

# Kingdom Fungi



# Characteristics of Fungi

- eukaryotic
- most are multicellular
- cell walls (made of chitin)
- live on substrate / stationary
- heterotroph (*how do they eat?*)
- don't store energy
- has mycelium



# How does Fungi absorb nutrients?

- The main structure is network of **Mycelium** (*microscopic branches are called **hypha***)
- hypha excrete enzymes onto dead substrate
- hypha absorb digested nutrients
- digestion is extracellular



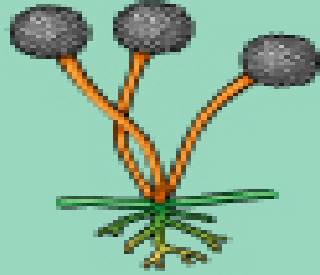




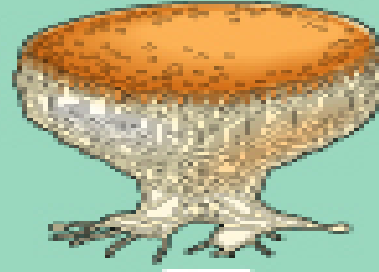
# Fungal Classification



Zygomycyco



Deuteromyc



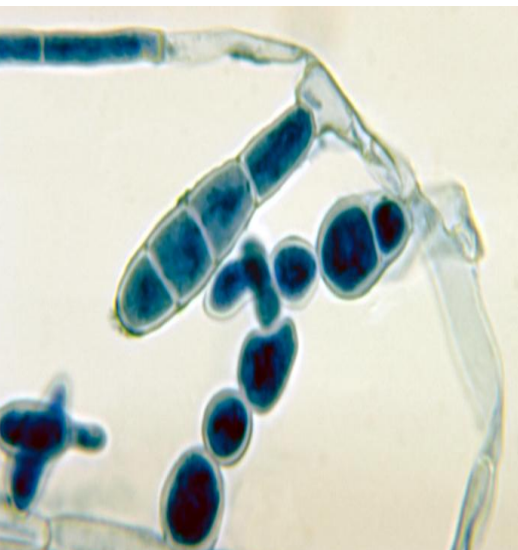
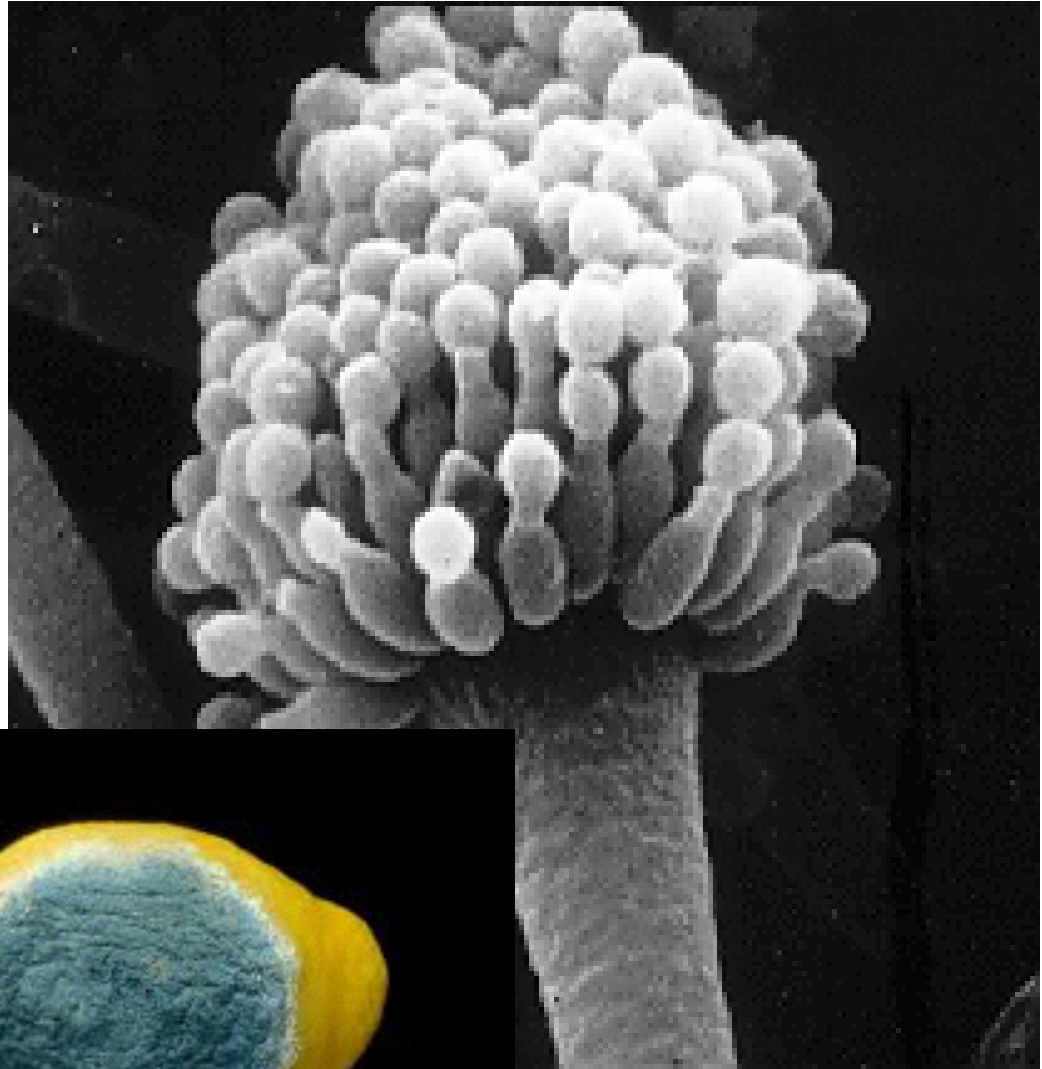
Ascomycyco



Basidiomyc

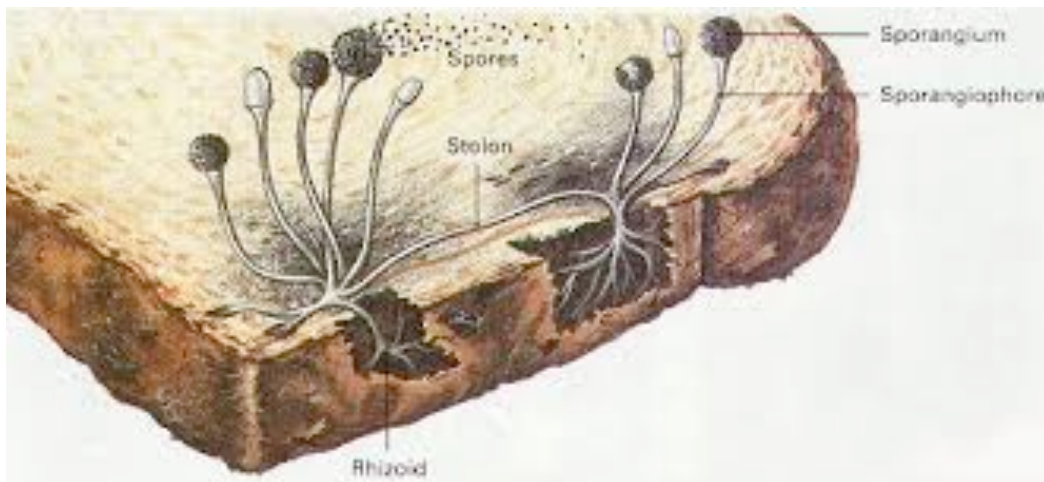
# Deuteromycota (imperfect fungus)

- **Produce only asexual spores**
- Very common
- Eg. *ringworm*, *athletes foot*, *Penicillin*

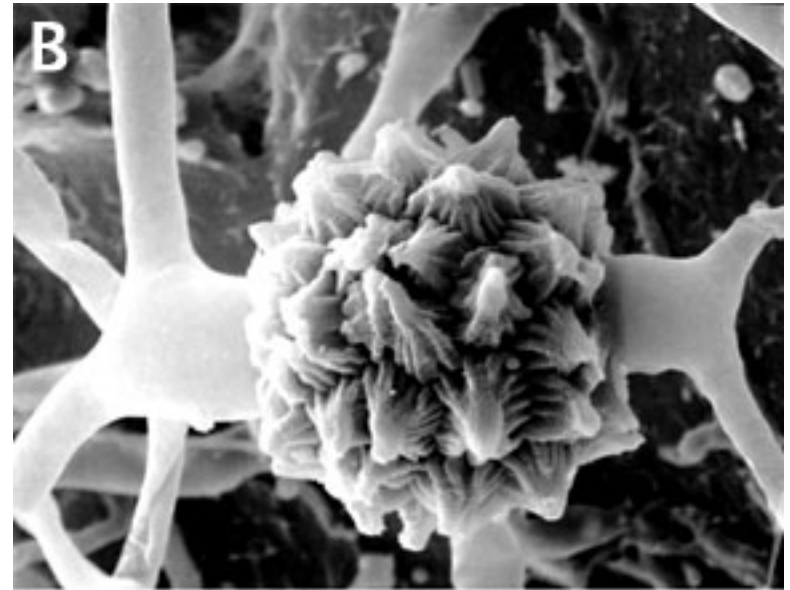
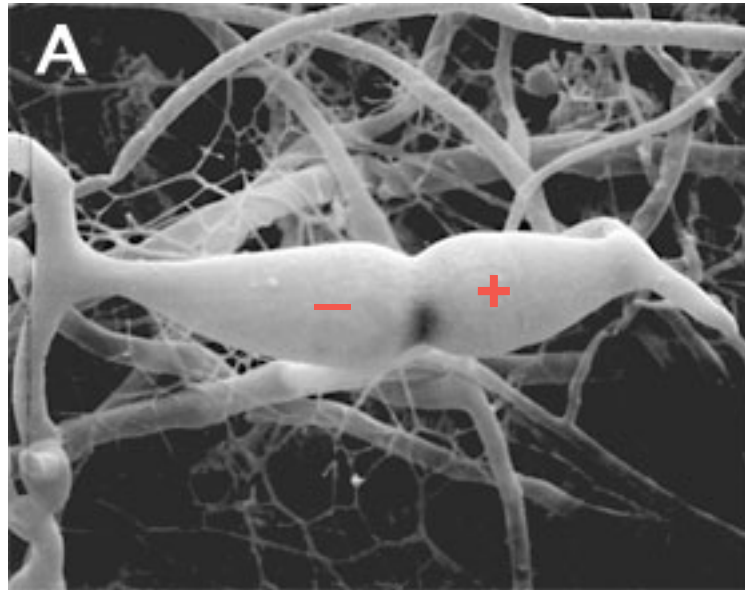


# Zygomycota

- Produce asexual spores\*\*
- Produce sexual zygospores
- **Appear as small fuzzy black dotted mould**
- *Eg. Black spotted bread mould*





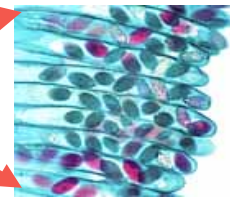


# \*\*Ascomycota



- Produce asexual spores
- **Produce sexual spores in a sac**

Eg. yeast, powdery mildew, morels





# Basidiomycota

- Produce sexual reproductive structures or fruiting bodies
- Basidiospores

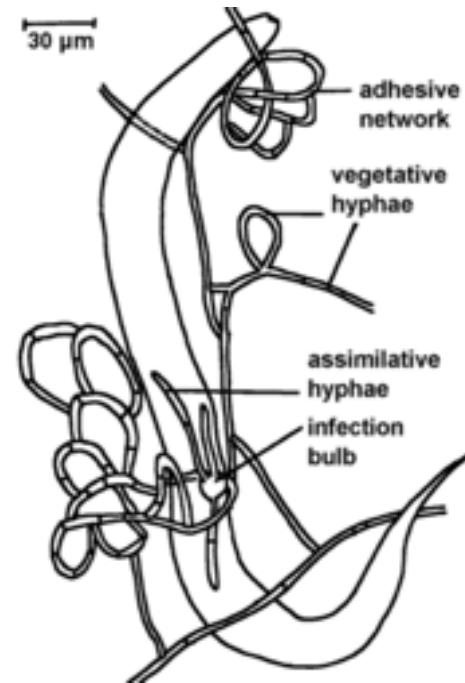


Eg. All *Mushrooms*, *bracket fungus*.



# Fungal Roles in the Environment

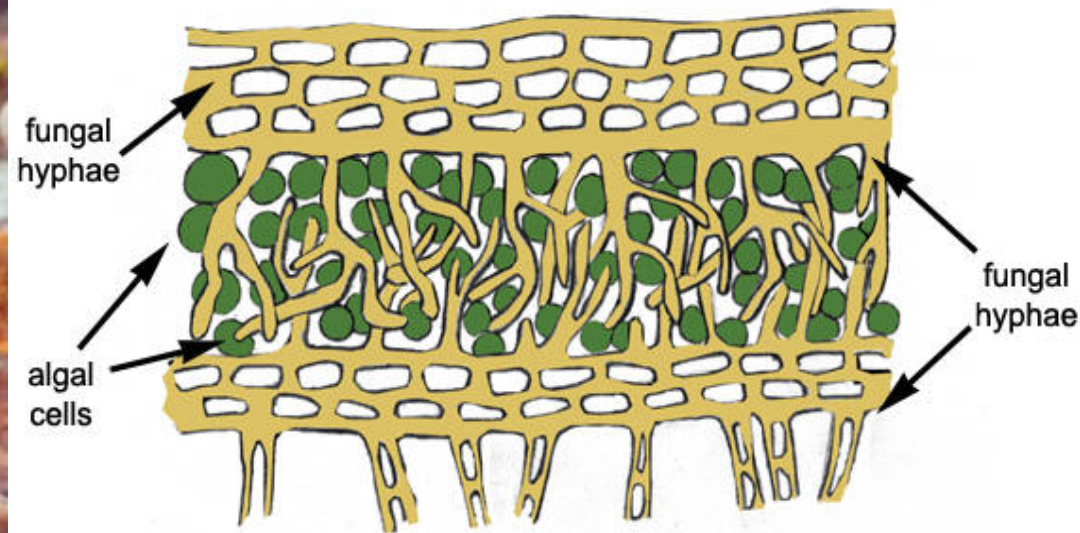
**Predatory Fungi**- catches and kills prey





# Fungal Roles in the Environment

**Mutualistic Fungi**- work together with other species in a beneficial way  
ex. *Lichen* = protista algae + fungi





# Fungal Roles in the Environment

**Saprophytic Fungi**- live on dead and decaying material in the environment (recyclers)

