Apply fungicides to prevent large patch disease

After a busy season of fighting weeds and other problems in the lawn, the next disorder to look for is a common fungal disease caused by the fungus *Rhizoctonia solani*. It affects all warm-season turfgrasses, but especially St. Augustinegrass and zoysiagrass.

Dr. Phil Harmon, Turfgrass Pathologist and Extension Specialist with the University of Florida, says that most people know this disease as brown patch. The correct name, however, for the disease that shows up during cooler temperatures is “large patch”.

Large patch usually appears as somewhat circular brown areas in the lawn. These patches usually start as six to twelve inch diameter circles that turn yellow and then reddish-brown, brown, or straw-colored as the leaves begin to die. Patches will frequently merge and may expand to several feet in diameter, forming irregular dead areas.

The fungus is most active along the border of the patch where it is expanding into the healthy surrounding area. Often, there may be rings of yellow/brown grass with green grass in the center giving it a “doughnut” or “smoke ring” pattern. In shady, moist areas a circular pattern may not occur.

To distinguish this fungal disease from other disorders, check the base of an off-colored leaf blade at the margin of a patch. If the blade easily comes loose from the plant and the leaf base is tan to brown in color and is rotted in appearance, then you may have large patch disease.

Large patch disease is most likely to be observed beginning in late October and then again in spring. This disease becomes active when the soil temperature, measured at 10 cm or 2 to 4 inches deep, is between 75 and 65 degrees F. To monitor soil temperature in areas of Florida, go to the Florida Automated Weather Network, or FAWN, at [http://fawn.ifas.ufl.edu/](http://fawn.ifas.ufl.edu/). There is a monitored weather station at the UF Research Station in Allentown.

Dr. Harmon also emphasizes that in order for fungicide treatments to be effective they must be applied prior to symptoms. So, if you had large patch problems last year, now is the time to apply a fungicide. Since this disease is spread by equipment such as mowers, foot traffic and clippings, you may want to apply a preventative treatment if you notice the disease in your neighborhood or your lawn is mowed with equipment that has been used on other lawns.

Fungicides that are recommended for large patch control include those that contain triadimefon (Bayleton or Bayer Advanced Fungus Control for Lawns) or thiophanate-methyl (Scotts Lawn Fungus Control). Make an application now and again in 28 days. Always remember to read and follow the label recommendations.

When environmental conditions are favorable, large patch is likely to develop on susceptible turgrasses. The severity of the disease can be somewhat controlled by following good lawn management practices.
Avoid applications of nitrogen fertilizer during the potential disease development periods. Irrigate only when necessary and do so only in the early morning hours (between 2 am and 8 am) when dew is already present. And, since mowers can spread this disease, mow diseased areas last and wash the turf clippings off the mower before proceeding to the next site.

Since this disease normally occurs when the turfgrass is not growing very rapidly, recovery may be very slow. The fungicides simply stop the disease from spreading; they do not promote turfgrass growth. This is why it is beneficial to apply these fungicides prior to disease development.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names in this article is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others.