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Volunteer Program

Tulare/Kings Counties

Mushrooms and Nuisance Fungi in Lawns and Landscapes

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Mushrooms, puffballs, conks, stinkhorns, inky caps, and bird's nests are just some names of the many reproductive (fruiting) structures of fungi that live in our landscapes. These "sacks of spores" are the most visible part of a fungus, which spends most of its active life hidden underground or inside a plant. Not all fungi produce a visible fruiting structure. The ones that we do see are usually beneficial decomposers of organic matter, which release vital nutrients for plant growth. Only a few cause plant diseases.

FUNGUS LIFECYCLE

Fruiting bodies release tiny spores that are carried by wind to new sites. When spores reach favorable places to grow, they germinate and form slender filaments called hyphae (pronounced highfee). A single hypha is too small to see without magnification, but clumps of hyphae (called mycelium (myseelium) are sometimes visible in soil or beneath bark. These parts of the fungus decompose the organic matter, absorbing a portion as food. When mycelium has developed sufficiently, fruiting bodies like mushrooms are produced. Fungi generally survive in soil for years and only produce fruiting structures when conditions are favorable, such as after periods of prolonged wet weather.

Fairy Rings: Sometimes a circular or semi-circular green band becomes obvious in a lawn. Bands may be 1-12 feet in diameter and a ring of mushrooms might be present. A fungus starts growing in the lawn forming such dense mycelium that water can no longer penetrate the soil and the grass weakens or dies. Mushrooms usually become visible and release their spores. The fungus continues to spread outward from the center and old mycelium breaks down into nutrients which greens the grass.

The common name for this is fairy ring, taken from the ancient belief that mushrooms grew in circles where fairies danced. Fairy rings continue to enlarge for many years. To eliminate the fungus requires removing the soil, so practically speaking, all one can do is treat the symptoms (aerate, fertilize, and water). All grasses are susceptible to fairy rings.

Inky caps: These fungi are so named because the conical cap of the mushroom decomposes into a dark liquid resembling ink shortly after it disperses its spores.

Stinkhorns: These fungi produce a fruiting body that when mature sticks up through the lawn resembling a giant finger. The tip of the stalk is covered by spores in a gooey slime that stinks. The terrible odor attracts flies and other insects, which pick up and spread the spores. Dig out or hand pick the stinkhorns like you would a mushroom.

Puffballs: The fruiting body of these fungi is an enclosed ball that opens or ruptures to release thousands of spores in a cloud of dust when they mature. In lawns puffballs are usually an inch or less in size, but in nature they often reach the size of soccer balls. Most puffballs are creamy white inside and outside when young. At maturity the inside is filled with dark colored spores.

Bird's nest: Occasionally seen in a lawn is a fruiting body that resembles a tiny nest with a small cup holding little eggs. Though not really eggs, they contain spores. Bird's nest fungi usually occur in groups that could be a few inches in size.

Slime molds: These primitive organisms are not true fungi. They form a gooey mass that is often described as looking like vomit on the lawn surface. This substance may be white, gray, yellow, brown, or red. Eventually it dries up. Slime molds usually disappear in a week or so, but damage to the lawn underneath may result from shading and suffocation. Remove slime molds by raking, mowing, or with a stream of water.

Oak root fungus is Armillaria: If mushrooms are growing from a base of a tree, it is likely that the fungus is attacking the tree. The most common is the Armillaria root rot fungus, which produces clusters of honey colored mushrooms in the fall. This fungus is very common in Tulare and Kings Counties. Several hundred different trees and shrubs are attacked and killed by it. The mushrooms do not usually appear until the host tree is dead or in advanced stages of decline. So they serve as an indicator that it will soon be time to remove the tree or shrub.

CAUTION - Mushrooms in Lawns and Landscapes: Frequently mushrooms develop in lawns or in bark chip mulches in landscapes. Many mushrooms are highly poisonous and ONLY an expert can distinguish between edible and poisonous species. Do not eat wild mushrooms or other fungal fruiting structures growing outdoors unless you are very familiar with the different species. There are no simple tests that can be used to identify poisonous mushrooms.

Small children tend to put anything, including mushrooms, in their mouths so remove all signs of fungi from the yard before allowing a child to play there. Pets may also be harmed by ingesting poisonous fungi.

Picking mushrooms does not kill the fungus because it does not affect underground mycelium from which they grow. Picking mushrooms or other reproductive structures soon after they appear does prevent their spores from spreading to new sites.

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