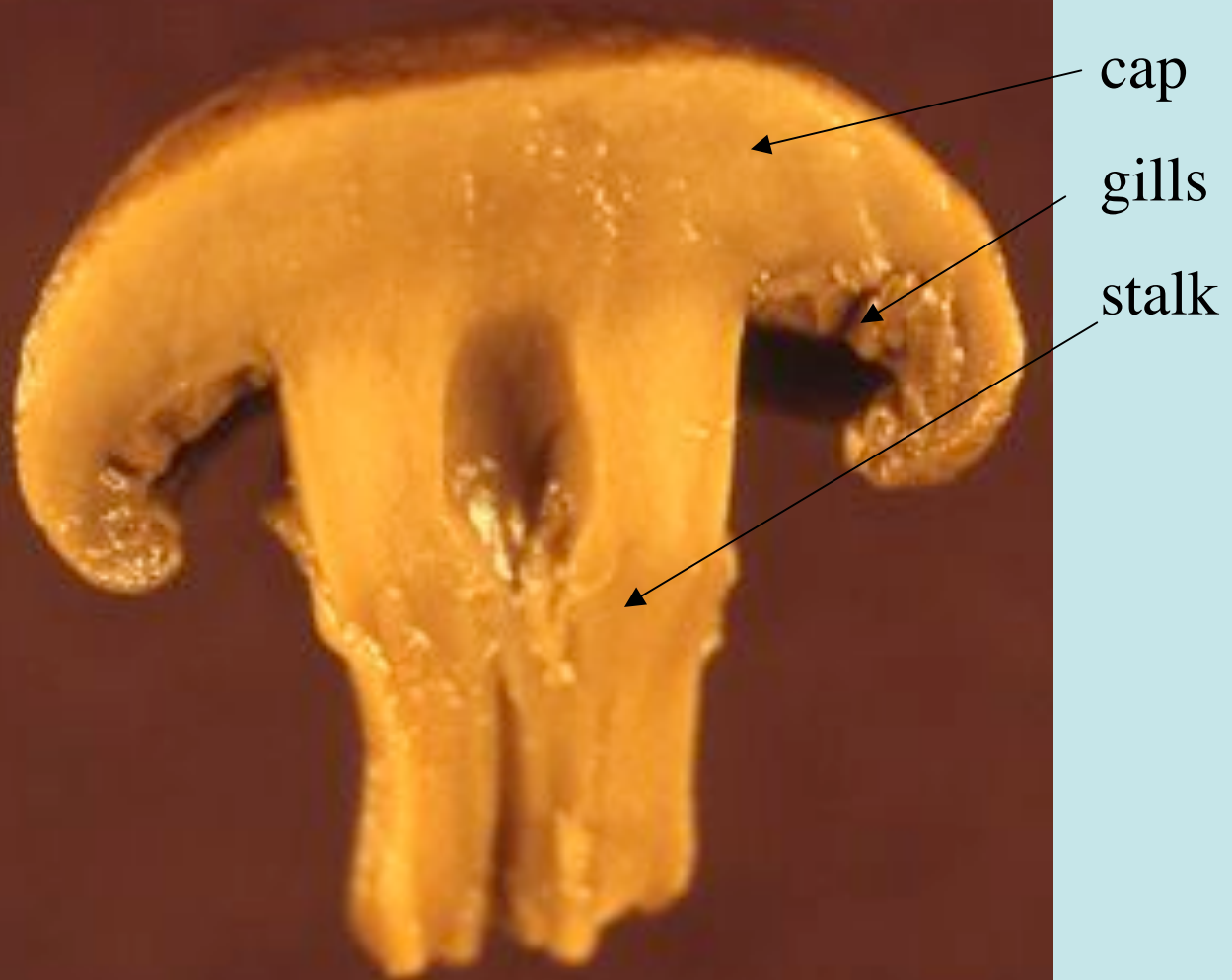


(d) Puffballs emitting spores

20 Life Cycle of Basidiomycota



21



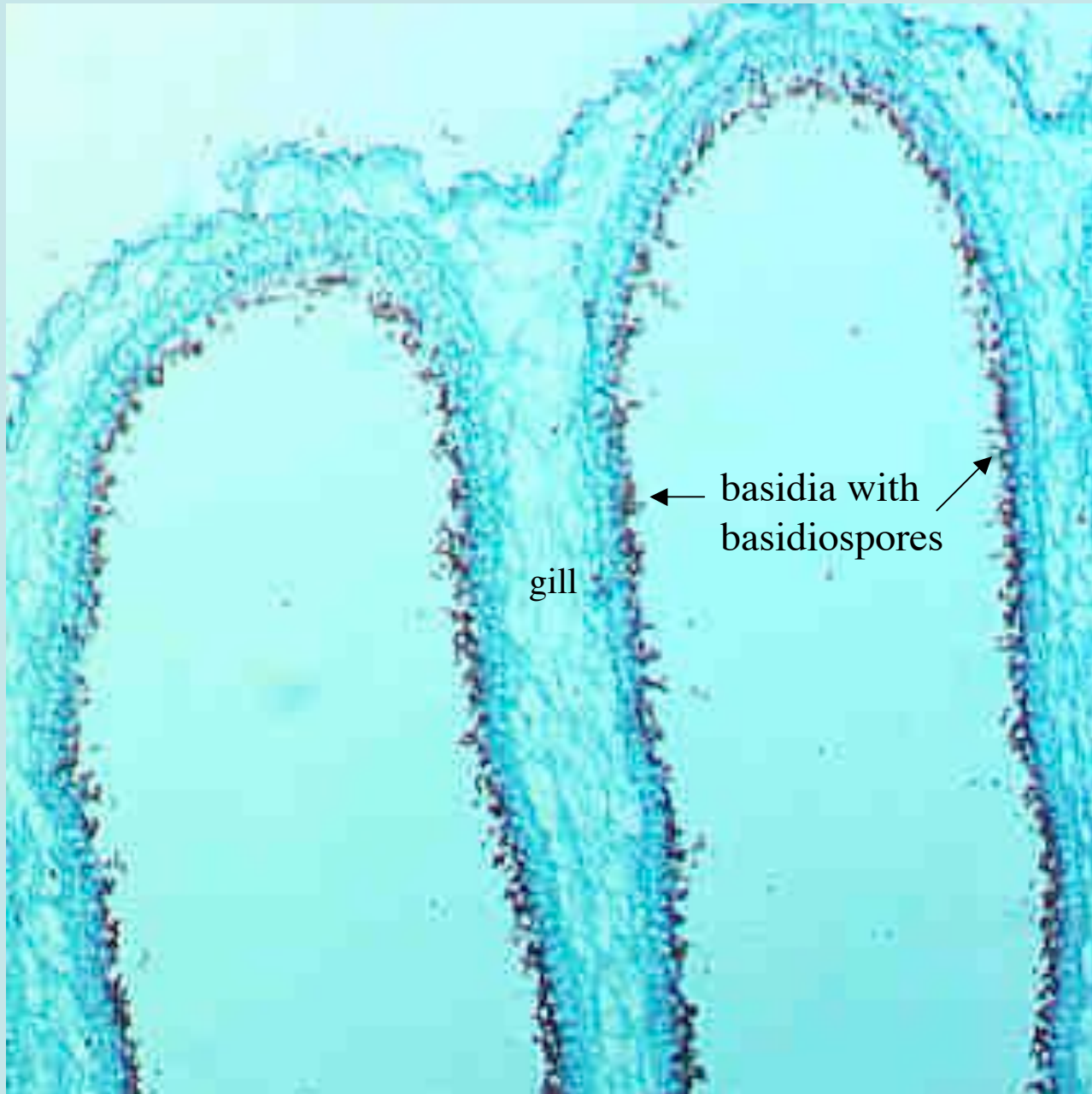
22

stalk

cap

gills

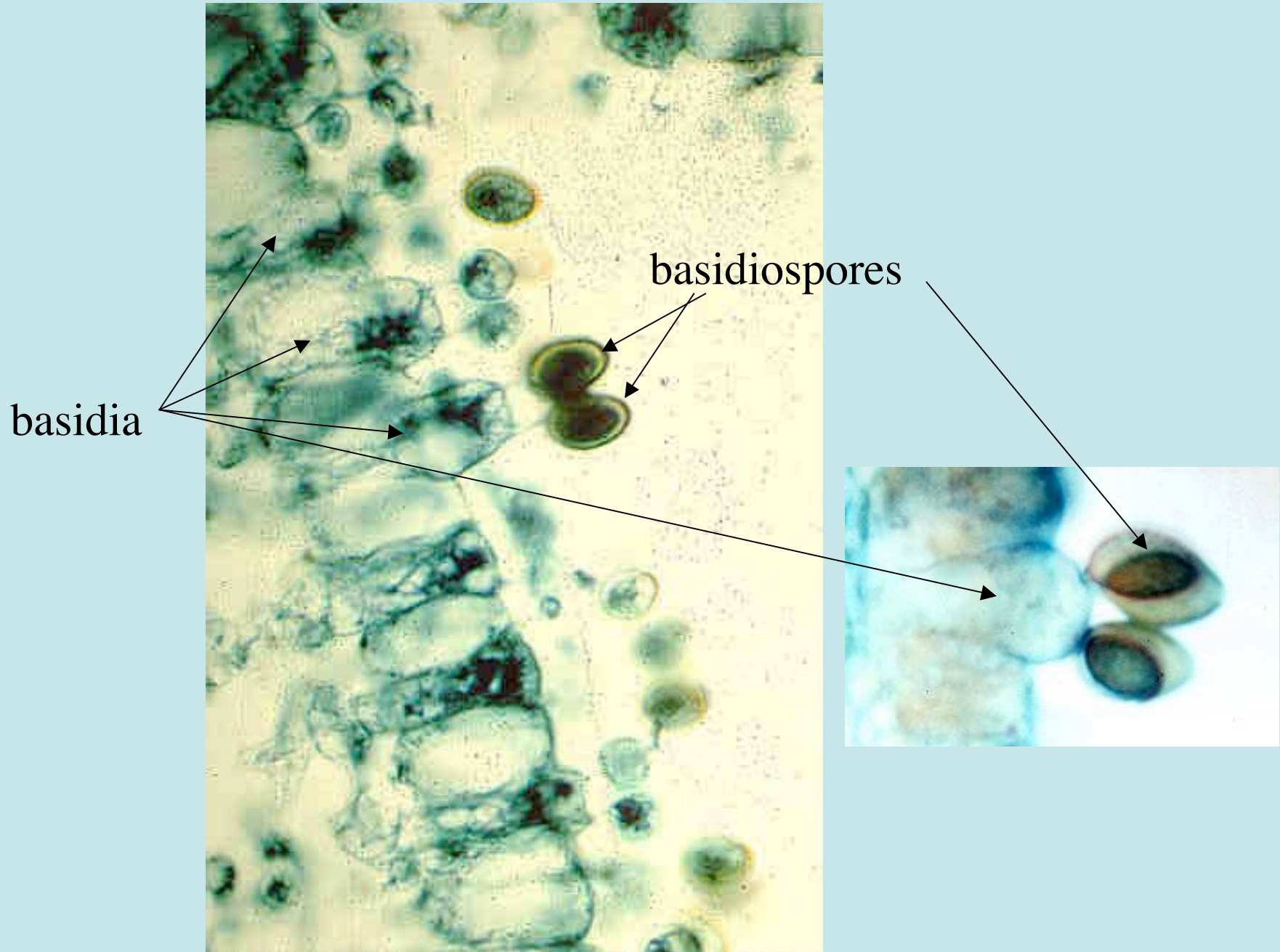




gill

basidia with
basidiospores

24



25 Lichen Growth Forms



(a) A fruticose (shrub-like) lichen



(b) A foliose (leaf-like) lichen



(c) Crustose (crust-like) lichens

26 Anatomy of a lichen

