

Slime Molds – Landscape Curiosities

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Introduction

During warm, wet conditions each year, many gardeners are surprised and sometimes alarmed to discover strange growths on their ornamental wood mulch, lawn grass or even their landscape plants. The Plant Health Clinic at Fayetteville gets numerous phone calls each year from panicky gardeners and landscapers about these peculiar “slimy” or “crusty” masses that seem to appear overnight in their garden areas or lawns. Although these creepy masses are considered to be a fungus-like organism, they possess animal-like characteristics which make them interesting to watch and examine.

Cause

Slime molds are saprophytic; that is, they feed on decaying organic materials, bacteria and yeasts. These curiosities are not considered plant disease organisms. They can sometimes smother plant parts or become a nuisance in the landscape or lawn. These organisms grow externally on plants that are close to the ground, such as strawberries, turfgrass and vegetables. The most common slime molds encountered in the landscape and garden belong to the genera *Physarum* sp. and *Fuligo* sp. The slime molds are often encountered in moist, shady areas like crevices in mulch, rotting logs and leaf litter. Slime molds in the genus *Fuligo* produce fruiting bodies on wood mulch

that are yellow or cream-colored, crusty masses that resemble dog vomit or scrambled eggs (Figures 1 and 2). These are the most commonly seen slime molds in the landscape. Sometimes slime molds may use landscape plants for support, giving them an unsightly appearance (Figure 3).



Figure 1. *Fuligo* sp. on wood mulch



Figure 2. Closeup of *Fuligo* sp. on wood mulch



Figure 3. *Fuligo* sp. on Lirope

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Physarum sp. is the most common slime mold on turfgrass. The fruiting body is dark gray to black and contains purple spores. These slime molds resemble soot and occur in small groups or rings in the grass (Figures 4 and 5).



Figure 4. *Physarum* sp. on turfgrass (courtesy of S. Matthews)



Figure 5. Closeup of *Physarum* sp. on turfgrass (courtesy of S. Matthews)

Life Cycle

Slime molds produce spores that are wind-borne. These spores are very resistant to unfavorable environmental conditions. Spores can remain viable for years. As the spores absorb moisture, they crack open to release a swarm spore (zoospore) that can

swim in a water film. These structures produce an amoeba-like body (plasmodium) that can move very slowly across mulch or other substrate (Figure 6). The plasmodium often climbs up grass blades or low-growing plants where it produces spores. As the slime mold body matures, it changes from a slimy, wet consistency to a crusty mass on plants or soil surface.

Management

Since slime molds are primarily considered a nuisance, no chemical control is recommended. The best way to control these curiosities is to break them up and dry them out. Rake and dispose of the fruiting bodies on wood mulch. Slime molds can be discouraged from forming by keeping the mulch dry. If the slime molds continue to persist despite efforts to keep the mulch dry, gardeners may wish to change to non-wood mulch in the landscape. When slime molds occur in the lawn, rake or sweep the thatch when the grass is dry. A stream of water can also be used to wash the powdery spore masses from the grass.

Contact your local county Extension office or the Plant Health Clinic for additional information about slime molds in the landscape.

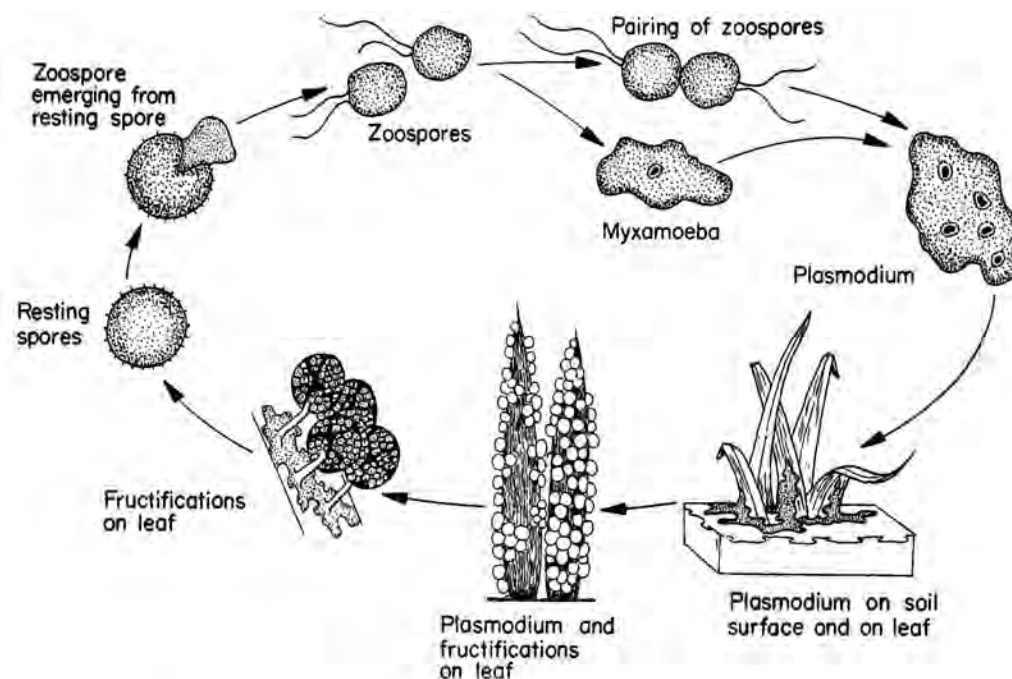


Figure 6. Life cycle of slime mold (courtesy of Plant Pathology, 4th edition)