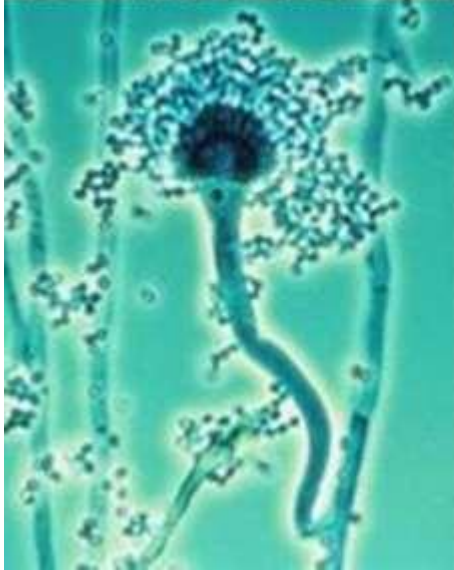


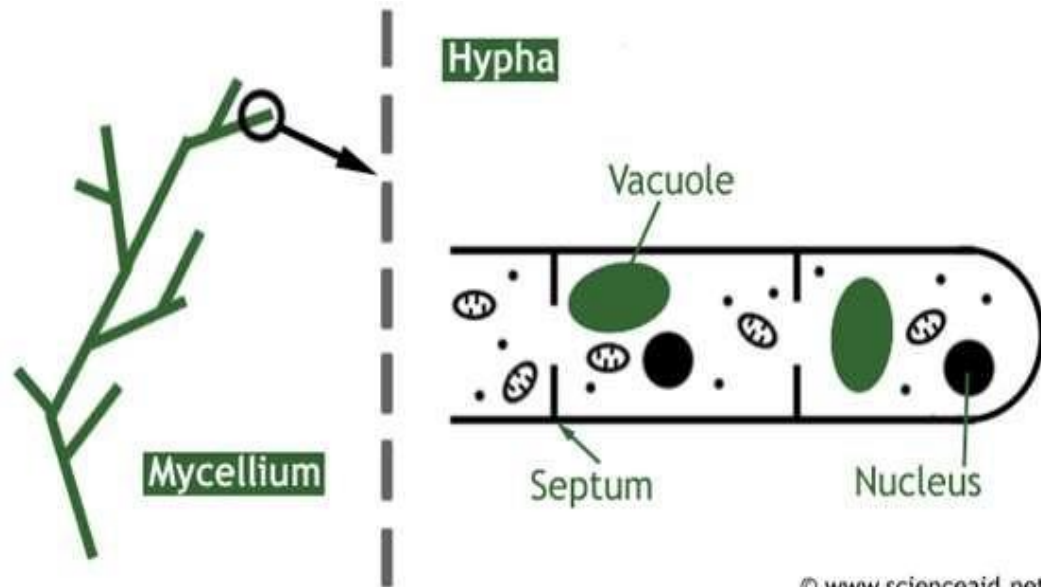
MORPHOLOGY OF FUNGI

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- Fungi are **eukaryotic** organisms. The vegetative body of a fungus is called **thallus** which is either unicellular (Eg Yeast) or multicellular (Eg Molds).
- The fungal cell wall is made up of **chitin**.
- The **plasmalemma** covers the cytoplasm and all cell organelles.
- Nucleus is usually small and mitochondria, endoplasmic reticulum and vacuoles are present.

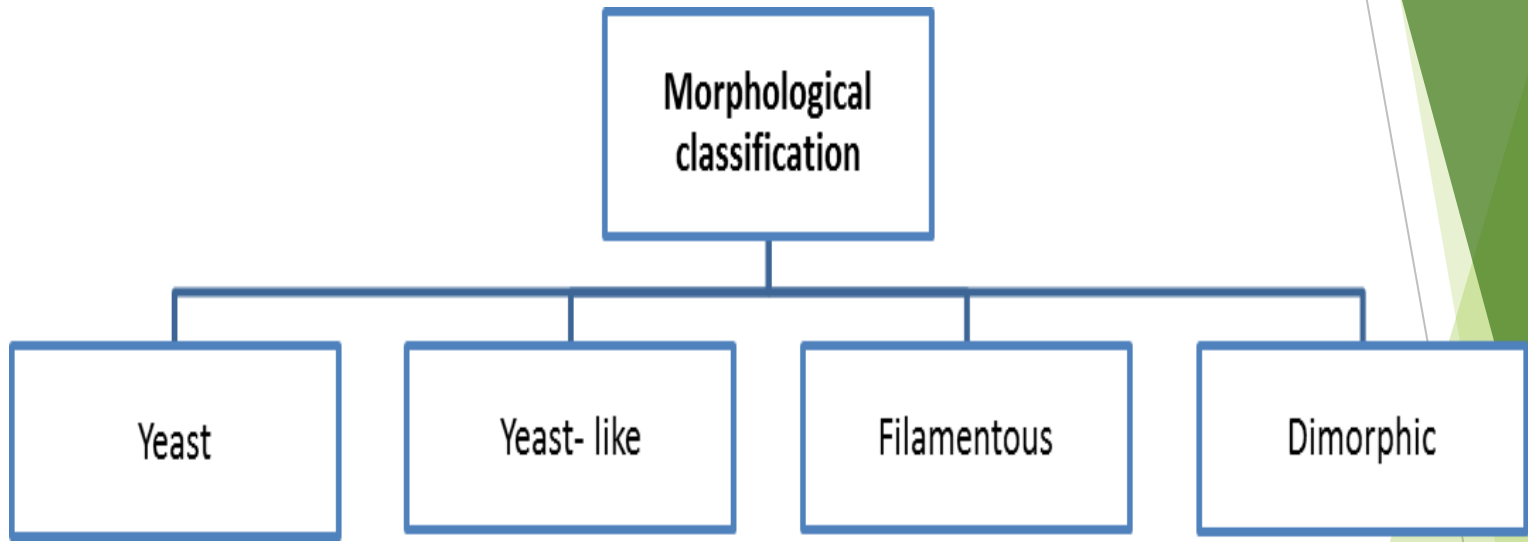
- Fungi contain filaments called the hyphae (singular: Hypha).
- The hyphae have internal cross walls called the septum (singular: Septa).
- Fungi may be **septate or aseptate**.



- The septa of many species have pores, allowing cytoplasm to flow freely from one cell to the next.
- Cytoplasmic movement within the hypha provides a means to transport of materials. The hyphae may be branched.
- A mass of hyphae that is not a reproductive structure is called a **mycelium**.

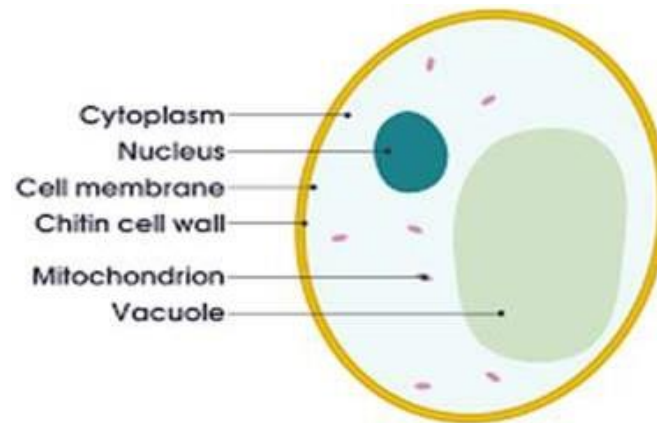
Vegetative mycelium- hyphae that penetrate the supporting medium and absorb nutrients.

Aerial mycelium- hyphae that projects above the medium and produce reproductive structures called **conidia**.



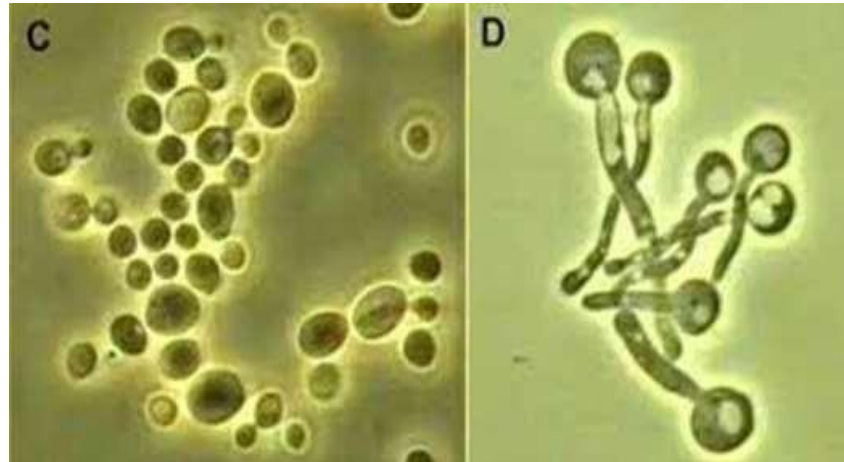
Yeasts

- Yeasts occur in the form of oval or round bodies that reproduce by asexual process called budding.
- Eg *Saccharomyces cerevisiae*



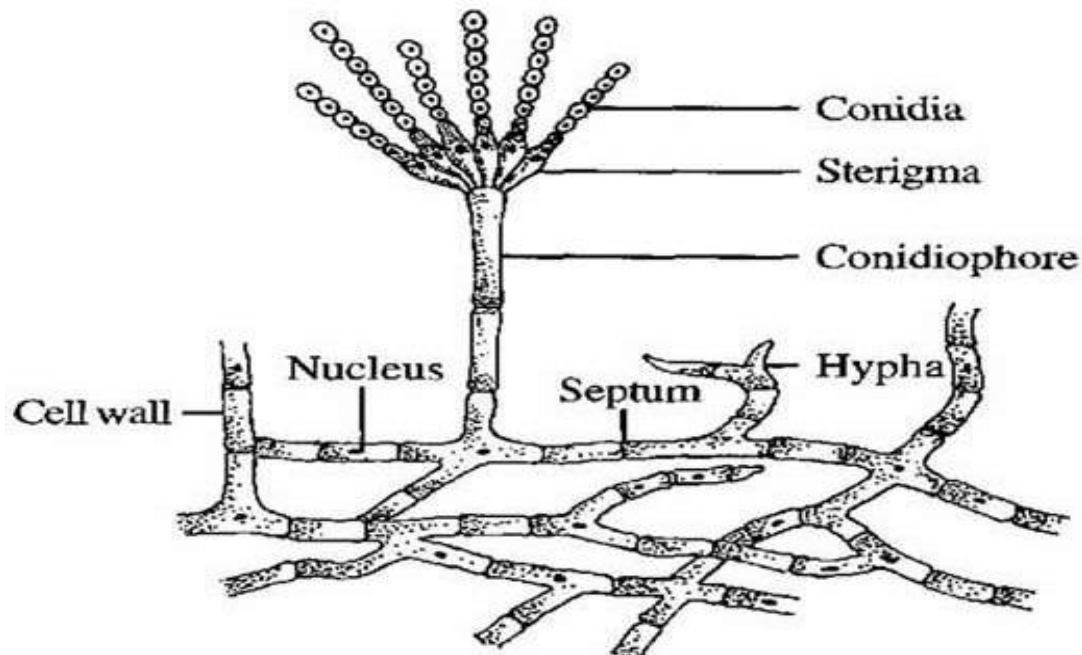
Yeast-like

- They grow partly as yeast and partly as elongated cells resembling hyphae.
- Eg *Candida albicans*



Filamentous fungi

- It consists of Mycelium. They reproduce by the formation of spores.
- Eg *Aspergillus*, *Penicillium*



Dimorphic fungi

- It exhibits yeast form in the host tissue in vitro at 37° C and mycelial form in vitro at 25° C.
- Eg *Histoplasma capsulatum*

