

PW 02 : Fungi and lichens

Work to be Done:

I. Microscopic Observation and Drawing of a Fungus

1. Zygomycetes: *Rhizopus nigricans* (Moldy Bread – Prepared in Advance)

- Observe under the light microscope and draw the structures.

2. Deuteromycetes: *Penicillium sp.* (Moldy Orange or Mandarin – Prepared in Advance)

- Observe under the light microscope and draw the structures.

II. Microscopic Observation and Drawing of a Lichen

1. Prepared Slide (Unknown Lichen)

- Observe under the light microscope and draw the structures.

2. Identification of Lichen Form, Color, and Reproductive Organs

- Observe and describe the **morphology, color, and reproductive structures** of the lichen.

Materials Required:

- Prepared slides (4 slides)
- Samples
- Dissection kits
- Microscopes
- Binocular magnifying glasses
- Slides & cover slips

Important Notes:

- **Each drawing must include a title and a legend.**
- **Indicate the magnification used** for both magnifying glass and microscope observations.
- **Include the classification** of each species.
- **Scientific names must be underlined** and consistently formatted.

1- Genus *Rhizopus* :

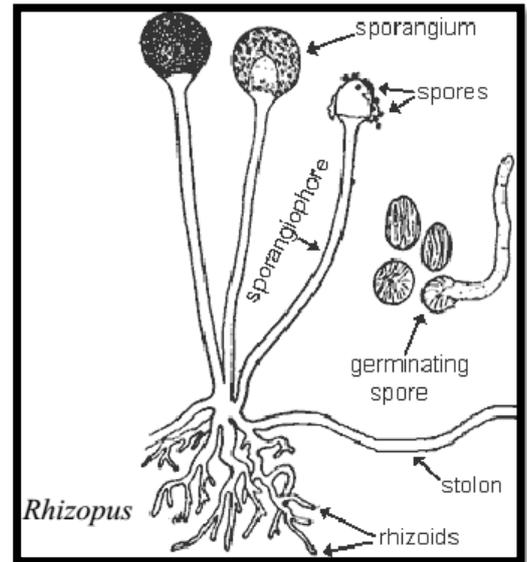
Phylum: Mucoromycota

Subphylum: Mucoromycotina

Order: Mucorales

Family: Mucoraceae or Rhizopodaceae (depending on the classification system)

Genus: *Rhizopus*



2. Genus *Penicillium* :

□ Domain: Eukaryota

□ Kingdom: Fungi

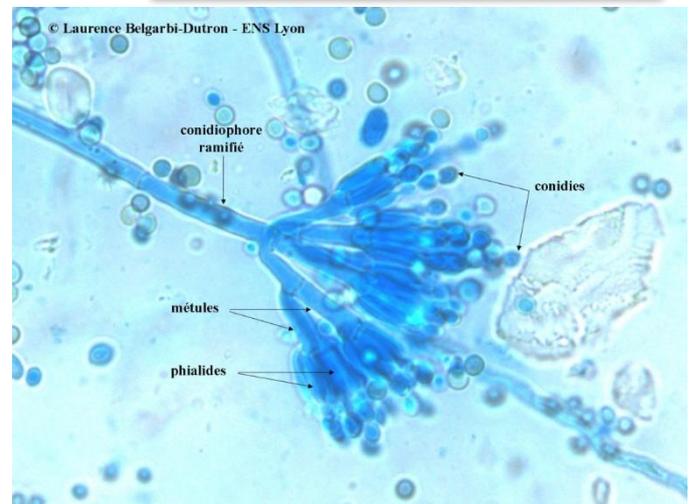
□ Phylum: Ascomycota

□ Class: Eurotiomycetes

□ Order: Eurotiales

□ Family: Aspergillaceae

□ Genus: *Penicillium*



3. Lichens

Domain: Eukaryota

Kingdom: Fungi

Division: Ascomycota

Class: Lecanoromycetes

Order: Teloschistales

Family: Teloschistaceae

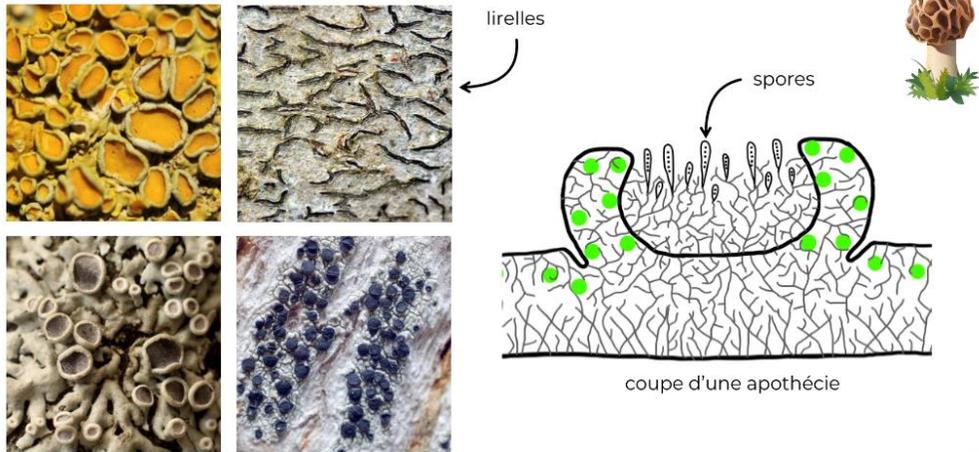
Genus: *Xanthoria*

Species: *X. parietina*



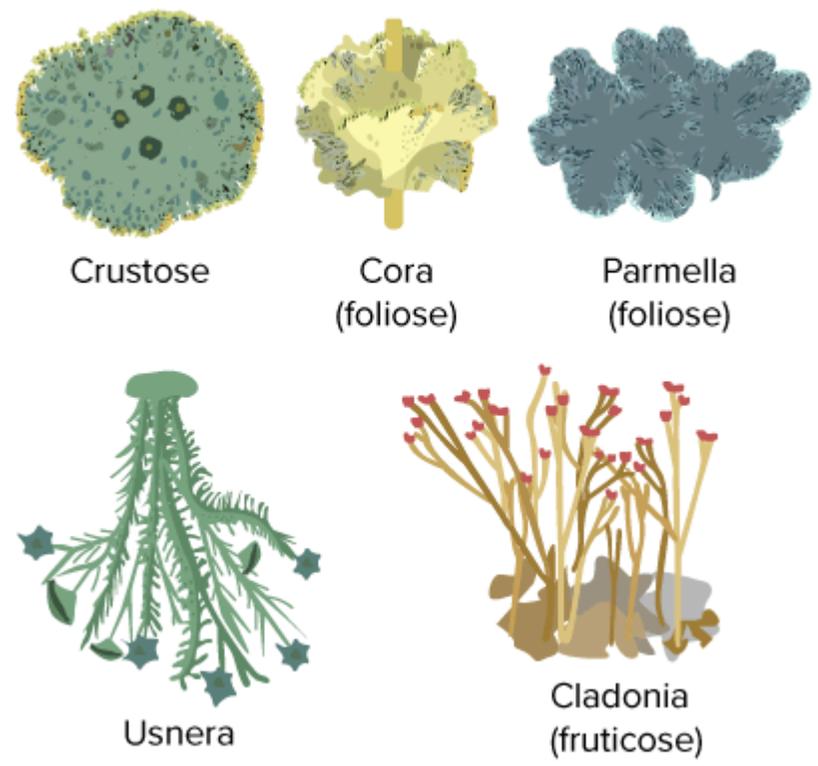
A

Reproduction sexuée via les « apothécies »



B

Forms of lichens



C

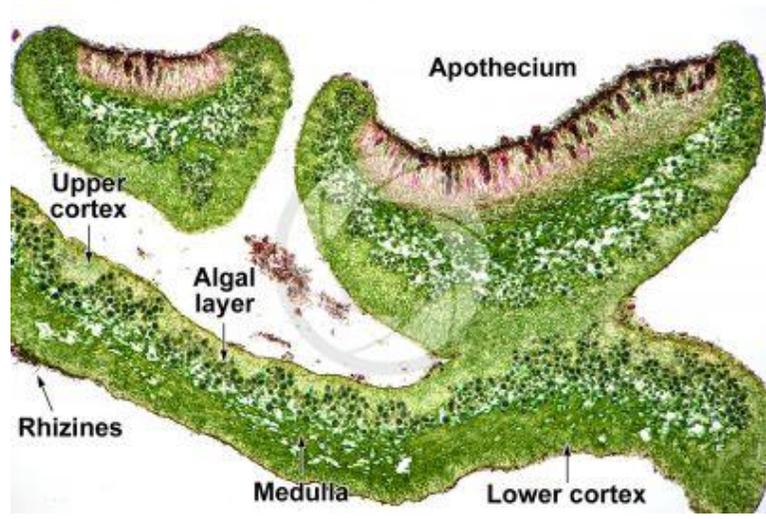


Figure : B / Lichens forms ; C/ under microscope and A / apothecium

First, observe the morphology of the lichen: Is it crustose (a crust tightly attached to the substrate), foliose (with small lobes that detach from the substrate), or fruticose (attached to the substrate at a single point)? Once this relatively simple step is completed, identify the color of the lichen and check for the presence or absence of apothecia (cup-shaped structures used for sexual reproduction).