

SLIME MOLD GROWTH AND REPRODUCTION



Types of Slime Molds

There are three types of slime molds called Plasmodial slime molds, cellular slime molds, and labyrinthulomycota, which are also known as slime nets. Slime molds have the ability to self-organize and move, even though their intelligence is purely genetic.

Plasmodial Slime Molds

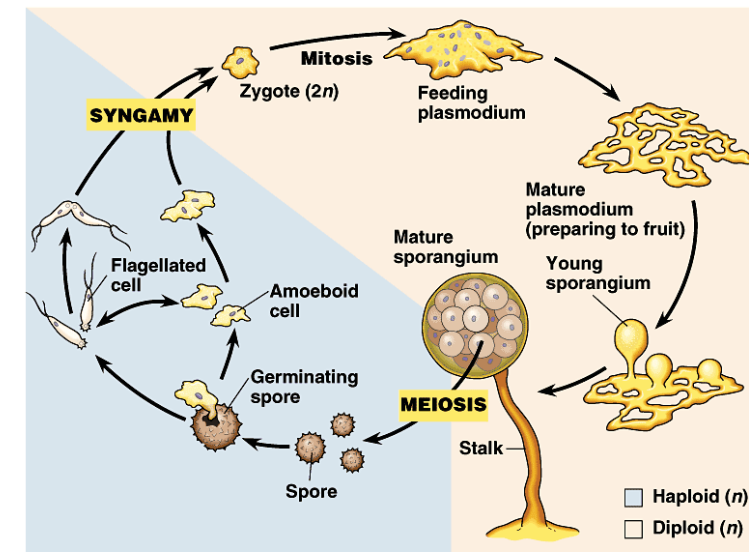
plasmodial slime molds are like one enormous cell with many diploid nuclei because they are formed as individual flagellated cells fuse together.

Cellular Slime molds

Cellular slime molds are single-celled amoeboids, but combine together when signaled by the release of a certain chemical. These are the slime molds that usually exist as single cells, but when food is scarce join together to build slime-mold slugs.

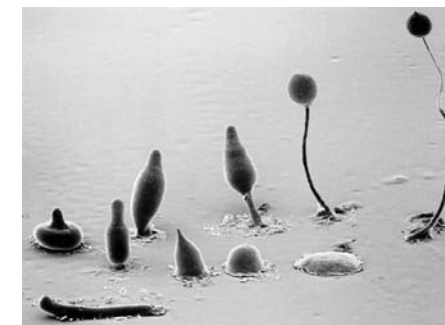
Labyrinthulomycota

These "slime nets" are also called slime molds but are not closely related to other slime mold groups. They are more closely related to Chromatista.



Slime Mold Reproduction

Slime molds reproduce similarly to the way corals and lichens do. They live mostly as amoeboid cells, when food becomes scarce they group together to form a feeding plasmodium, which matures to grow sporangium, which are long stalks with spores concealed in a cavity on top. Once the sporangium has matured, the spores are released and carried by the wind to new locations to grow into amoeboid cells. The slime mold Plasmodium is pictured at the top left and the sporangium are pictured above.



Slime Mold Slugs

when some slime molds accumulate, they can form "slugs" which have the ability to move about in search of a better environment for the slime mold cells to grow. these slugs mature in the same way plasmodium do creating sporangium, which release spores to grow into more slime mold.