Department of biology

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((Mycology))

Stage (-3-)

LEC- ((10))

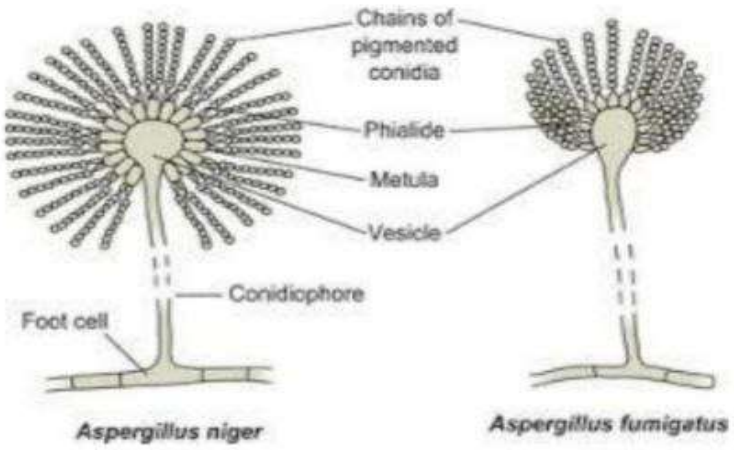
Class of spherical sac fungi: - Plectomyces

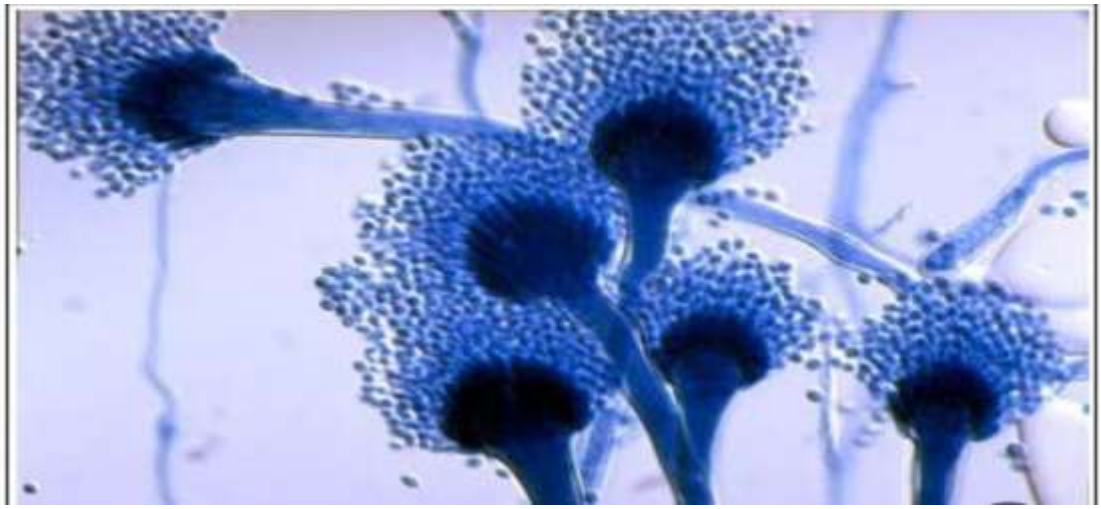
By

Msc. Baneen Maen Kareem

2-Class of spherical sac fungi: - Plectomyces

Fungi that form a closed spherical fruiting body, Cleistothecium, inside which there are loose scattered sacs that do not form a fertile layer. It includes several orders, the most important of which is the Order Eurotiales. Its most important families are: Family Eurotiaceae. Its most important genera are Aspergillus and Penicillium, which are two filamentous fungi. The fungus Aspergillus is characterized by being widespread and includes more than 200 species classified according to the color of the conidial head (conids and vesicles that may be black, white, yellow, etc. Many of its species are classified with imperfect fungi, but whenever their sexual phase is discovered, they are placed among the cyst fungi. Most of the species are saprophytic, while some are parasitic on humans and animals. When the spores produced by the fungus are inhaled in abundance, they cause an allergic reaction accompanied by a runny nose. Nasal congestion with severe sneezing is a disease in humans called Aspergillosis, which includes the skin, ears, nails, nose, and lungs. Other diseases it causes on plants include rot in general, as well as blackening of onions. This fungus is famous for producing mycotoxins, especially aflatoxins. It is possible to grow the syrup on the medium of sapwood dextrose agar (SDA) or potato dextrose agar (BDA) to produce white, fluffy colonies. After that, the colony takes on a black, green, yellow color, etc., depending on the type of fungus. Asexual reproduction is through the formation of a specialized cell in the foot cell, on which a conidophore is formed, at the end of which a vesicle is formed, on which pear-shaped phialid-generating cells are formed, and then chains of spherical spores with varying colors are formed, which are responsible for discoloring the colonies with their distinctive colors. The colors are due to the presence of pigments. In the spore wall, the colony is black in color: A. niger, A. flovus is yellowish green, and A. candidus is yellow.



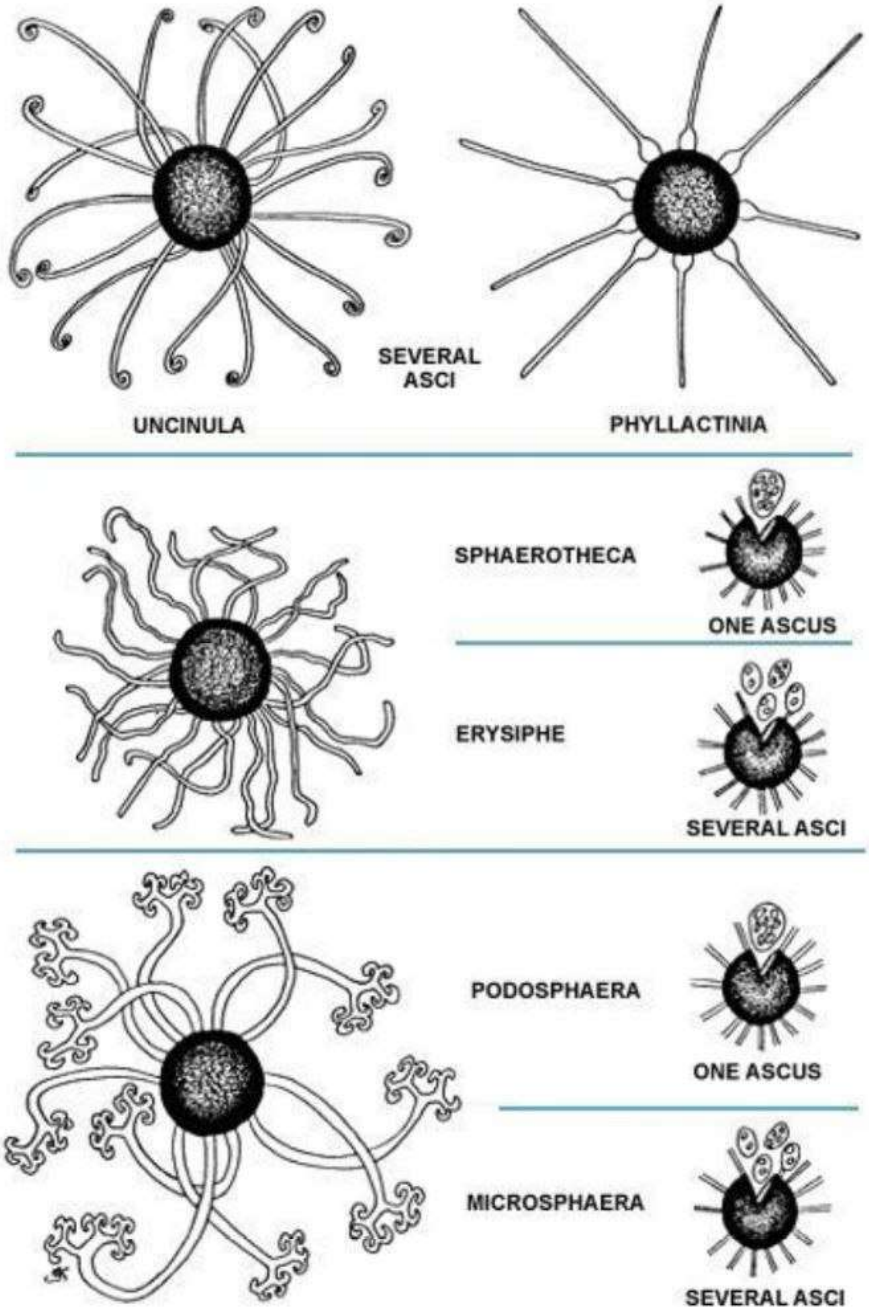


The Penicillium fungus applies to what was mentioned in the previous fungus, but here, during asexual reproduction, it is a carrier of any somatic cell. Then this carrier branches to give a structure similar to a brush. At the end of the branches are the piriform cells with chains of spores on them. There are more than 250 species of them that cause plant diseases and also infect humans. Pencilosis is also a producer of aflatoxins. The colonies are also of different colors and grow on the media simple sandy colonies with grooves. The fungus causes diseases on On humans as well as on plants, as is the case with green and blue rot of citrus. The fungus is famous for producing antibiotics and organic acids.

3-Class Pyrenomycetes is characterized by the formation of a fruiting body of the type Perithecium, i.e. flask or flask, in which the sacs are located in the form of a fertile layer attached to the bottom. The sac has one wall, which distinguishes it from the double-walled visceral fungi. Some of its members form a closed spherical fruiting body. The most important of its orders is Claviceptales and Erysiphales. The order Claviceptales is one of the important orders because it includes fungi that parasitize grain crops and cause disease. Ergot disease, especially the Claviceptaceae family, which includes the diameter Claviceps purpurea. The affected spike has deformed and enlarged seeds resulting from the transformation of the seed into a stony body of the fungus. The infection is accompanied by the secretion of toxins, which are alkaloid compounds. When ingested, they cause hallucinations, constriction of blood vessels, and the lack of blood reaching the extremities, which causes cankerri and thus cutting off the patient's limb. However, when these toxins are used in low specific concentrations, they are considered a treatment that facilitates the birth process and restores the uterus to its position. It is normal after birth. It also helps to stop bleeding. Some species attack insects, such as Cordyceps sp. All members of this order have the body of a female amphipod.

اطراف مصابة

Order Erysiphales: Members of this order form a closed, spherical fruiting body. They are fungi, a region on the plant that includes an important family, Erysiphaceae, which specializes in infecting plants and causing a famous disease, Powdery mildew disease. The reason for the name is that the infected plant looks like it was sprinkled with white flour. It is diagnosed based on the number of sacs inside the fruiting body and according to the appendages that secure the fruiting body, as shown below.


SEVERAL ASCI
UNCINULA
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