

Phylum : myxomycota
Class: myxomycetes

- 1- True slime mold
- 2- No cell wall.

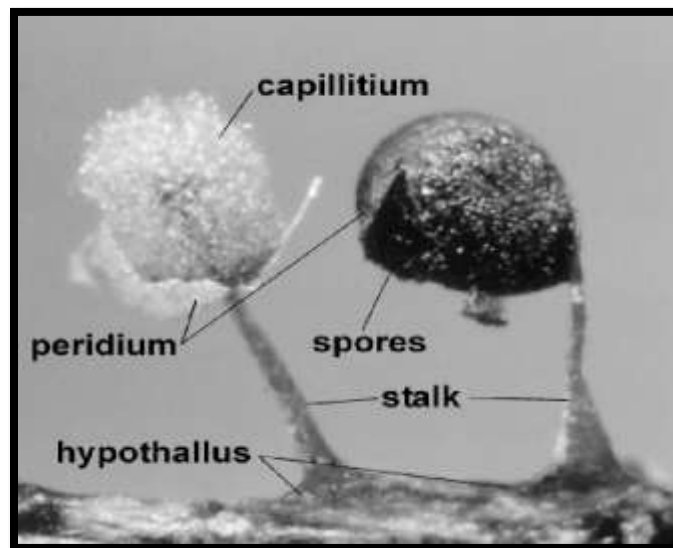
Life cycle are four stages or four types of cells:

- 1- Three cells uninucleated ,one of them flagellated
 - 2- Somatic phase as plasmodium multinucleated
 - 3- Somatic phase resisted to environment condition called **sclerotium** .
 - 4- Reproductive phase as sporophores which contain inside of it spores that have cell wall .
- ❖ **Peridium** : non-cellular envelope covers spores inside sporophore.

Type of sporophores (fruiting body)

1- Sporangium : consist of

- | | |
|----------------|----------------|
| a- Peridium | d- Stalk |
| b- Columella | e- Hypothallus |
| c- Capillitium | f- Spores |



Figure(1) Sporangium consist of slime molds

- 2- **Aethalium** : big like cushion shape .
- 3- **Pseudoaethalium** : accumulation of several sporangium .
- 4- **Plasmodiocarp** : like plasmodium .

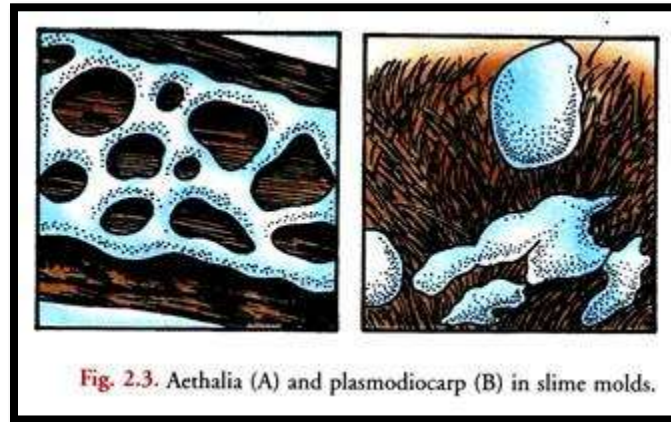


Figure (2) Aethalia and plasmodiocarp of slime molds

1- Sub class : ceratiomyxomycetidae

Order : Ceratiomyxales

Family : Ceratiomyxaceae

Genus : *Ceratiomyxa* sp.

- ❖ Forming exospores , no sporophores . cell wall

2- Sub class : Stemonitomycetidae

Order : Stemonitales

Family : Stemonitaceae

Genus : *Stemonitia* sp.

- ❖ Plasmodium kind Aphanoplasmodium , sporangium , violet spores

3- Sub class : Myxogasteromycetidae

1- Order : Liceaceae

Licea sp.

Lycogala sp.

- ❖ Plasmodium kind Protoplasmodium and Aphanoplasmodium, spores light colors, Aethalium.

2- Order : Trichiales

Metatrachia sp. (wasp nest slime mold)

Trichia sp.

Arcyria sp.

- ❖ Plasmodium kind Protoplasmodium and Aphanoplasmodium , sporangium ,spores light or red colors.

Phylum 2 : plasmodiophoromycota
Class : plasmodiophoromycetes
Order : plasmodiophorales
Family : plasmodiophoraceae

General characteristics of this Division:

- 1- Somatic phase is plasmodium , no cell wall .
- 2- Multi nuclei .
- 3- Endobiotic or Endoparasitic on vascular plants or on kingdom Stramenpila .
- 4- Necrotrophic meaning :kill the host cell before feeding . not phagotrophic .
- 5- Forming zoospore, have two flagella type whiplash and unequal length .
- 6- Presence nuclear division Cruciform .

Economic importance :

- 1- *Plasmodiophora brassicae* parasitic on Cabbage causing club root.

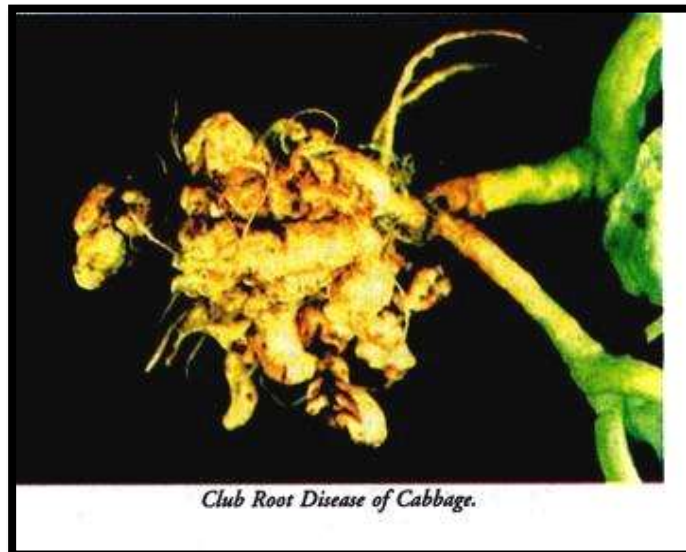


Figure (3) *Plasmodiophora brassicae* causing club root on Cabbage

2- *Spongospora sp.* parasitic on potato causing powdery scab .

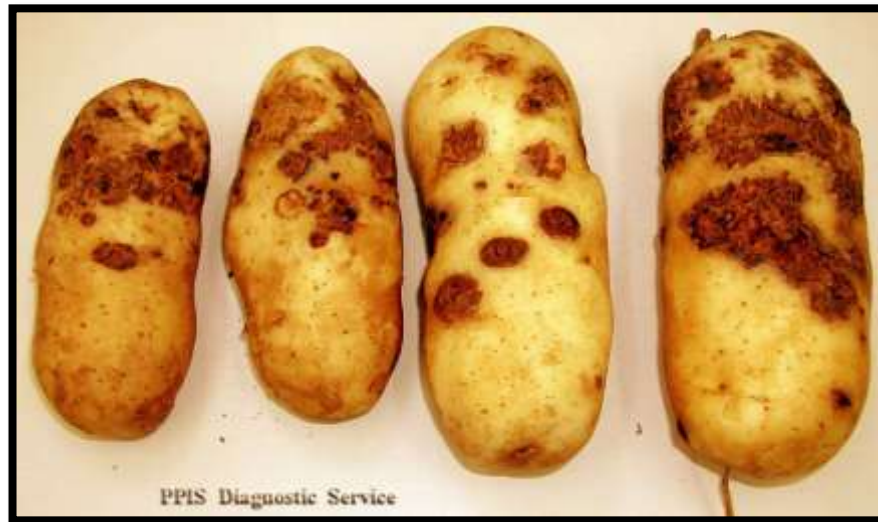


Figure (4) *Spongospora sp.* causing powdery scab on potato

- 3- Parasitic on water mold (Oomycota) *Saprolegnia sp.* which parasitic on fish and their eggs, so it used as biological control .
- 4- Viruses transporter that cause plant disease .
- 5- Some of them are parasitic on fresh water algae .