

Fairy Ring on lawn

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FIG. 1

Disease Pathogen: Fungal (caused by a number of soil inhabiting fungi)

- Centuries ago people thought the mushrooms appeared where “fairies” had danced the night before, hence the name, fairy ring

Period of Primary Occurrence: spring and summer

During periods of low temperatures and drought, mushroom production and fungal activity stops and may not resume for months or years

Plants Affected: Turf grass

Identifying Characteristics

- Fairy Rings (Circles or crescent-shaped areas) first appear as either dark green or brown bands in turf ranging in size from a few inches to 50 feet in diameter
- Mushrooms, the fungal fruiting structures, often develop in a circle outside the dark green/brown ring after heavy rainfall or irrigation
- Appear in turf that contains a high level of organic matter or areas previously covered with trees or fill that contained stumps or logs

Description / Symptoms

THREE TYPES OF FAIRY RINGS:

- No mushrooms, stimulated grass growth.
The rings of lush growth are caused by the release of nutrients, particularly nitrogen, from the activity of the fungus living on organic matter in the soil
- Ring contains mushrooms and a ring of lush grass growth
- Ring of mushrooms with no unusual grass growth
- Turf can die within ring due to the dense mat of fungus in the soil that can interfere with normal penetration of water, or from toxic substances given off by the fungus in the soil



FIG. 2



FIG. 3



FIG. 4

- Fairy rings normally reoccur each year and their diameter slowly increases as the fungus grows in a radial pattern

Best Management Practices (BMP)

NON-CHEMICAL CONTROL

- If ring consists only of mushrooms/puffballs with no stimulated grass growth, rake off and dispose of these fungal fruiting structures
- Improve the health of surrounding turf by deeply watering root zone and applying moderate rates of fertilizers
- Excessive amounts of water or fertilizers should be avoided as they contribute other turf diseases and can stimulate fairy ring development
- More frequent mowing may make the difference in height between grass of the fairy ring and adjacent grass less conspicuous
- In rare cases where eradication is required, the sod and underlying soil in front of and in back of the ring can be removed. The resulting hole should be filled with sterilized topsoil or soil mix. New sod or seed can then be established.

CHEMICAL CONTROL

- Soil fumigants are sometimes effective but can only be applied by licensed pest control personnel
- Some fungicides can be used, but since the soil in the infected area is almost impervious to water control is difficult
- Some success has been achieved by aerating the soil and drenching the area with fungicide



FIG. 5



FIG. 6

Sources

Related Texas AgriLife Extension Services Publications

Other Common Names:

<http://plantanswers.tamu.edu/turf/publications/fairyings.html>

<http://plantpathology.tamu.edu/Textlab/Lawns/turf.html>

| FAIRY RING | |
|----------------------|-----------------|
| Scientific Name: xxx | Order: xxx |
| | Family: xxx |
| Other Common Names | Plants Affected |
| xxx | xxx |

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Always remember to read and heed six of the most important words on the label:
“KEEP OUT OF REACH OF CHILDREN”

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GH-071