**EXECUTE:** RESEARCH AND EXTENSION

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## Problem: Mushrooms in a lawn



Hosts: All turfgrasses

## **Description:**

Heavy rains can result in the appearance of mushrooms in home lawns. Although these organisms are often very noticeable, most are relatively harmless to the plant life.

Many different mushrooms can appear in lawns. Some of these mushrooms are associated with arc-like or circular patterns in turfgrass called fairy rings. The ring pattern is caused by the outward growth of fungal mycelium. The mycelium forms a dense, mat-like structure in the soil that decomposes organic matter.

This decomposition releases nitrate into the soil, which in turn stimulates the growth of the grass at the outer portion of the ring. This results in a dark green appearance of the grass at the margin of the ring. Unfortunately, the thick fungal mat formed by the fungus does not allow for water penetration. **The fungus may also release certain byproducts that are toxic to the turf.** This can lead to dieback of the turf in the ring. Fairy rings are difficult to control.

**Recommendations:** You can sometimes eliminate a fairy ring by digging to a depth of 6 to 12 inches and 12 inches wide on both sides of the ring, refilling the hole with non-infested soil. Alternatively, you can try to mask the symptoms by fertilizing the rest of the lawn so that it is as dark green as the ring. This often isn't a good idea because it tends to promote other turf problems.

Some mushrooms in lawns are not associated with fairy rings. These may be mycorrhizal (symbiotic association with tree roots) or live on dead organic matter (wood, etc.) in the soil. Since some of these mushrooms are beneficial, you should not

kill them. Besides, a fungicide spray to the mushroom itself does little good. Most of the fungus is below ground and inaccessible to the chemical. However, there are treatments available to commercial applicators that can help eliminate mushrooms. See the reference below for more information.

If the mushrooms are a nuisance, pick them and dispose of them as soon as they appear. Also remove any sources of large organic debris from the soil. Mushrooms often appear during wet weather and go away when the soil becomes dry.

Some of the mushrooms in the lawn are edible, but others are poisonous. Never eat any mushroom unless you are sure of their identity.

## **References:**

Fairy Rings in Turfgrass, Kansas State University, K-State Research & Extension Publication EP-155

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