

Plant Pathology Fact Sheet

Localized Dry Spot

By Paul Vincelli and Brian Eshenaur

Localized dry spot is one of the most serious summer problems that we encounter on Kentucky bluegrass lawns. When attempting to determine the cause of dying patches of grass during the summer, always check the soil first. If the top couple of inches of soil is dry, then trying to correct the problem with pesticides is futile.

Symptoms

Localized dry spot first appears as small 2 to 4 inch diameter patches of dead or dying turfgrass. The spots will continue to enlarge in a circular pattern, mimicking any number of diseases (such as dollar spot, red thread etc.) and insect problems (such as webworms, grubs, etc.). Soil beneath the spots will be powder dry to a depth of 1 to 2 inches.

After a good summer rain, the turf appearance will usually improve, but only for 2 or 3 days. This improvement is short-lived because little moisture actually penetrates into the soil. If the soil can only absorb moisture at the rate of 1/10 inch water per hour, then rainfall at 1 inch per hour will be of little value since much of it will just run off.

In addition, when a thatchy lawn becomes dry, the thatch becomes hydrophobic (water repellent). It could take several hours of light rainfall just to penetrate the thatch.

As is the case with most serious lawn pest problems, dry spot most often occurs under one or more of the following situations: south-southwest facing slopes, severe thatch problem, heavy traffic, open sun areas, heavy clay and shallow soil.

Treatment

To correct localized dry spot problems, you must irrigate. Most sprinklers apply water very slowly, at rates of 1/4 to 1/2 inch of water per hour. However, if the water begins to run off before you have thoroughly wet the surface 2 to 3 inches of soil, wait an hour or so before continuing to irrigate. To determine how deeply the soil has been wetted, probe down into the soil using a knife, screwdriver, soil probe or similar instrument. Once the soil has been properly irrigated, do not repeat until the surface begins to dry again. If the weather is extremely hot and dry and the soil type very poor, you may need to irrigate again within 4 or 5 days. If, on the other hand, the weather is fairly cool at night, irrigation may not be necessary again for another one to two weeks. Hopefully in that period of time your lawn will also receive some helpful rainfall.

(This information was provided by Dr. A.J. Powell, Extension Turf Specialist)

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