
Slime Molds

Slime molds belong to the Myxomycetes, a group intermediate between bacteria and fungi. Their assimilative phase is a plasmodium, which is transformed into distinct fructifications on a substratum. They are not parasitic and are often found in rotting logs. Sometimes they are a nuisance in lawns, for the plasmodium after ingesting decayed organic matter or microorganisms for food moves up a grass blade for fruiting. Their spores are produced on or in aerial sporangia and are spread by wind. On absorbing water the spore cracks open and the contents escape as a swarmspore, sometimes two, with two flagella. The swarmspore ingests food like an amoeba, divides by fission into a myxamoeba, unites with another to form a zygote, which enlarges, with mitotic division, into a

multinucleate plasmodium. There are many species. Two only are listed here, as being common on turf.

Fuligo septica (formerly *Mucilago spongiosa*). Cream to yellow plasmodium forms large grayish white structures, 2 to 6 cm long by 1 to 6 cm wide, that are lobed and branched sporangia filled with a dark mass of purple, spiny spores.

Mucilago spongiosa (see *Fuligo septica*).

Physarum polycephalum Plasmodium colorless, watery-white or yellow. Fruiting bodies small, gray, sessile, crowded on grass blades, and scattered in groups or rings over an area of several feet. Spores are purple brown in mass. The sporangia develop during humid weather in summer and autumn. Use a stream of water to wash the spore masses off the grass.