



Cattle • Turf • Trees • Landscape • Citrus

**Brown Patch**, also called Rhizoctonia Blight, is a common disease that is now beginning to show up in Empire Zoysia and other varieties of turfgrass. This disease is very prevalent this time of year especially when ideal conditions are present. Please familiarize yourself with this disease and things are recommended you do for the prevention and curing of Brown Patch.

**Pathogen:**

*Rhizoctonia solani*

**Turfgrasses Affected:**

All warm-season turfgrasses, especially St. Augustinegrass and Zoysiagrass can be affected.

**Occurrence:**

This disease is most likely to be observed from November through May when temperatures are below 80 F. It is normally not observed in the summer. Infection is triggered by rainfall, foggy mornings, and excessive irrigation or extended periods of high humidity resulting in the leaf canopy being continuously wet for 48 hours or more.

**Symptoms/Signs:**

The fungus infects the leaf area closest to the soil, disrupting transport of water and nutrients to the upper portions of the foliage and eventually killing the leaf. A soft, dark rot will occur at the base of the leaf. The entire leaf will pull out easily from the leaf sheath due to this basal leaf rot. Eventually, entire plants will easily pull off the stolons. Roots are not affected by this pathogen.

This disease usually begins as small patches (1 foot) that turn yellow and then reddish-brown, brown or straw-colored as the leaves start to die. Patches can expand to several feet in diameter. It is not uncommon to see rings of yellow/brown turf with apparently healthy turf in the center. Turf at the outer margin of a patch may appear dark and wilted. This is where the fungus is most active.

**Cultural Controls:**

**Avoid excess nitrogen during potential disease development periods.** Do not use readily available forms of nitrogen such as soluble liquids or quick-release nitrogen sources just prior to or during these periods. Instead, use slow-release nitrogen sources. Apply a balanced fertilizer containing equivalent amounts of potassium, preferably a slow-release potassium form. Irrigate only when necessary and do so only in the early morning hours (between 2 and 8 AM) when dew is already present. Since mowers can spread this disease, mow diseased areas last, and wash turf clippings off the mower before proceeding to the next site.

**Chemical Controls:**

You can cure brown patch by using a contact fungicide. It is important that you treat the disease as soon as possible and continue to apply fungicide for several weeks after or as long as conditions persist. There are plenty of fungicides at Lowes or Home Depot that are marked as being able to treat brown patch disease. Follow labeled directions.

**Additional Information:**

Please note that for the diseased turfgrass to recover, it must be growing. Symptoms will not disappear until new leaves develop, and the old leaves are removed by mowing. 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 may be beneficial to apply these fungicides prior to disease development, but only if this disease has been a routine problem in the landscape. Always incorporate cultural control measures into the disease management program also.