

Diagnosis and Control of Fairy Ring

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Is there a large brown circular doughnut of dead grass in your lawn? Or is there a slowly enlarging semi-circle of dead grass in your lawn? If so, your lawn may have fairy ring.

Fairy ring is a disease caused by one of a group of fungi. They often start where trees are or have been. The fungus begins at a point and slowly spreads out in a circle. The fungus grows underground and feeds on decaying organic matter. As the fungus grows it can release compounds that are toxic to the grass, and can waterproof the soil keeping it very dry. The result is a dead ring of grass with live grass in the center. Many lawn grasses are affected, but Bermuda grass appears to be somewhat tolerant.

Identify fairy rings by several characteristics. The fungus grows slowly and the area will often continue to be a problem from one year to another. The area can be small or large -- some fairy rings are 50 feet or more in diameter.

The easiest way to recognize fairy rings is by their shape. Rings are circular or semi-circular with dead grass at the outer-edge and living grass in the center. Sometimes the fungus produces mushrooms (the reproductive structures of the fungus), which may also appear in a circle or semi-circle.

The fungus actually grows in the soil making control difficult. Chemical control is not practical. One chemical will keep the fungus from producing mushrooms but it is recommended for use by professional lawn maintenance personnel.

The best way to control fairy ring is through cultural methods. Aerate the soil in the affected area with a pitchfork or similar tool. Do this at least four to six inches deep. Fairy rings can be up to twelve inches deep. Then irrigate the affected area daily. Keep the soil moist. The fungus does not like wet conditions so this treatment should discourage growth of the fungus.

Keep the soil moist and the disease may die out. This is difficult since the fungus can waterproof the soil it grows in, making it hard to wet. This is why we aerate these places first. Continue this treatment daily for four to six weeks to try to kill the fungus.

Be careful not to water so much that the turf begins to contract other diseases. Lawns that are too wet are susceptible to a host of other diseases. You may want to use a soaker hose so that you can wet just the affected area. Treat the lawn like this and then stop and see if the fairy ring returns. This treatment is not always successful, but it is the easiest way to deal with this problem.

The soil in an area can be removed if necessary to destroy the fungus. Remove the soil 12 inches deep in a band 3 feet wide centered on the dead ring. This is a very difficult process.

The effects of fairy ring can sometimes be masked by proper fertilization. This will not control the disease but may cover up the symptoms. Do not over-fertilize centipede lawns since this may kill the lawn.

Fairy rings can be hard to control. You may want to leave it. The grass at the edge of the ring will continue to die while the grass in the center recovers. The result is that the ring will continue to increase in diameter.

Aeration and intensive watering appears to be the best way to try to control fairy ring, but don't be discouraged by lack of results. Perseverance may be the key to control of this lawn problem.

Remember to return to a normal watering program after the fairy ring is treated. Apply three-quarter to one inch of water when the lawn gets dry. Then wait until the lawn dries to water again. Do not water too often since this can produce a weak lawn.