## **REPRODUCTION IN FUNGI**



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## Introduction

- Fungi reproduce naturally by a variety of means
- 1. Asexual Reproduction/Somatic/Vegetative
- 2. Sexual Reproduction

## **Asexual Reproduction**

- It does not involve the union of nuclei, sex cells or sex organs
- It may be accomplished by
- 1. Fission
- 2. Budding
- 3. Fragmentation
- 4. Spore Formation

## Fission

• It includes the fission of somatic cells yielding 2 similar daughter cells



# Budding

It includes the formation of a bud - a small outgrowth of the parent cell developing in to a new individual



#### Fragmentation

• It includes the fragmentation or disjointing of the hyphal cells, each fragment becoming a new organism



## Asexual spores

- Their function is to disseminate the species
- They are produced in large numbers
- 1. Sporangiospores
- 2. Conidiospores
- 3. Arthrospores
- 4. Chlamydospores
- 5. Blastospores

# Sporangiospores

- These single celled spores are formed within sacs called sporangia/sporangium at the end of special hyphae called sporangiophores.
- They are of 2 types
- 1. Aplanospores non motile sporangiospores
- 2. Zoospores- motile sporangiospores, flagella





# Conidiospores

- Also called conidia/conidium
- Ther are of 2 types
- 1. Small, single celled conidia are called microconidia
- 2. Large multicelled conidia are called macroconidia
- Formed at the tip or side of a hypha



#### Arthrospores

- Also called as oidia/oidium
- These single celled spores are formed by disjointing of hyphal cells



# Chlamydospores

- Thick walled
- Single celled spores
- Highly resistant to adverse conditions



#### Blastospores

#### Formed by budding



