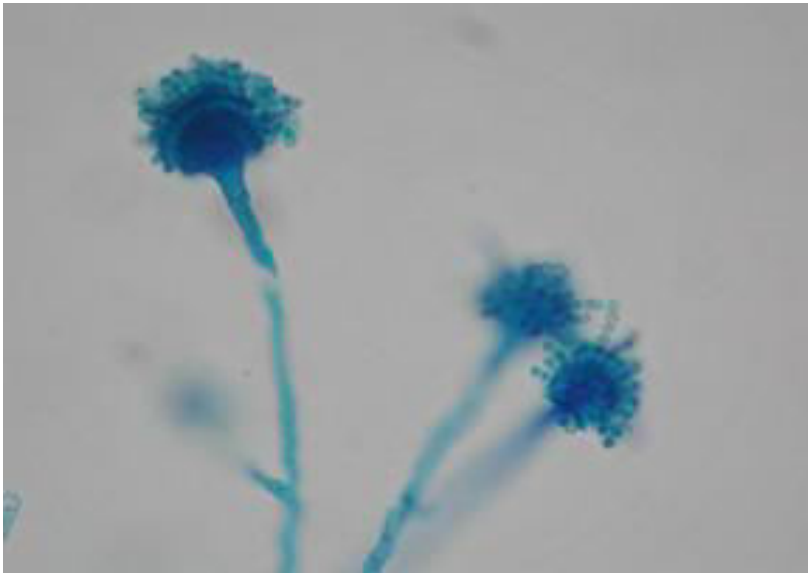


Saprophytic Fungi

(Air contaminant fungi)



Saprophytic Fungi

- Fungi that feed on dead organic matter. e.g.: plant and animal remains
- Rapid growth (within 3 days).

Fungal colonies are described using the following terms

Texture:

- Woolly
- Cottony
- Powdery
- Silky
- Velvety, etc...

COLOR:

- Black
- Brown
- Pink
- Cinnamon
- Yellow
- Green, etc...

Aspergillus sp.

- *Aspergillus sp.* are air contaminant fungi (saprophytic fungi).
- They can cause diseases in immuno-compromised individuals (Opportunistic fungi).
- **Aspergillosis:** any infection caused by *Aspergillus sp.*

Aspergillus niger

Colony morphology:

Colony is black and powdery.



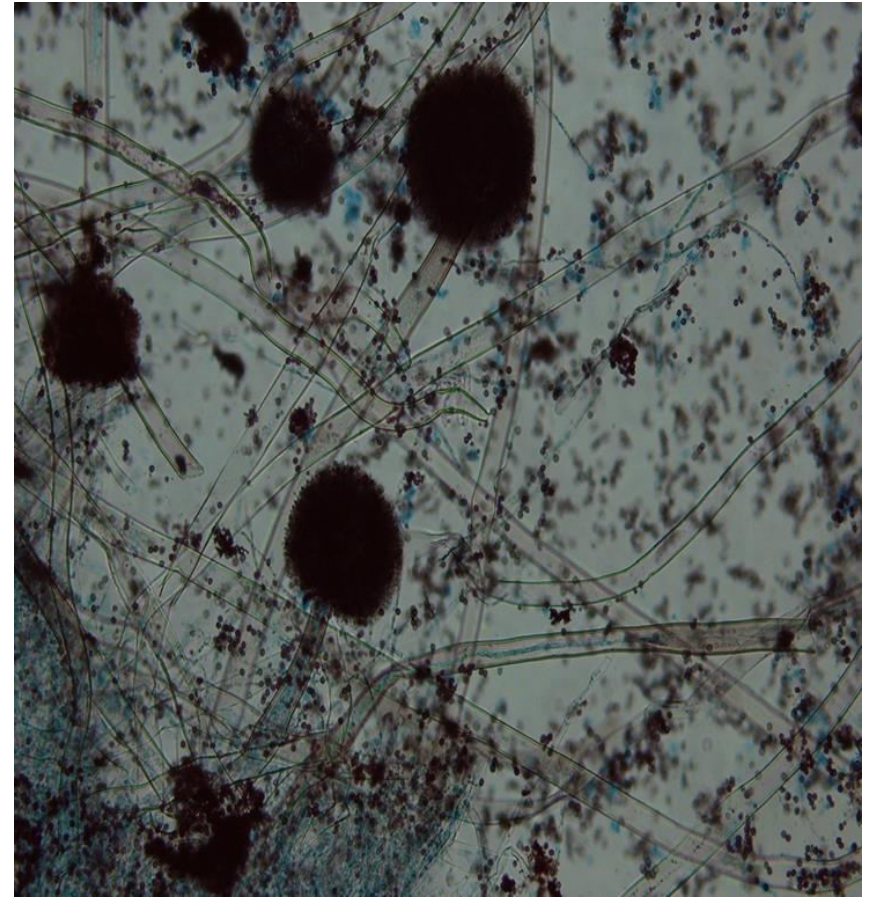
Aspergillus niger in the culture media



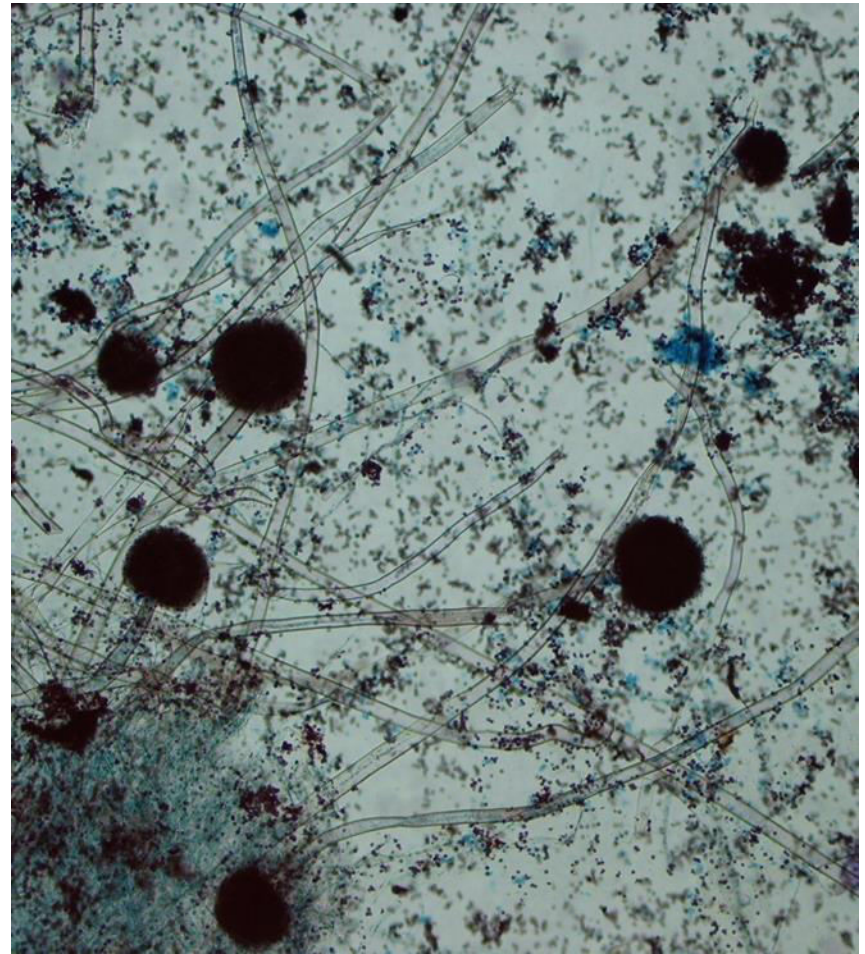
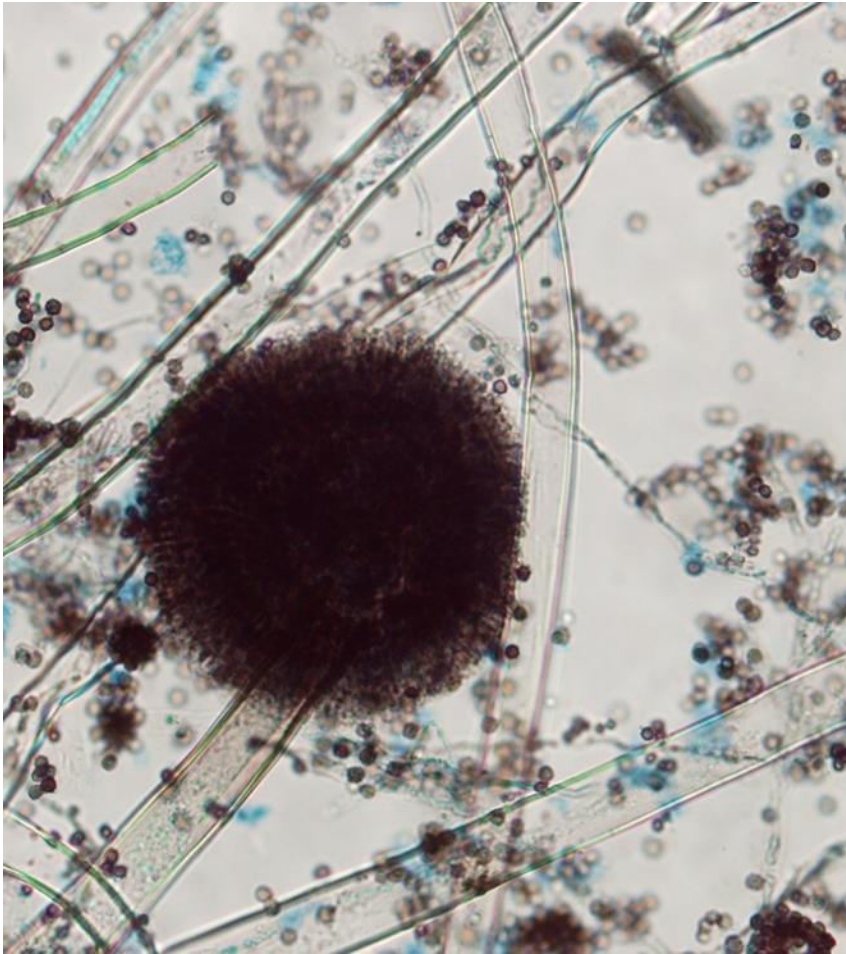
Aspergillus niger

Microscopic morphology:

- Septate hyphae.
- Conidiophores are long, thick, hyaline or brownish.
- Spherical vesicles.
- Biseriate phialides.
- Conidia are round, black in color



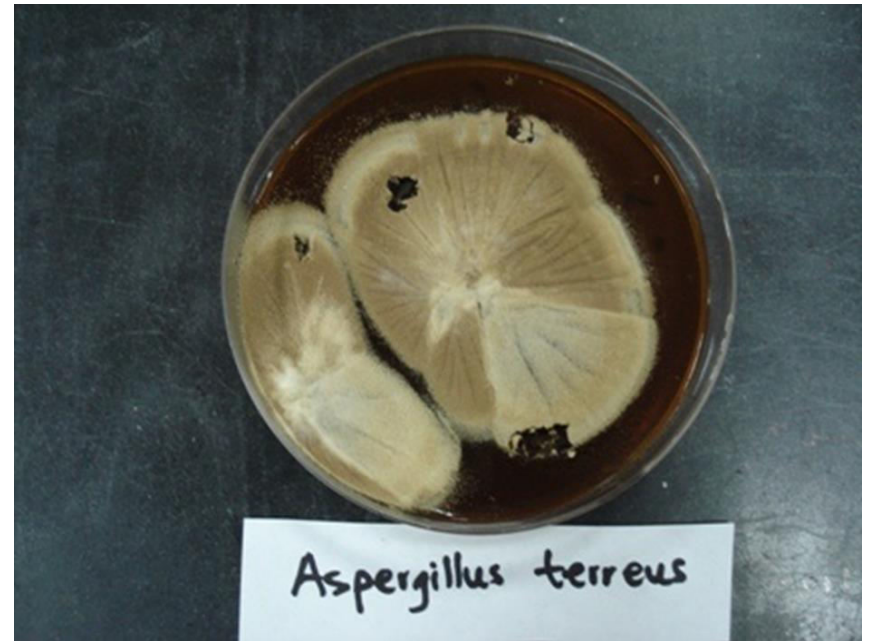
Aspergillus niger under the microscope



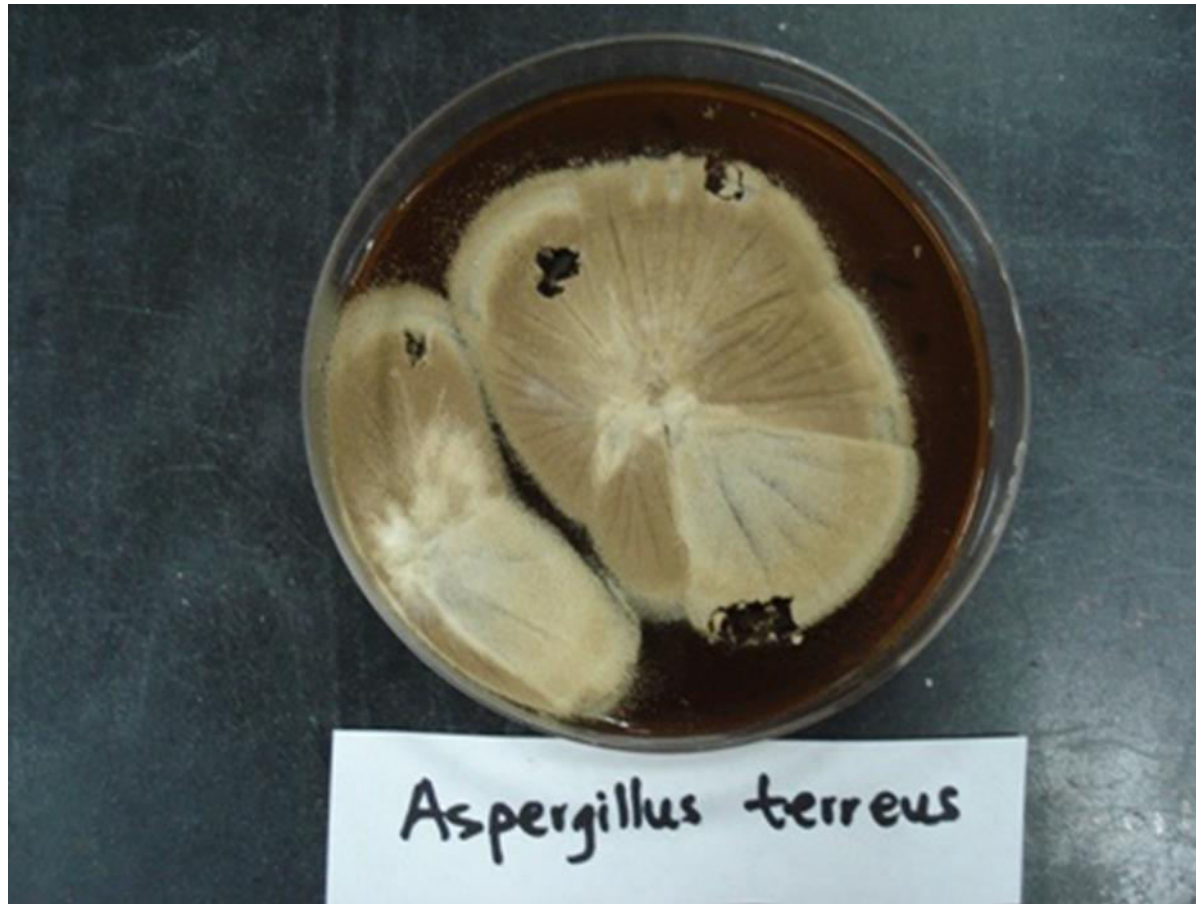
Aspergillus terreus

Colony morphology:

Colony is brown or cinnamon in color and velvety.



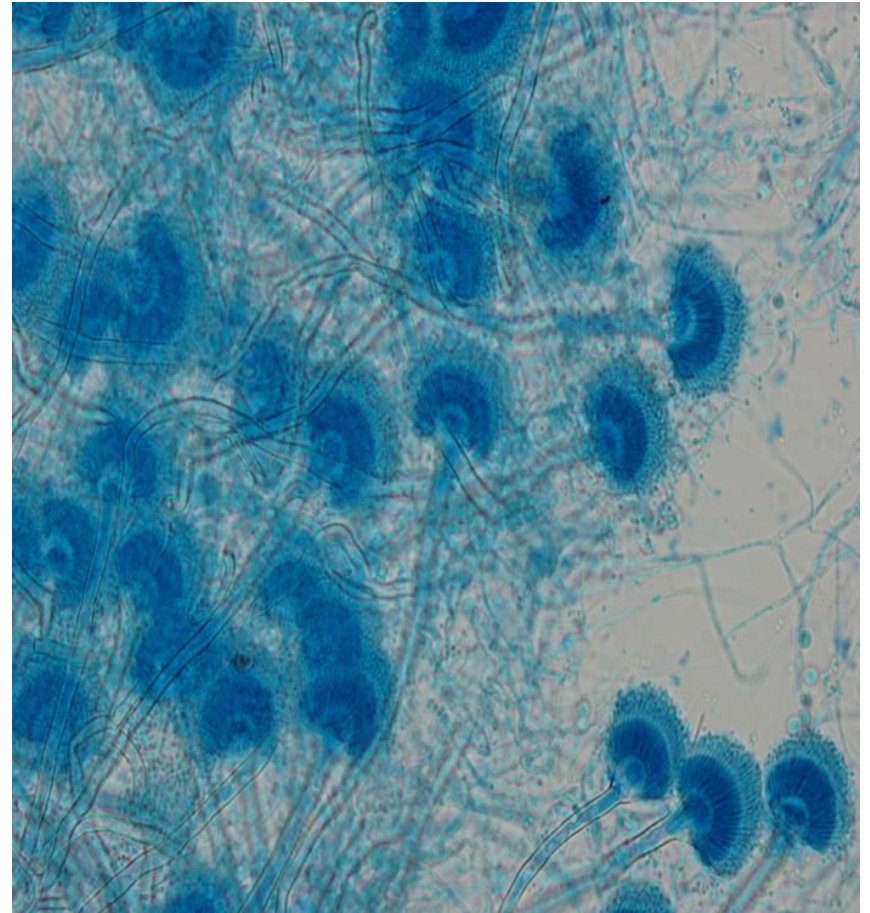
Aspergillus terreus in the culture media



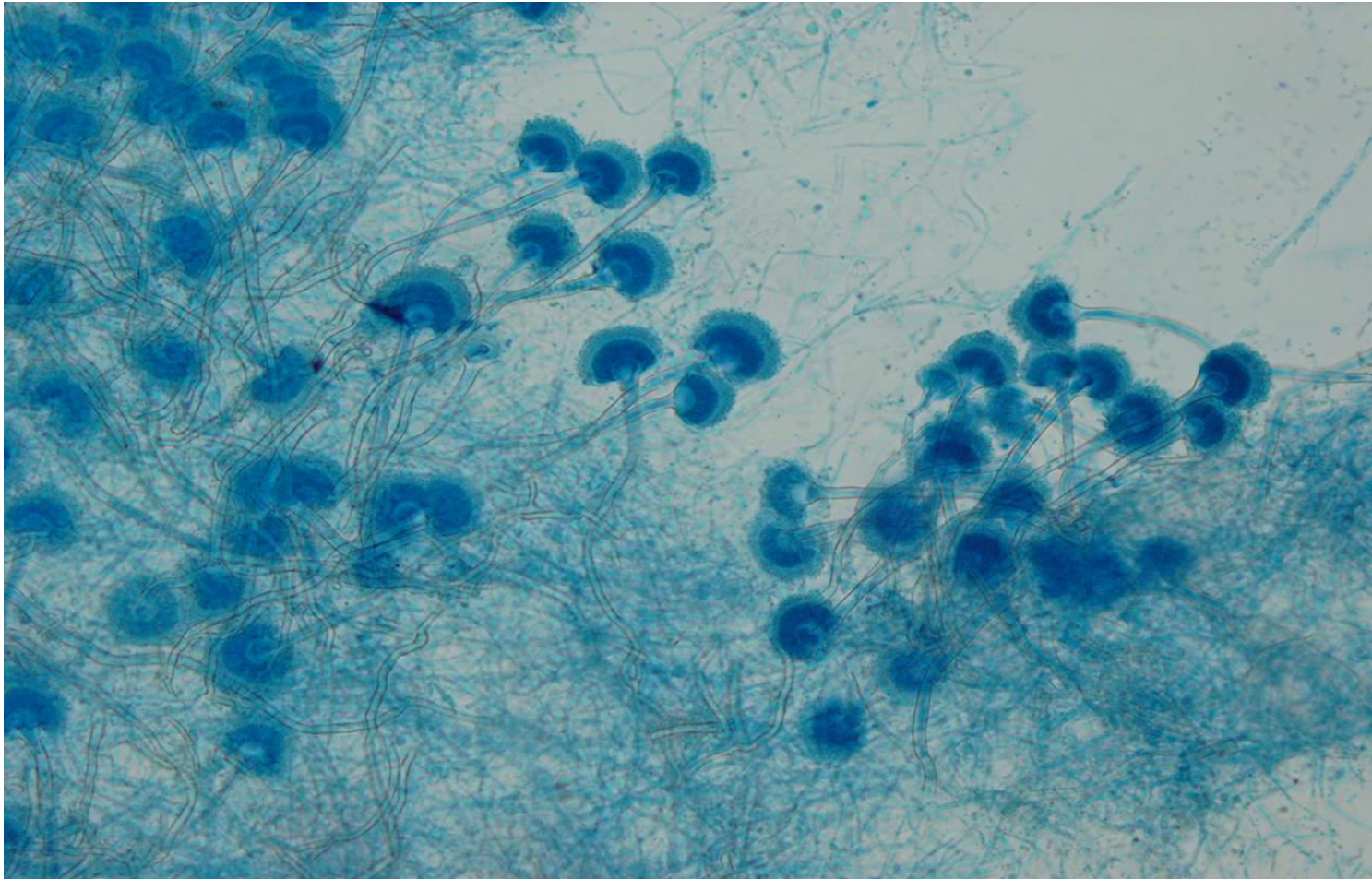
Aspergillus terreus

Microscopic morphology:

- Septate hyphae.
- Conidiophores are smooth and hyaline.
- Vesicles dome- shaped.
- Phialides are biseriate (compactly columnar).
- Round conidia.



Aspergillus terreus under the microscope



Aspergillus flavus

Colony morphology:

Colonies are yellow or green and velvety.



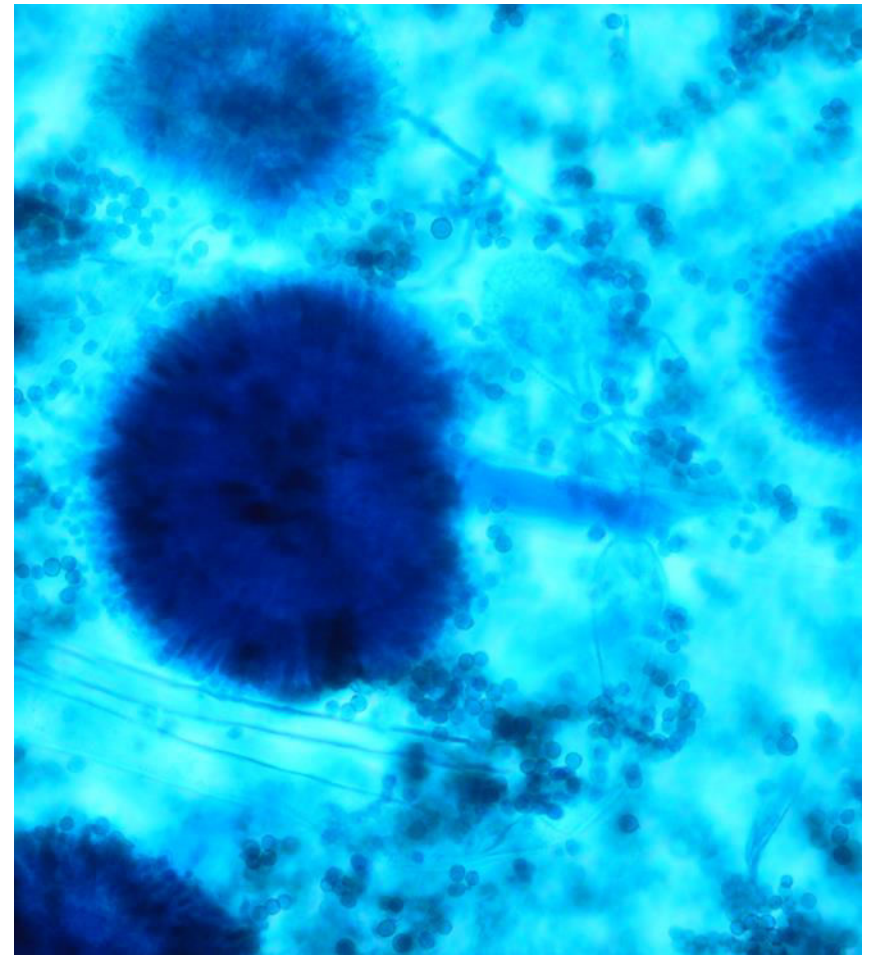
Aspergillus flavus in the culture media



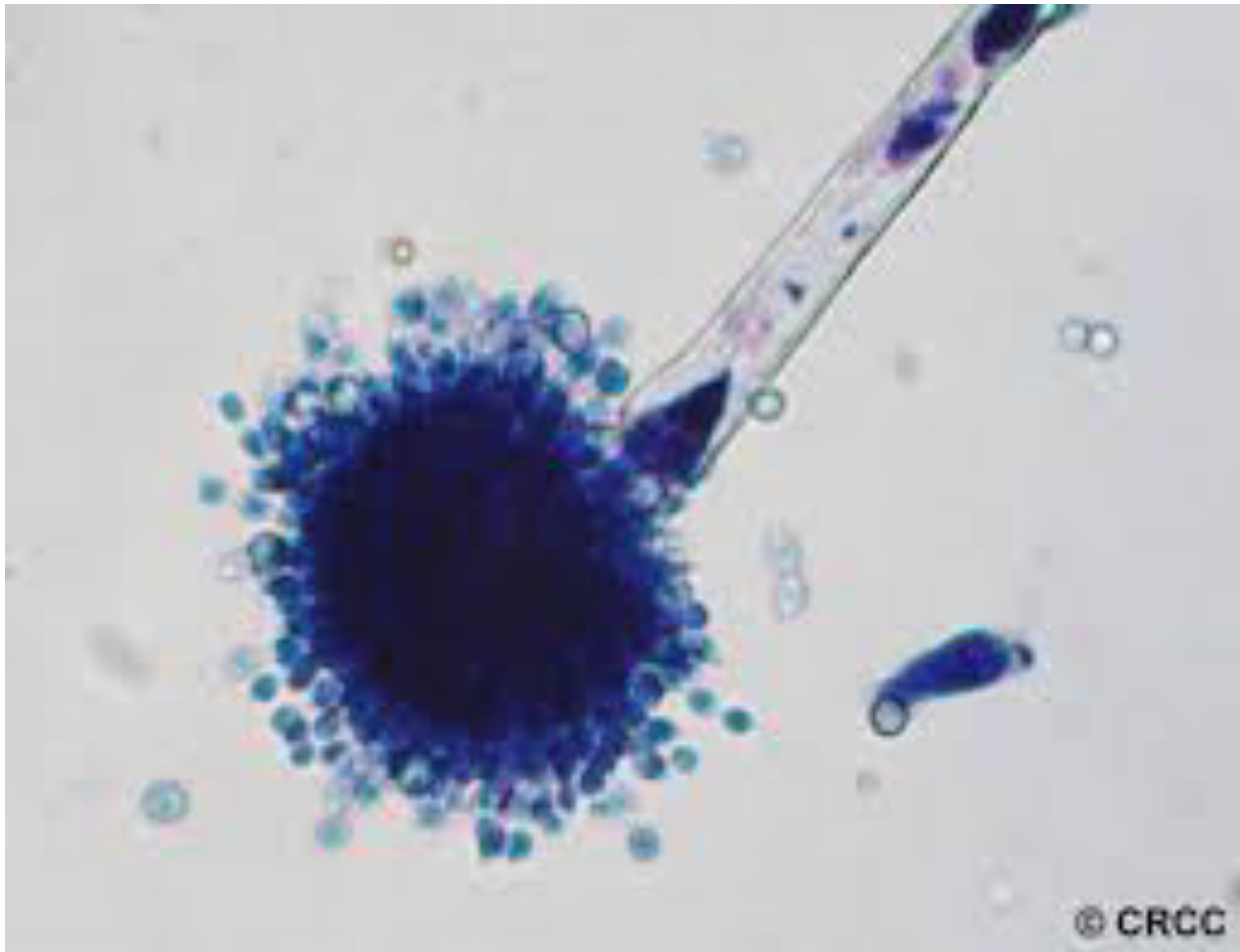
Aspergillus flavus

Microscopic morphology:

- Septate hyphae.
- Conidiophores hyaline, thick wall.
- Spherical vesicles.
- Phialides cover $\frac{3}{4}$ of the vesicles, uniseriate or biseriate.
- Round conidia.



Aspergillus flavus under the microscope



Aspergillus fumigatus

Colony morphology:

Colonies are gray or green and velvety or powdery.



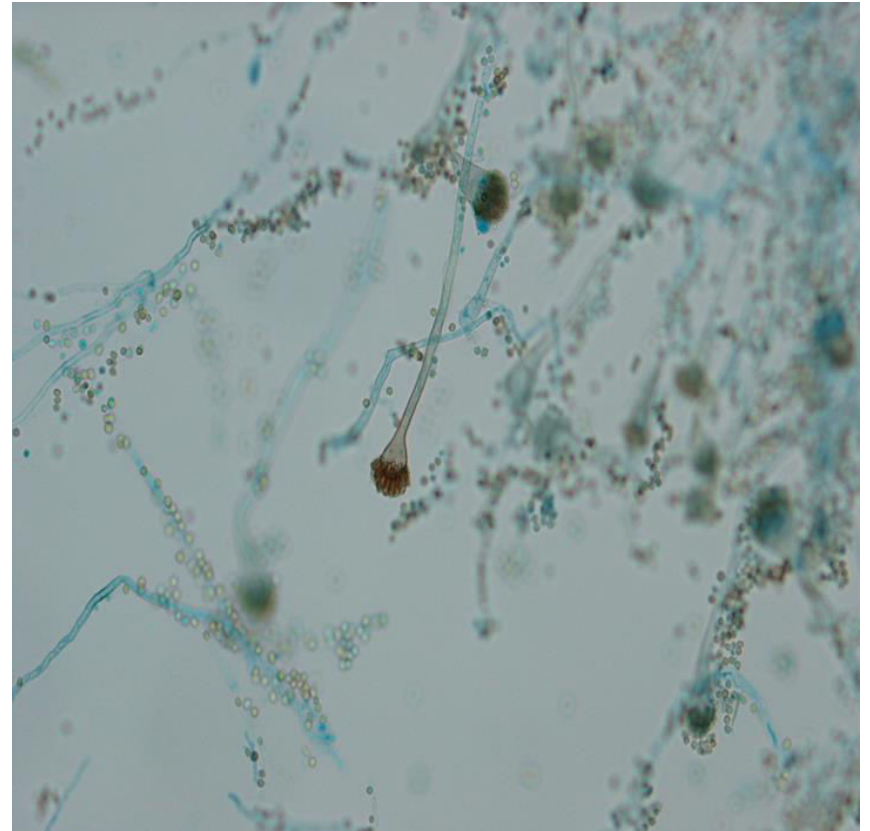
Aspergillus fumigatus in the culture media



Aspergillus fumigatus

Microscopic morphology:

- Septate hyphae.
- Conidiophores are smooth, short and the upper part is green.
- Vesicles flask in shape.
- Phialide cover upper ½ of the vesicles.
- Round conidia.



Aspergillus fumigatus under the microscope

