Classification of fungi:

Classification: is the systematic arrangement of organisms into groups based on specific standards.

Standard Endings:

Phylum ……....mycota

Sub phylum …….mycotina

Class ……..mycetes

Subclass…….mycetidae

Order ……ales

Family ……..aceae

Writing scientific name: The first letter of the genus written with a capital letter, while the species with small letter, the scientific name written in *italics* or underlined. Ex: aspergillus niger

Aspergillus niger ***OR*** **Aspergillus niger**

The fungal characteristics that use in Classification:

- **Cell wall**
- **The cell wall chemical component**
- **Somatic phase**
- **Reproduction**
- **The structural that formed by fungi**
- **Fruiting bodies**
- **Spores**

Fungal Webster, Weber and Hibbett Classification (2007):

1- Kingdom: Protozoa (Protista)

Phylum: Myxomycota
Phylum: Plasmodiophoromycota

2- Kingdom: Chromista (Stramenopila)

Phylum: Hyphochytriomycota
Phylum: Labrinthulomycota
Phylum: Oomycota

3- Kingdom: Fungi

Phylum: Chytridiomycota
Phylum: Zygomycota
Phylum: Ascomycota
Phylum: Basidomycota
Phylum: Deutromycota

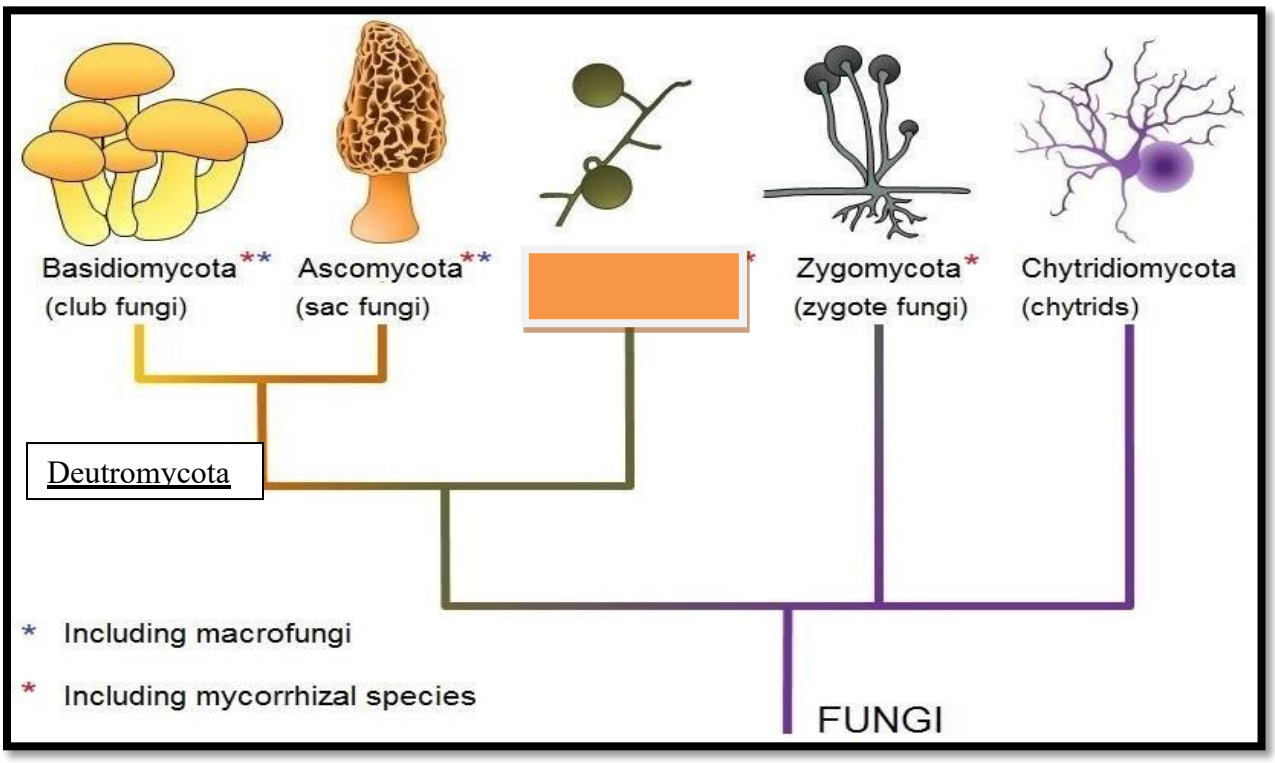

Figure (1) kingdom fungi

Kingdom: Protozoa (Protista)

1- No cell wall so also called Gymnomycota
2- Phagotrophic nutrition.
3- Somatic phase is **plasmodium**.
   - ❖ **Plasmodium:** protoplasmic mass similarity amoeba, multinucleated also called true slime mold.
   - ❖ **Pseudo plasmodium:** Accumulation of amoeba cells surrounded by membrane, also call cellular slime mold.

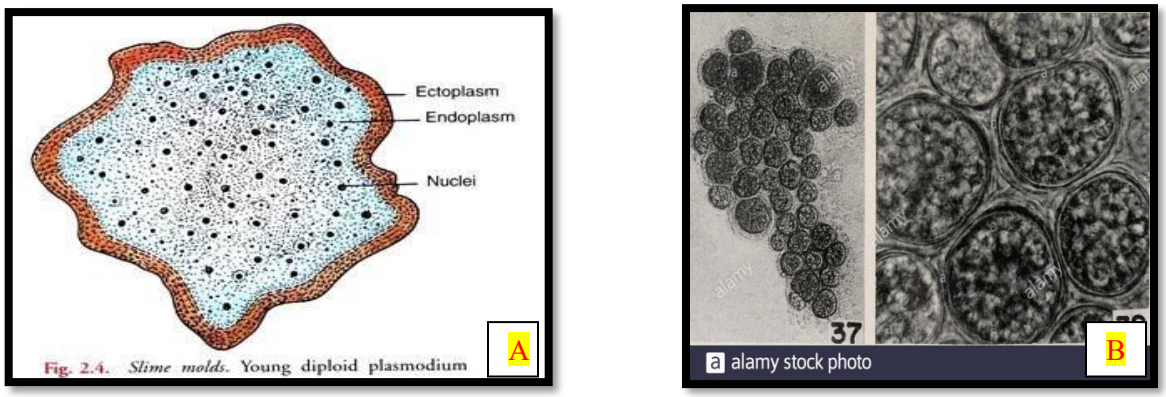

Figure (2) (A) plasmodium (B) Pseudo plasmodium

Type of plasmodium

1- **Protoplasmodium**: microscopic, slow movement, produce one sporangium.
2- **Aphanoplasmodium**: grow as protoplasmodium at the beginning, and then it will change into network.
3- **Phaneroplasmodium**: grow as protoplasmodium at the beginning then it will change into granular and more density plasmodium. it is visible.

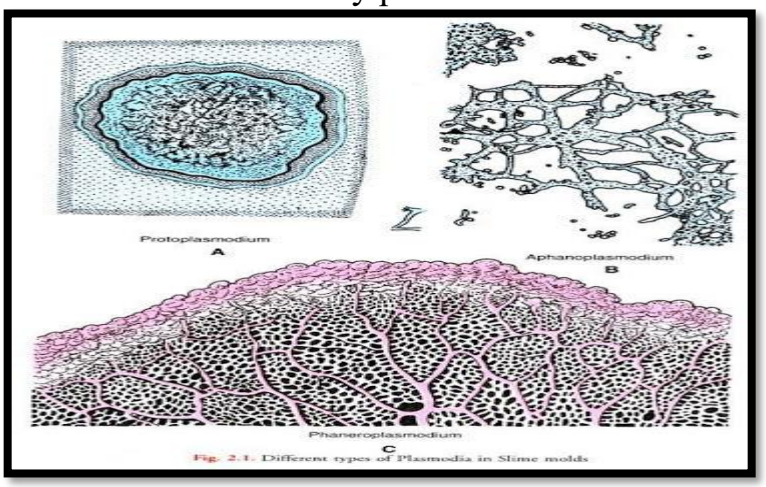

Figure (3) type of plasmodium