Brown Patch Season Begins

By Jane Morse, University of Florida/IFAS Manatee County Extension Agent

Brown Patch is a fungal disease that affects turfgrasses, especially St. Augustine and Zoysiagrass. It is usually seen from November through May when temperatures fall below 80°F.

This disease begins as small patches (one foot) that turn yellow and then reddish-brown, brown or straw-colored as the leaves start to die. These patches can expand to several feet in diameter. Turf at the outer margin of a patch can appear dark and wilted while turf in the center of a patch may appear healthy (Fig. 1). Correct diagnosis is important because brown spots can be caused by many things including animal urine, dry spots, herbicide damage and pest insects.

Fig. 1

Infection is triggered by heavy rainfall, excessive irrigation or when the grass is continuously wet for 48 hours or more. The fungus infects the leaf at the area closest to the soil. Water and nutrients are stopped from getting to the upper portions of the leaf and the leaf eventually dies. A soft, dark rot will occur at the base of the leaf and the entire leaf will pull out easily from the base of the leaf (Fig. 2). Roots are not affected by this fungus and should remain a healthy white color.

Fig. 2

This disease can also be confused with phenoxy herbicide damage on St. Augustine. The difference between herbicide damage and Brown Patch is that the herbicide-damaged leaf will not be dark and rotted at the base (Fig. 3). It will be dry with a tan discoloration and no rotten smell. Perhaps as many as one hundred or more herbicide formulations contain a phenoxy-type active ingredient. The active ingredient of phenoxy-type herbicides may be listed on the label as 2,4-dichlorophenoxy-acetic acid, 2-methyl-4-chlorophenoxyacetic acid, triclopyr, or dicamba.

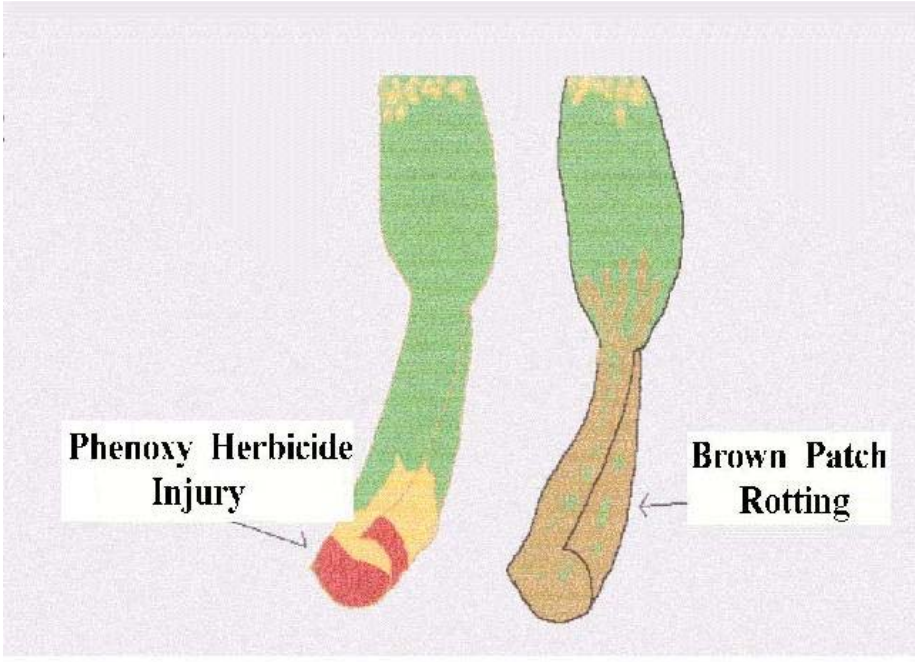

Fig. 3

Things to do to keep grass from getting Brown Patch include avoiding excess nitrogen during periods of time when conditions are ripe for disease development (wet, cool weather). Instead of using quick-release nitrogen or water-soluble nitrogen, use a slow-release nitrogen source (e.g., IBDU, SCU, urea formaldehyde, poly-coated sources, milorganite, etc.). Water the lawn only when it is showing symptoms of wilt and water in the early morning hours (between 2 and 8 AM) when dew is already present. Mowers can spread the disease, so mow diseased areas last and wash clippings off the mower when done.

If Brown Patch has been a routine problem in the past, a fungicide application may be needed. This disease occurs when the grass is not growing very much and recovery may be very slow. Symptoms will not disappear until new leaves are formed and old leaves are removed by mowing. Fungicides do not promote turfgrass growth; they simply stop the disease from spreading. The most important disease control methods are proper fertilizing, watering and mowing practices.

The first expected frost in our area is usually around the end of December. One month before the expected first frost, 1 pound of potassium per 1000 square feet, using 1.6 pounds muriate of potash (0-0-60) or 2 pounds of potassium sulfate (0-0-50), may be applied to increase winter hardiness of grass. Do not apply potassium during hot periods or if the lawn is under moisture stress. Irrigate after application to prevent burn. As always, be sure to mow grass at its proper height. For standard St. Augustine, the height should be 3-4 inches. Mow often enough so that only 1/3 of the leaf blade is removed each time.

For more information on growing plants in Florida, call your local Master Gardeners at the Manatee County Extension Service (an “extension” of the University of Florida). Master Gardeners are available Monday-Friday from 9 AM to 4 PM and can be reached by calling 722-4524.