

Practical mycology
Phylum: Oomycetes



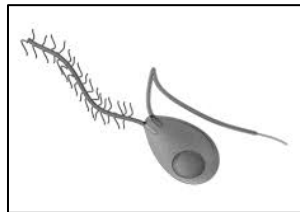
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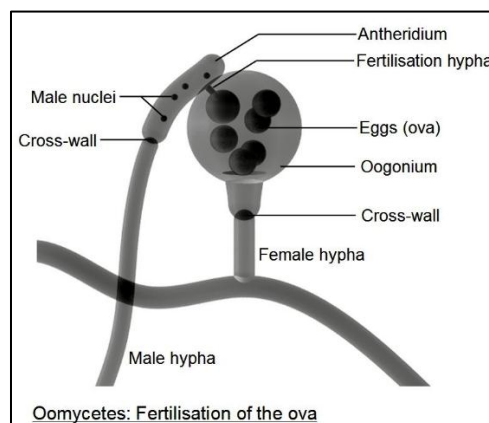
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Phylum: Oomycetes

- The oomycetes, also known as “water molds”, are a group of several hundred organisms that include some of the most devastating plant pathogens.
- The primitive forms are unicellular, whereas the advanced forms have a well-developed branched, filamentous, and coenocytic mycelium.
- The cell wall is mainly composed of cellulose- β -glucan and chitin is altogether absent.
- A sexual reproduction takes place by means of pyriform or reniform biflagellate zoospores, which are devoid of cell wall. In pyriform zoospores, the flagella are attached anteriorly and in reniform laterally. One flagellum is of whiplash type and the other of tinsel type.



- The sexual reproduction is oogamous type. The male and female sex organs are known as antheridia and oogonia, respectively. The sex organs are either terminal or intercalary.

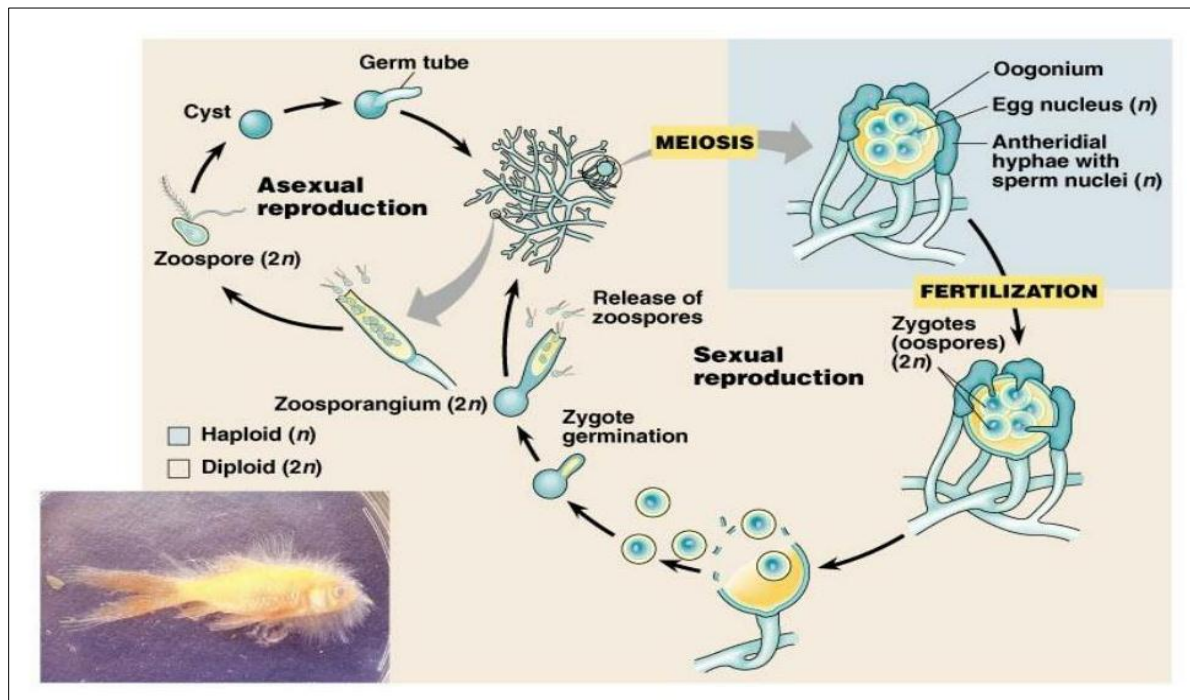


- The gametes are non-flagellate. The fusion of gametes results in the formation of thick-walled oospores.

Order: Saprolegniales

- 1- The majority of saprolegnials is aquatic and occurs in clear water.
- 2- The mycelium is coarse , stiff and sparsely branched.
- 3- The thallus is eucarpic.
- 4- Some cellulose is present in the cell wall saprolegniaceae.
- 5- Zoospores always develop within a zoosporangium.
- 6- Zoospore is biflagellate with their anterior flagellum tinsel –shape, and posterior whiplash-shape.
- 8- Sexual reproduction is oogamous.

Saprolegnia (also known as water mold, oomycete infection, or winter kill), is an opportunistic fungal pathogen in freshwater aquariums. It usually appears as a fuzzy patch on fish's skin.



Life cycle of saprolegnia