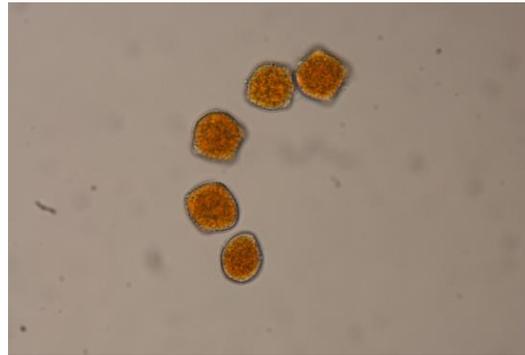


Rusty turf

October 12, 2016

Several fungal pathogens may cause rust diseases in turfgrasses. In our region, these diseases most commonly occur in summer and fall months in stressed, slowly growing Kentucky bluegrass, perennial ryegrass, or even tall fescue. Rust diseases may cause yellowing of turf, but the most recognizable sign of infection are yellow to orange urediniospores that make turf appear orange and are still visible in some areas. These spores are easily spread by wind or physical contact with infected leaves, and may cause secondary infections.

Rusts may overwinter in infected turf in mild climates, but in areas with cold winters the primary inoculum (wind-blown urediniospores) travel from regions with warmer winters in spring to summer. Urediniospores then infect turf stressed because of drought, nutrient deficiency, traffic, etc. Infections produce more urediniospores that are able to re-parasitize turf every few weeks with suitable conditions and a susceptible host. These infections typically are not of great concern, and control with fungicides is usually not necessary – especially now. However, rust diseases do weaken turf, and may predispose turf to severe injury due to winter (or other) stresses. Rust disease are least common in turfs of resistant cultivars that are irrigated and fertilized appropriately to reduce stress. If you are dealing with rust, be sure to treat the underlying condition (stress), not the *red herring* (rust).



Urediniospores of the causal organism of a rust disease viewed under a microscope.



Signs of a rust disease on turfgrass blades.

The end (for rust) is near, at least for this year. Much like migratory birds, the causal microorganisms of rust diseases will soon be less commonly encountered this year. Wind-blown spores are traveling south for the winter to infect turf or alternate hosts, and ensuing cooler temperatures in our region will limit further infection this season.

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