LAB 4

F:pilolaceae

Black sporangium and this sporangium have the ability to shoot the spores far from the fungus so it is called shot gun fungi example *pilobolus sp.*

Order 2 :Endogonales

Found in soil ,wood and remains of plants

Family: Endoganacae

Genus: Endogonegenus : Sclerogone

Order 3 : Mortierellales

Colorless sporangium ,smoothzygospore ,branched hyphae found in soil and animal wastes

Genus:modicella sp.

Genus:Mortierella sp.

Genus: Dissophora sp.

Sub phylum 3 :Kickxellomycotina

Order 1:Zoopagales

This order called predacious parasitic zygomycetes it is parasite on fungi ,worms and nematode, sexually reproduce by zygospore and asexually by conidia it is important in biological control have genus *Zoophagus sp.*

Order 2 :Kickxellales

Family :kickxellaceae

Include 6 genus the most important genus are Coemansia and Kickxella

Saprophyte in soil on animal wastes and fungi so it is important in biological control

Class:Trichomycetes

Differ from fungi by:

1-Simple thallus

2-In some species there is zygospore

3-In some species the cell wall contain cellulose.

4-Asexual reproduction by spores depending on order

| Order | type of spore | genus |
|--------------|----------------|-----------------|
| Harpellales | trichospore | Harpella sp. |
| Aselariales | Artheospore | Asellaria sp. |
| Eccrinales | sporangiospore | Enterobryus sp. |
| Amoebidiales | Amoeboidspore | Amoebidium sp. |

Sub phylum-4-:Entomophthoromycotina

Order : Entomophthorales

1-parasite on insects and frogs.

2-weak mycelium .and forming conidiophore .

3-colerles , multinucleate and big conidia .

Genus: Entomophthoramuscae. (fly fungi).

Life cycle of this fungi 5-8 days we can see halo of spores surrounding the house fly. The first thing the fungus does, according to some reports, is grow up into the brain of the fly, in order to control its activities. The mycelium of the fungus grows into a particular area of the brain that controls the crawling behavior of the fly, forcing the fly to land on a nearby surface and crawl up as high as possible. Eventually the hyphae of the fungus grow throughout the body of the fly, digesting its guts, and the fly dies. Small cracks open in the body of the fly and the *Entomophthora* produces sporangia, each with a single spore, in pads. Remember that most fungi want to get their spore bearing structures as high as possible, so that the spores will get caught in air currents more easily. Other fungi produce fruiting bodies to accomplish this but *Entomophthora* takes advantage of its relationship with the fly to get its spores as high as possible.



Longitudinal section of the abdomen of the fly filled with fungal hyphae.

after the contact of the conidia with fly it will form aprisorium and inter the body of the fly by forming tube and inside the fly it will form hyphal bodies which start to germinate to give conidiophore that carry the conidia to go outside the fly body and start to infect another insect if couldnot find insect it will give secondary conidia and then third conidia till the end of the protoplast.this fungus used in biological control.