

Yard and Garden – 11-21-09 – Ted Griess/ Extension Horticulture Assistant

How well I remember a country song that hit the airwaves in the early 1960's. Claude Putman Jr. wrote it. Performed by such artists as Tom Jones, Porter Wagoner, Johnny Cash, Elvis Presley and a host of others, the popular tune was titled *The Green, Green Grass of Home*. While mowing leaves in my backyard, that tune ran through my mind. However, this time I was singing a slightly modified version of its chorus, and it went like this.

Yes, they'll all come to meet me
Arms a-reachin', smilin' sweetly.
It's not good to touch
The red, red grass of home.

I've been inundated with calls from people asking what is causing their mower, golf carts, shoes and pant cuffs to be covered with a dusty brick-red powder.

My response has been, "It's coming from the red, red grass of home."

The fact is the dust is rust. Although similar in appearance, it's not the rust (iron oxide) we commonly see collecting on the surface of iron when exposed to the elements. The rust disease we are seeing on turfgrass is caused by either one of two fungal species: *Puccinia graminis* or *Puccinia coronata*.



Rust occurs on most turf grasses grown in Nebraska; however, the disease is generally more severe on susceptible cultivars of Kentucky bluegrass and tall fescue. Rust usually appears in late summer following hot, dry periods when grass growth has slowed; its symptoms continue throughout the fall months. Warm days and moderate night temperatures along with night watering or heavy morning dew create optimal conditions for rust to prosper. Severities of rust outbreaks vary from year to year. This year rust seems widespread.



From a distance, rust-infected turf appears dull yellow or light brown. Diseased plants initially develop light-yellow, spotted lesions on the leaves. A close examination of rusted leaf blades reveals the presence of orange to brick-red pustules. As the pustules enlarge, they rupture, exposing masses of powdery, red spores each capable of infecting a grass blade. The powdery

material rubs off easily on your fingers, shoes or clothing. Continuous heavy infection causes many grass blades to turn yellow. Severely rusted lawns are more susceptible to winter kill. The disease tends to be more severe in partially shaded areas, such as under trees or along fences.

Rust management begins with the use of improved rust-resistant turfgrass cultivars. Maintaining turf in a vigorous state is the best defense. Turfgrass provided with optimal levels of fertilizer and water is less likely to be damaged severely by rust. Avoid night watering which increases the length of time the leaf blades remain wet. Frequent mowing severs the infected leaf tips thus reducing inoculum, but one should avoid close mowing or scalping of the turf. Bagging and disposing of the diseased clippings may help the turf.



The decision to use fungicides is often difficult because applications need to be applied in early July followed by one or two additional treatments at three-week intervals. Since a rust epidemic is dependent on weather, it is not easy to determine if early fungicide applications are warranted.

Fortunately for Nebraska, our cold winter temperatures kill most rust spores. If, however, winters are mild, rust can survive. Most rust overwinters in the South and its spores are carried north to Nebraska by the winds during the growing season.

In the meantime, I'll continue mowing my leaves and with some reluctance, I'm hoping for a cold winter. Then, with any luck at all, next spring, my red, red grass will again become *The Green, Green Grass of Home*.