Practical mycology

Phylum: Chytridiomycota

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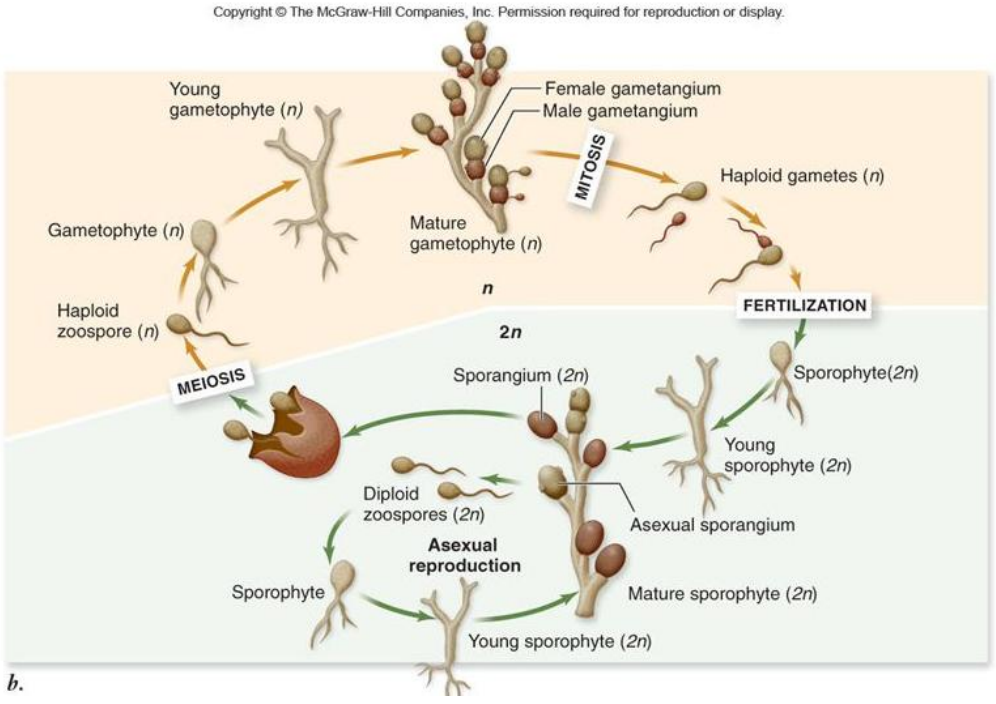
Phylum: Chytridiomycota

- Chytridiomycota (commonly known as chytrids) are saprotrophs, and have chitin cell walls and a posterior whiplash flagellum.
- Chytridiomycota reproduce with zoospores that are capable of active movement through aqueous phases.
- For most members of Chytridiomycota, asexual reproduction occurs through the release of these zoospores derived through mitosis.
- In some members, sexual reproduction is achieved through the fusion of isogametes.
- Chytridiomycota are coenocytic with no distinction between individual cells.
- The filaments are long and tubular with a cytoplasm lining and large vacuole in the center.
- These single-celled organisms have branching hyphae with rhizoids and produce gametes with flagella.

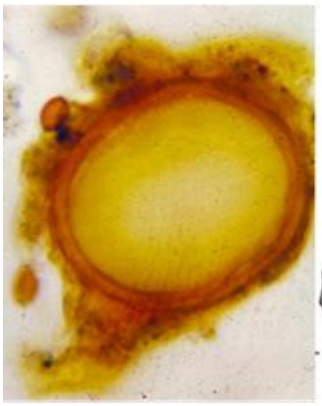
The life cycle of chytridiomycota

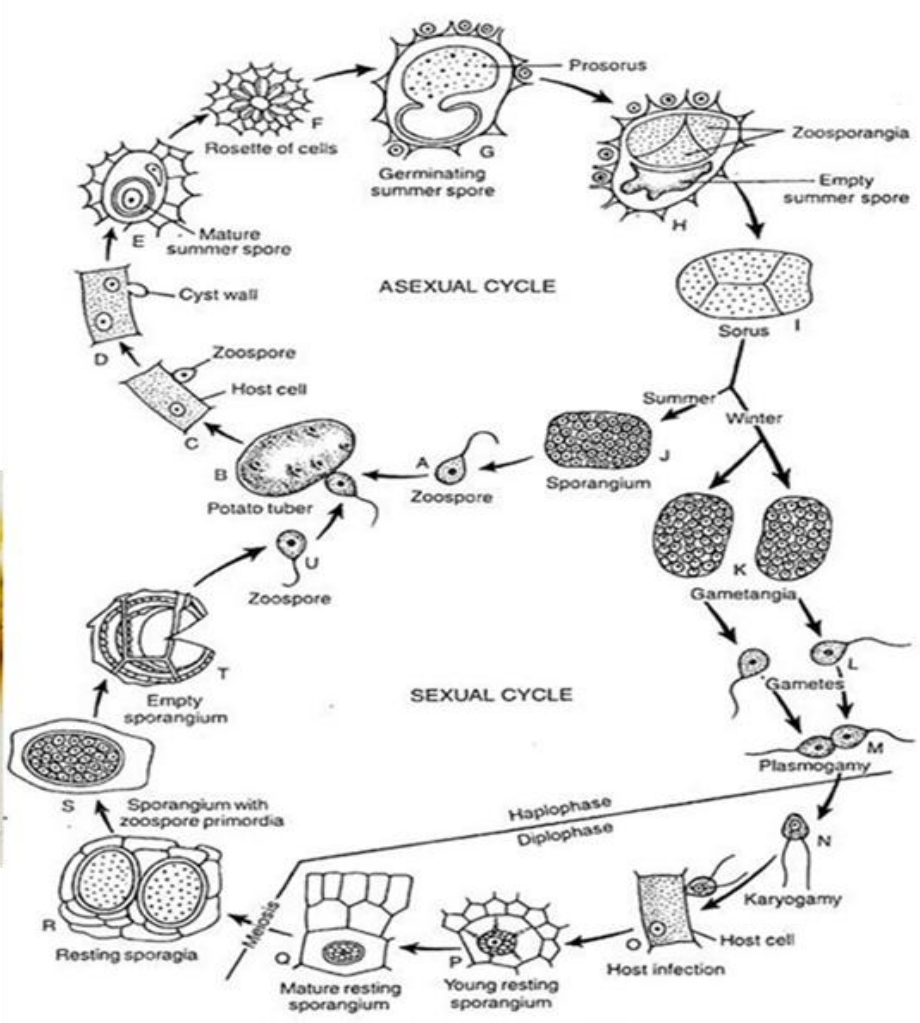


b.

Synchytrium endobioticum

Synchytrium endobioticum is a chytrid fungus that causes the potato wart disease, or black scab. It is an obligate parasite, which does not produce mycelium but an abundance of dissemination sporangia which are responsible for tumor formation on underground potato organs. These sporangia produce zoospores, organs of dissemination and infection. This fungus can survive for many years (up to 30 years) in the soil in the form of a cyst (survival spores).





The life cycle of *Synchytrium endobioticum*