Brown Patch Disease of St. Augustinegrass

Rhizoctonia solani

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After a busy season of chinch bugs and crabgrass, the next problem will be a common fungal disease called brown patch. This creative name describes the general symptoms caused by various ailments, whether it is chinch bugs, nematodes or the other numerous diseases that attack St. Augustine grass. One has to investigate more closely to distinguish which culprit it might be.

With brown patch disease, symptoms begin as 6-12 inch diameter off color patches that turn yellow, then reddish-brown, then brown to straw-colored (see photo). These patches may merge and may expand several feet in diameter. Often, there may be rings of yellow/brown turf with green centers. Also, turf at the outer margin of an infected patch will be dark and wilted, this is the active zone of the pathogen as it spreads outward. To distinguish this fugal disease from other ailments, check the basal area of the leaf blades. This pathogen causes a black rot at the juncture of the stem and leaf blade (see photo).

This disease becomes active when temperatures drop below 80 degrees F., 73 degrees is optimum and, surprisingly, it is inactive during the hot humid summer conditions that one would typically think a fungus would thrive in. It shuts down when temperatures go above 90 degrees F. Infection occurs during periods of high humidity or excessive moisture for 48 hours or more. Soluble nitrogen fertilizer applications, greater than 1.1 pounds of actual nitrogen per 1000 sq. ft. put the turf at risk. Thatch buildup, more than 0.75 inch, also creates a disease favorable habitat.

What to do: Avoid excess soluble nitrogen during November-April. Use slow-release sources of nitrogen and apply a balanced fertilizer containing equivalent amounts of potassium, preferably as a slow-release form also. Reduce watering to once per week to lower the available moisture level. Keep records of areas where this disease appears. These high activity areas can be targeted with fungicides first as it is not always necessary to spray the entire lawn. However, fungicides work best when they are applied as a **preventive**, that is, before the fungus pops up or during early stages of infection. Applications should reduce spread if the infection is caught early. Commonly recommended fungicides are propiconazole, thiophanate methyl, mycobutanil, or azoxystrobin. Some of these are available as bottled products that can be attached to and applied with a garden hose.

For more information see: http://turf.ufl.edu/residential/diseaseindex.htm

For more information on Home Gardening, contact the Collier County Extension, Master Gardener Plant Clinic (239) 353-2872. The Plant Clinic is open Monday, Wednesday and Friday, 9AM to Noon and 1PM to 4PM.

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