

Slime Molds on Home Lawns

► Slime molds rarely damage lawns, but their appearance is unsightly to homeowners. Learn the symptoms, cause, and control.

Slime molds commonly occur on all warm- and cool-season turfgrasses across Alabama. Most slime mold causing fungi on turfgrasses belong to the genera of *Physarum*, *Fuligo*, and *Mucilago*. Slime molds are saprophytic fungal-like organisms that obtain their nutrients from dead or decaying organic matter in soil or thatch. Slime molds are most prevalent following prolonged periods of leaf wetness, which favors growth.

Slime molds use living turfgrass strictly for structural support and rarely cause damage to lawns. However, the sudden appearance of the crusty, gray to black fruiting bodies of a slime mold on the leaves of a manicured lawn often causes homeowners a great deal of anxiety. At times, homeowners mistake slime mold appearance with chemical spills and become concerned about the health of their lawns. Alabama's humid, warm climate is quite conducive to slime mold activity, particularly during extended periods of rain in late spring and summer. Areas with poor drainage and heavy thatch (dead turfgrass tissue lying between the green vegetation of the grass above and the root system below) also favor slime mold growth. Slime molds may appear in the same area of a lawn from year to year.



Figure 1. Slime mold ring on residential turf.



Figure 2. Slime mold pustules on residential turf.

Symptoms

Various species of slime molds can result in the growth of many small, round pustules called *sporangia* (fruiting bodies) on turfgrass leaves in small circular to irregular patches, usually 4 to 8 inches in diameter (figure 1). Slime mold pustules may be purple, gray, white, yellow, or orange (figure 2). The affected patches of turf covered with the body of the slime mold, or plasmodium, have a slimy, oily, or greasy appearance (figure 3) before the fruiting bodies form and become crustlike.

Since the individual fruiting bodies are about the size of a pinhead, there are thousands of them embedded in the crusty residue on leaf blade surfaces (figure 4). In some cases, stacked, brightly colored fruiting bodies may form on leaf surfaces that are filled with a dark brown to black powdery mass of spores. Spores are released when sporangia are damaged or disintegrate.



Figure 3. Slime mold growth on residential turf showing greasy appearance.



Figure 4. Slime mold encrusting on leaves of turfgrass.



Figure 5. The body of a slime mold known as the plasmodium on zoysiagrass

In most cases, slime molds are found scattered in patches across a lawn in shaded and wet areas but can occasionally cover a majority of the surface of a lawn. Typically, encrusted grass blades are not discolored or directly damaged by a slime mold. However, in severely colonized turf, slime mold growth may cause mild yellowing and reduce plant vigor due to their shading effect reducing photosynthesis. After a few days to a week, the crust or fruiting bodies disintegrate, and the slime mold disappears without a trace.

Cause

Slime molds are “primitive” saprophytic fungi that engulf decaying organic matter, bacteria, and protozoa in the soil or thatch. The body of a slime mold is a single amoeba-like, multinucleate cell called a *plasmodium*, otherwise known as “the shapeless blob” (figure 5). After a heavy dew or evening fog, the plasmodium will slowly creep onto the leaves of a turfgrass or low-growing plant as well as on pine bark and other organic mulches. The plasmodium rapidly dries in the morning sun into a crust containing numerous fruiting bodies. As the crust disintegrates, clouds of dustlike spores are dispersed by air currents, water, mowers, pets, and foot traffic. Surviving spores absorb water, germinate, and release a single motile “swarm” spore. Two spores then fuse to form an amoeba-like zygote that later gives rise to the

multinucleate plasmodium. Slime molds appear most often during several days of cloudy, wet weather, usually in the late spring and summer. The occurrence of slime molds on Alabama lawns at other times of the year, even when conditions appear favorable, is actually quite sporadic. On most lawns, slime molds are not an annual occurrence but can be a repeat occurrence in areas with shade, poor drainage, or heavy thatch.

Control

Because slime mold pustules typically disappear after 2 to 3 days, control practices are not needed. However, slime mold pustules can be removed if the growth is unsightly. Mowing or light raking is an effective means of destroying the crusty fruiting bodies of a slime mold. Washing the affected patches of turf with a hard stream of water can also break up the slime mold and restore the beauty of a lawn. Because slime molds may be more common on heavily thatched or poorly drained portions of a lawn, renovation of affected areas should reduce the incidence of disease. Selective pruning of overhead trees to increase sunlight may also help reduce the incidence and severity of slime molds. Fungicide applications for control of slime molds are not recommended for home lawns. However, there are fungicides available for controlling the disease on commercial turfgrass, but fungicide applications are only suggested in severe cases.



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