

RUST

Identification: When Rust first appears, it shows up as small orange or reddish-brown flecks on the blades of grass. These flecks eventually grow, creating oval or elongated pustules that contain orange or reddish-brown spores, almost like a powder. When the pustules mature, they tend to change from brown to black. If an area is heavily infected by this disease, the grass will have an overall appearance of yellow-orange or reddish-brown color. Infected leaves eventually end up yellowing, withering, and dying.

One of the easiest ways to identify Rust is to take a white paper towel, or something similar, and rubbing a few suspect grass leaves with it. If the grass is infected with this disease, there will be an orange coloring on paper. Also, when mowing an infected area, there tends to be a cloud of orange dust around the area as the spores are released.

Cause: This disease favors humid weather and temperatures ranging from 70-75 degrees at night and 85-95 degrees in the day. Excess moisture, either from rain, dew that lasts several hours after sunrise, or frequent watering will also increase the likelihood of Rust appearance. When weather conditions are favorable to the development of this disease, it is more likely to develop on lawns with low soil fertility, drought stress, large shady areas, and closely cut grass.

Disease cycle: The cycle of development for rust diseases is quite complex. Of the dozen or so species of rust fungi that affect turfgrasses, all but three go through five distinct spore production stages. Some of these stages, which are necessary for the completion of the entire life cycle, must occur on plants that are unrelated to the grasses. For a specific rust species, completion of the rust life cycle may require grasses and woody shrubs or grasses and herbaceous ornamental plants. In general, rust diseases do not kill turfgrasses, but may weaken them to the point that they become more susceptible to stress-related problems.

Cultural control: Adequate nitrogen and irrigation to maintain growth through late summer will minimize rust infections. In most years, the disease will not become severe, although infected turf may become yellowish-orange

Prevention:

- Aerate your lawn
- Practice good watering techniques, watering infrequently, but thoroughly in the mornings
- Reduce shade where possible
- Mow frequently to maintain the height recommended for your type of grass
- Bag grass clippings, especially when there is an outbreak of this disease or if it has been a problem in the past
- Follow a clear fertilization schedule

Treatment: Fungicides are available, but should only be used if the prevention methods don't help clear up the disease, the Rust is particularly severe, or if it infects a newly laid lawn. This is due to the fact that, in general, this disease can be controlled through simple maintenance practices and the cost of the fungicide needed to clear up the disease can be expensive. Also, when planting a new lawn or repairing damage by replanting in an area that has been infected by this disease in the past, or if your area is prone to Rust outbreaks, it is recommended that you plant a grass type that is resistant to this disease.