

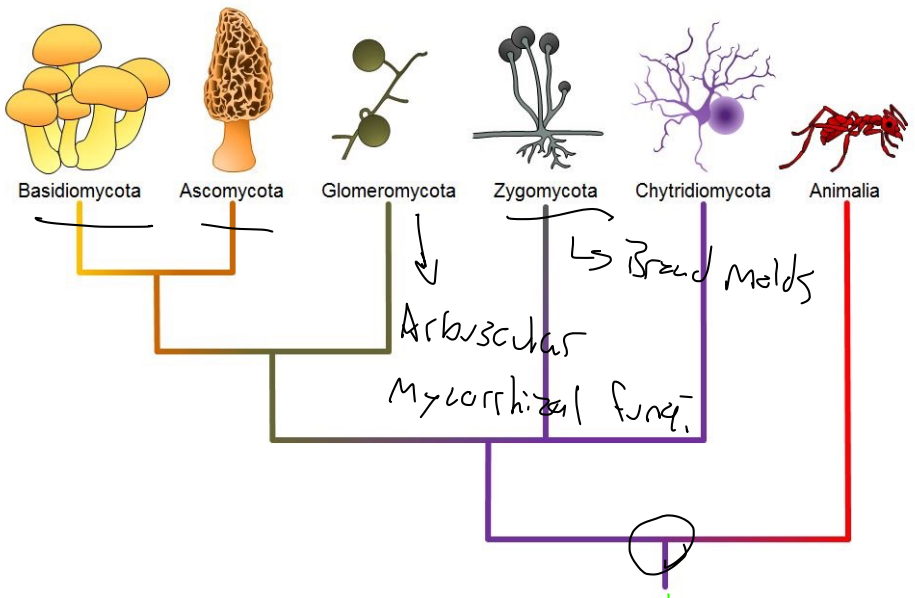


Fungi!

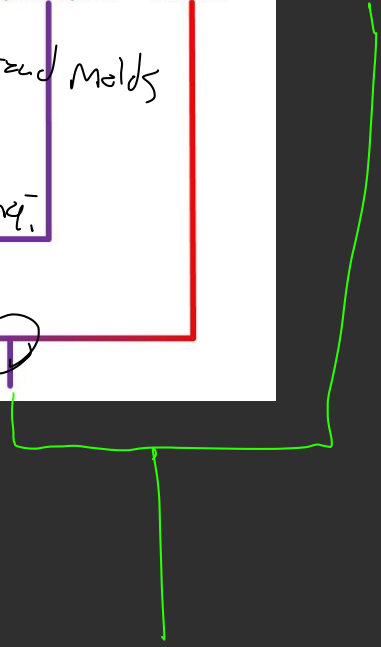
Fungi are one of the most diverse groups of life!



- Decomposers
 - Pathogens
 - Mutualists
- Lignin → Humic acid → soil
humus
Organic
Material



Plants



Fungi: as fossils?

Fungi lack hard tissues,
rarely occur as
fossils.

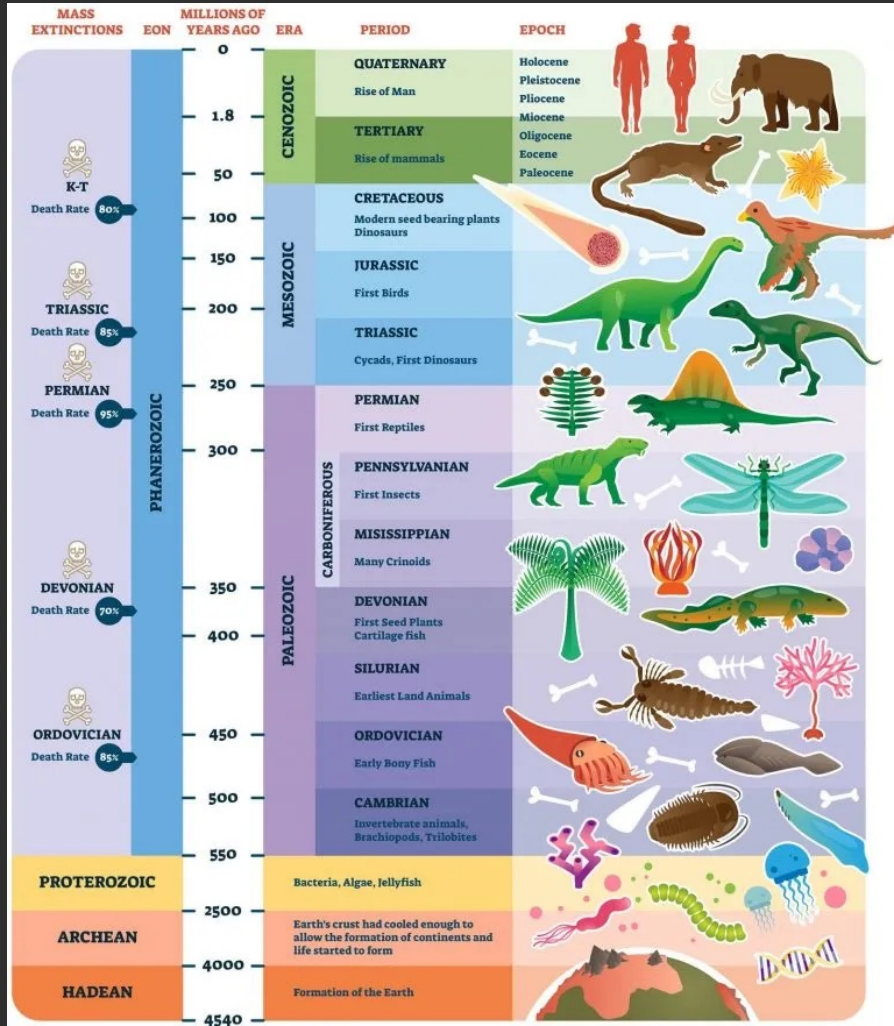
1.5 billion
year
old
Fungi fossils?



65 MYA
 Dinosaurs went- extinct

350 MYA
 Trees AND
 Fungi diversified

450 MYA
 Fungi: moved
 to land w/ plants



Fungi: were extremely abundant

→ Climate favored

Fungi: Fungi

Killed forests and

dinosaurs

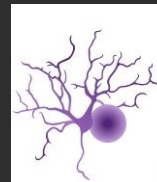


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Chytrid Fungus: and amphibian extinction



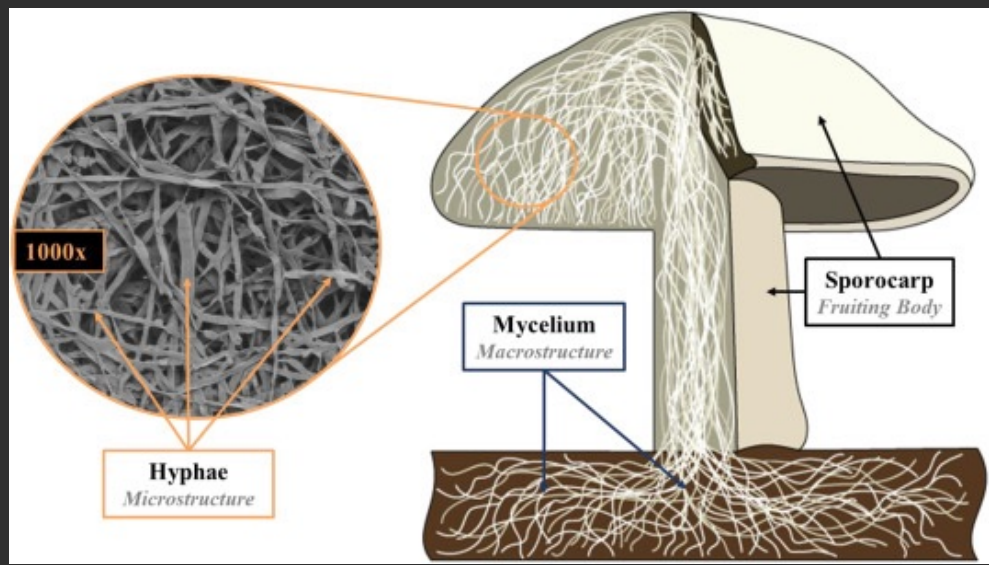
Chytridiomycota



Sporocarp →

Fruiting body

(produces spores)

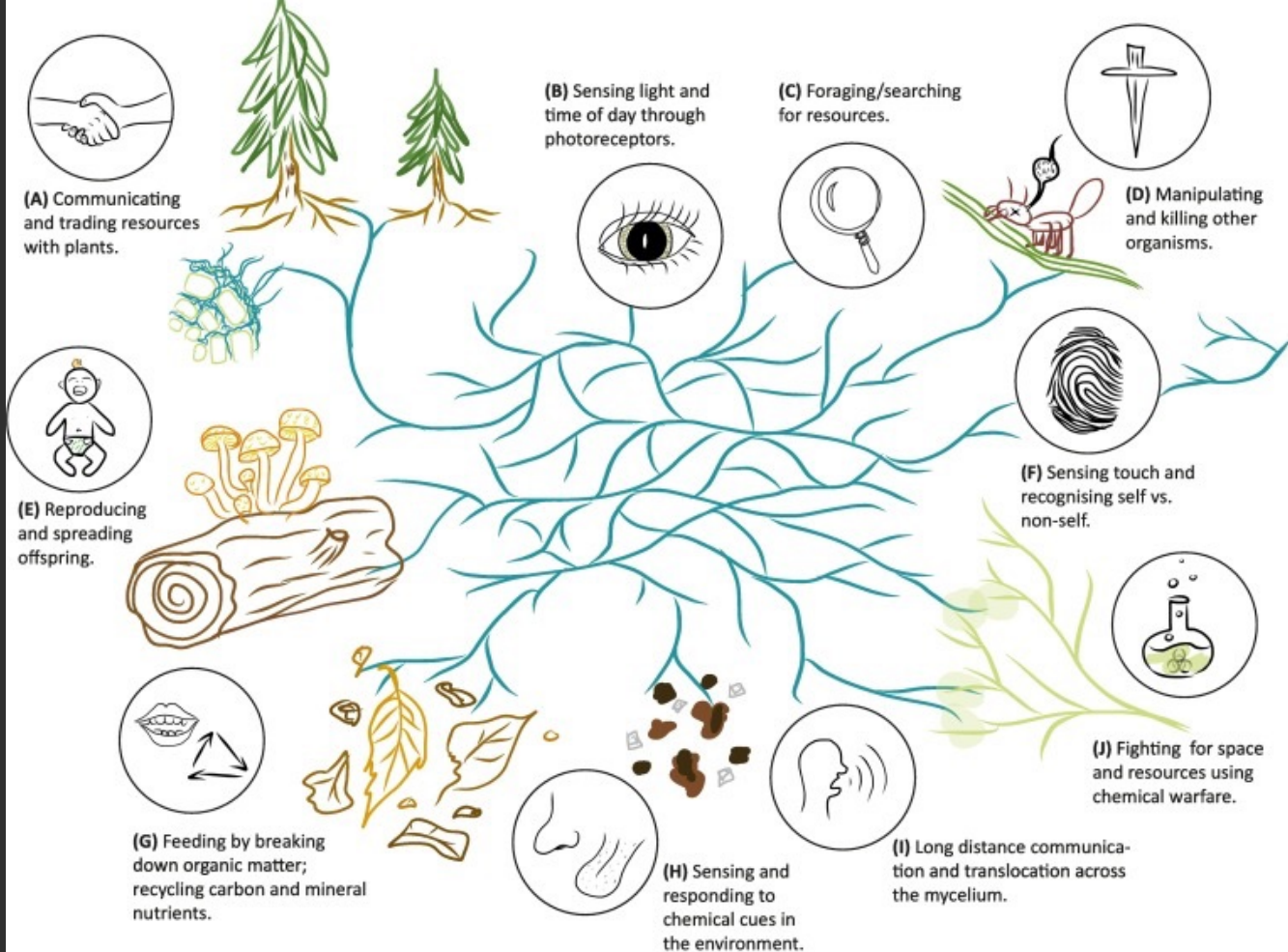


Hyphae → Filamentous structures, occur in soil, wood, or any feeding surface.

secrete enzymes/absorb nutrients; and in fruiting body,
→ microscopic

Mycelium = Network of hyphae. Visible to
naked eye

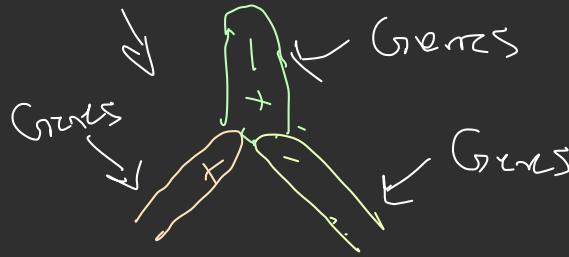
Fungal Behaviour



Fungi:

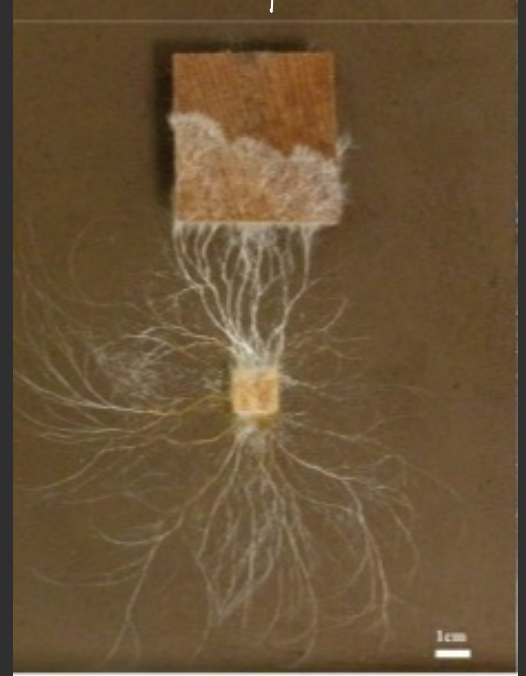
Sexual and asexual reproduction

↓
Spores



Karyogamy

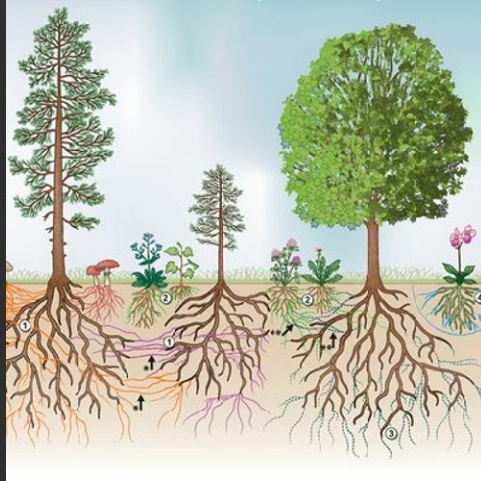
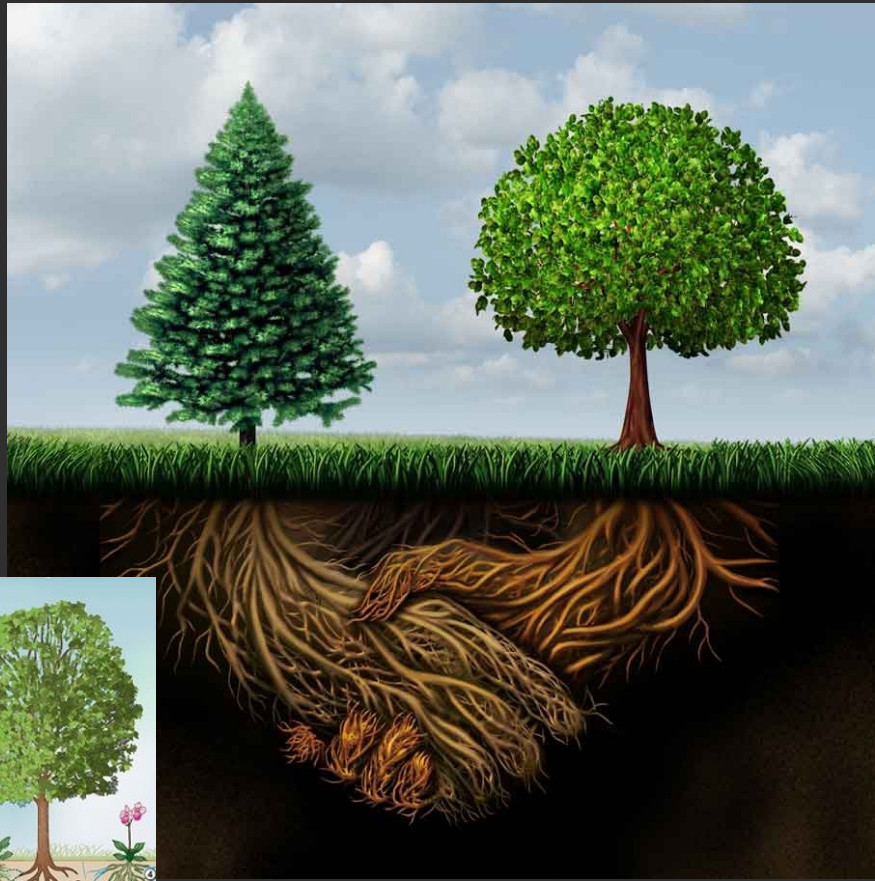
Growing on Nutrients



Wood Wide Web

→ Trees communicate
with one another and
share resources
via mycorrhizae

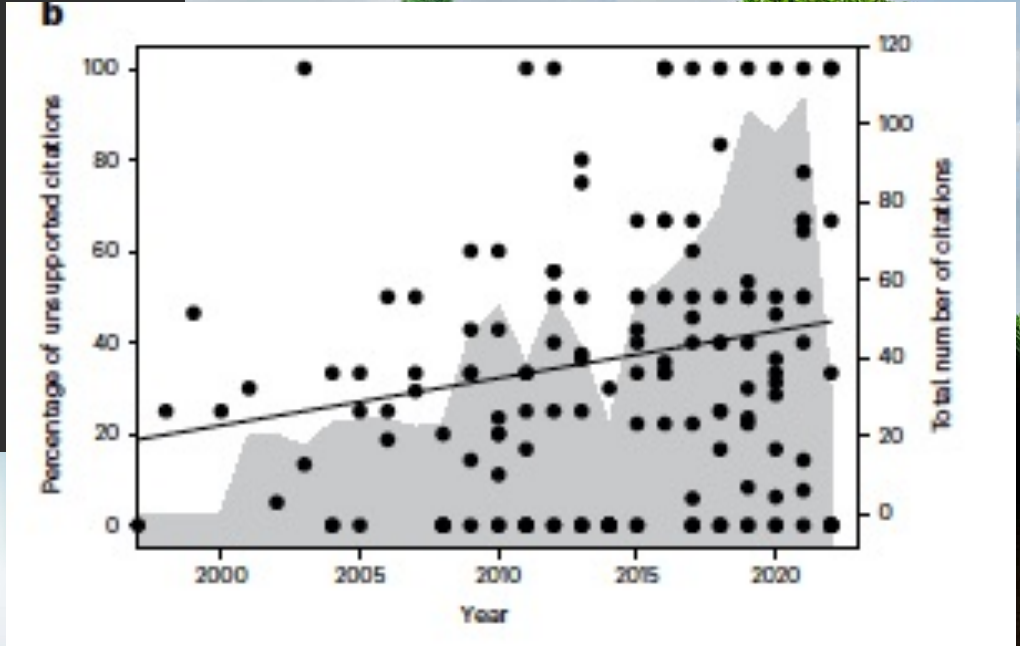
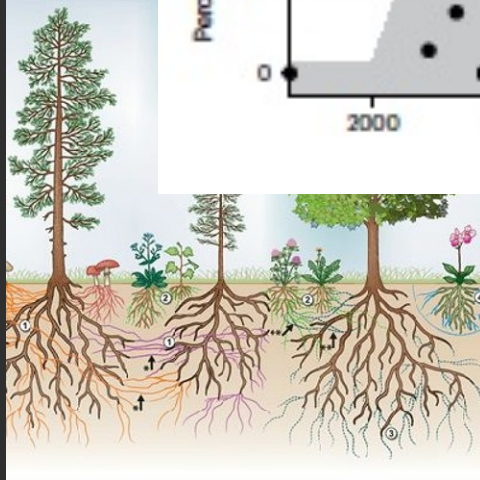
Common
Mycorrhizal
Networks



CMNS → Research!

have been tested
in
Douglas fir in B.C.
and a
Japanese Pine

is 5 studies!



Most studies show
negative effect of
being part of CMN



Wood Fungi are
one of the
world's most
threatened groups
of organisms!



↑
Removal of wood!

Most species are still undescribed.

Myconauts - The Society for the Protection of Underground Networks (SPUN)

A black and white image showing a complex network of glowing, interconnected lines and nodes, resembling a mycelium or a network structure. The lines are thin and branch out, with some nodes appearing as bright, circular spots. A vertical ruler is visible in the center, providing a scale for the network. The overall appearance is that of a glowing, underground network.

PROTECT THE
UNDERGROUND



Basidiomycota Sporocarp Forms

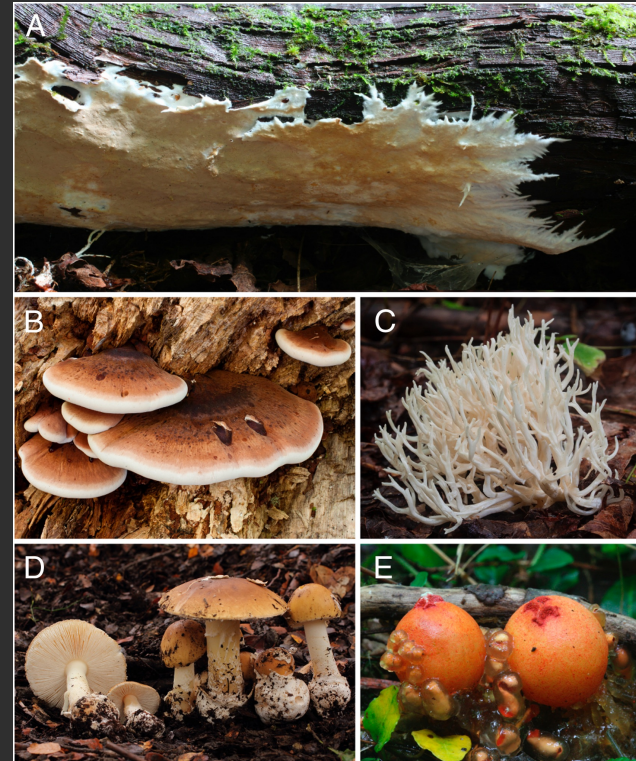
A = Resupinate (Paint,
Skin, or crust Fungi)

B=Pileate-sessile
(Conks)

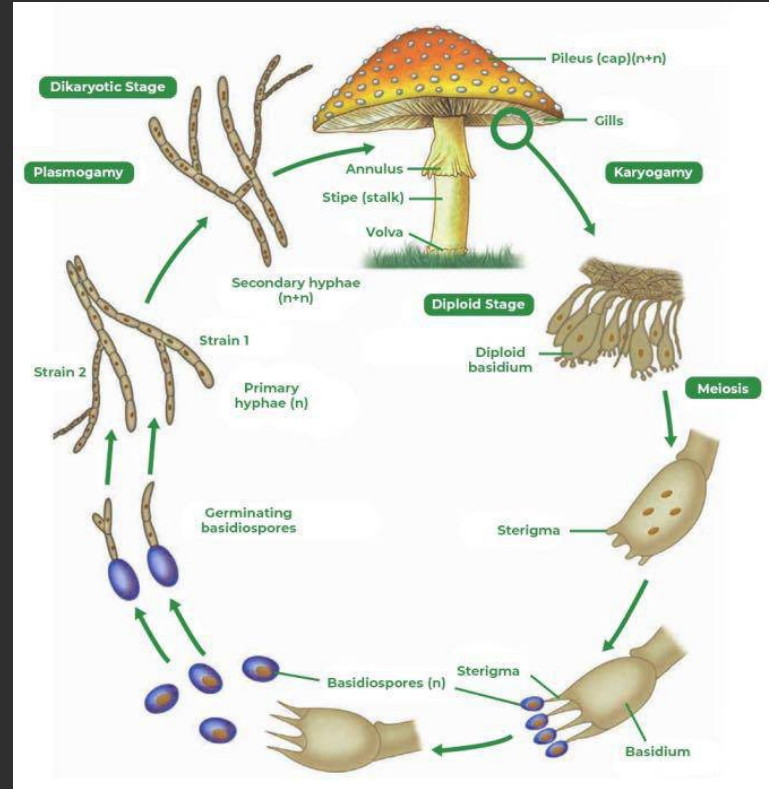
C= Clavrioid-coralloid
(Coral and club fungi)

D = Pileate-stipitate
(Mushrooms)

E= Gasteroid
Earthballs, dye balls,
false truffels



Basidiomycota produces
basidiospores in the
gills or pores.



Ascomycota Produce

ascomycetes in

Asci



Cup fungus



Ascomyetes Life Cycle

