

REPRODUCTION IN FUNGI AND FUNGAL LIKE ORGANISMS CAUSING PLANT DISEASES

Aim: To acquaint the students with reproduction in fungi and fungal like organisms causing plant diseases

Reproduction

Fungi may reproduce in three ways:

- Vegetative reproduction
- Asexual reproduction
- Sexual reproduction

1. Vegetative Reproduction

It occurs through:

Fragmentation of hyphae

- Production of thin walled spores such as oidia or arthrospores
- Production of swollen, thick walled spores with storage of rich food, i.e. chlamydospores which are formed to tide over the adverse environment.
- **In Fragmentation**, a bit of broken hyphae establishes a new colony. Fragmentation occurs in nature and is usually employed in the laboratory to keep the fungus growing by transferring small portions of hyphae to new culture tubes.
- **In Budding**, small soft portion of the cell wall bulges out and a daughter nucleus migrates into it. Then the bud is pinched out by a constriction at the point of its origin. Sometimes the budding is so quick that a chain of buds is formed due to non-detachment of the daughter buds, and is called **pseudomycelium**.
- **In Fission**, a cell divides in a transverse plane into two cells. Although, it is a characteristic of bacteria and it also occurs in fission yeasts.

