



Overview

Rhizoctonia solani (large patch) is a foliar disease of warm-season turfgrass. It is one of the most common diseases turf managers face. Large patch can affect many warm-season turf species including Zoysiagrass, Centipedegrass and Seashore Paspalum. Large patch can infect golf, sports and residential turf types.

Environmental Conditions Favoring Disease Development

Large patch develops in the fall when soil temps drop below 70°F. Even though infection can begin in the fall, symptoms will usually begin to develop late fall/early spring when turf begins to green up. As with other foliar diseases, extended leaf wetness (dew, rainfall or improperly timed irrigation cycles) increases disease development. Large patch survives in the thatch layer even when the disease is not actively growing.

Symptoms and Identification

On higher cut turfgrass, patches start off as an orange-yellow color and turn tan as the center of the patches die off. These patches can start off small, but often grow and coalesce into very large patches. Shoots can easily be pulled from the sheath.

Management

Cultural

The main cultural strategy to reduce large patch severity is ensuring turf is healthy. Proper timing of irrigation and fertility can go a long way in managing large patch. Adjusting irrigation cycles to occur in early morning as opposed to late afternoon or early evening will reduce the amount of time the turfgrass stays wet. Improving drainage and reducing thatch can also help reduce large patch infection.

Chemical

Preventative fungicide applications are very important to achieve acceptable Large patch control. Applications should be made in the fall when soil temps drop below 70°F. The Fame® Fungicide portfolio is built on strong and lasting large patch control. In higher cut turfgrass, such as home lawns or golf course roughs effective brown patch control was achieved using 28-day application intervals. On golf course greens where other diseases may occur along with large patch, products like Fame SC®, Rayora® and Kalida® deliver. With the varied combination of active ingredients, controlling multiple diseases that occur under the same conditions as large patch can be accomplished with Rayora®, Kalida®, and Fame® SC.

References

Smiley RW, Dernoeden PH, Clarke BB. 2017. Compendium of Turfgrass Diseases, Third Edition. American Phytopathological Society. St. Paul, MN. Pp. 80.

Photo(s) Courtesy

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