Slime Molds on Turfgrass

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Slime molds may be found on all cultivated and weedy grasses. They are most prevalent following prolonged periods of leaf wetness and may be observed from late spring to late fall. Although not directly damaged by slime molds, the aesthetic quality of a turfgrass stand may be affected by their presence. Plant vigor may be slightly reduced in severely colonized turf due to excessive growth of the fungus on leaves causing a shading of the leaf surface and leading to a reduction in photosynthesis. Slime molds may reoccur in the same location each year.

Causal Organism

Slime molds are “primitive” fungi that use the living turfgrass plant strictly for structural support. They are saprophytes, or organisms that obtain their nutrients solely from dead or decaying organic matter in soil or thatch. Most fungi causing slime mold on turfgrass belong to either the genera Mucilaga or Physarum. Slime molds are most prevalent following prolonged periods of leaf wetness, which favor the growth and development of the fungus. Areas with poor drainage and heavy thatch also may enhance the likelihood of their development.

Symptoms

There are various species of slime molds, each resulting in a discolored, irregular patch ranging from several inches to several feet in diameter. Discoloration is due to extensive sporulation by the fungus. In general, small capsule-like spore masses, each about the size of a pinhead, grow perpendicular...
to the surface of the leaves. These fruiting bodies are typically grayish-white to blue-gray or ash colored and contain purple spores. Some slime molds appear as thin, white, yellow, or gray layers of slimy paste-like material that covers the leaf blades. These masses later dry to form bluish-gray, black, or white powdery growths on the leaves. At this stage, the grass has the appearance of having been dusted with soot. In the case of heavy spore production, some yellowing or chlorosis of the leaves may be observed due to shading of the turf causing reduced photosynthesis.

Management

The recommendation for areas experiencing light to moderate slime mold infestations is to simply let nature take its course. Heavy infestations can be removed via mechanical means such as mowing, raking, or using a forceful spray from a garden hose. Washing the leaves with a stream of water should be attempted only after the onset of dry weather to avoid further development or spread of the fungus. Chemical management is not typically recommended.