**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**
2. Peridium d- Stalk
3. Columella e- Hypothallus
4. Capillitium f- Spores

 

 Figure(1) Sporangium consist of slime molds

1. **Aethalium :** big like cushion shape **.**
2. **Pseudoaethalium :** accumulation of several sporangium .
3. **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
1. **Sub class : Stemonitomycetidae**

 Order : Stemonitales

 Family : Stemonitaceae

 Genus : *Stemonitia sp*.

* Plasmodium kind Aphanoplasmodium , sporangium , violet spores
1. **Sub class : Myxogasteromycetidae**
2. **Order : Liceaceae**

*Licea sp.*

*Lycogala sp.*

* Plasmodium kind Protoplasmodium and Aphanoplasmodium, spores light colors, Aethalium.
1. **Order : Trichiales**

*Metatrichia 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 Stramenopila.
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

1. ***Spongospora* *sp***. parasitic on potato causing powdery scab .

 

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

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