

Rust¹

M. L. Elliott and G. W. Simone²

Rust

Pathogen: *Puccinia* spp.

Turfgrasses Affected: St. Augustinegrass and zoysiagrass; it may also be observed on perennial ryegrass used to overseed lawns in the winter months.

Occurrence: This disease primarily occurs on St. Augustinegrass and zoysia- grass. It can occur from late fall to early spring when the turfgrass growth is slowed as a result of cool weather. It will be more severe on turfgrass areas that are stressed from nutrient deficiencies or shade (ex: under trees or on the north side of a building). The leaves must be wet for infection to occur. This wetness may be from dew, high humidity, rain, or irrigation.

Symptoms/Signs: Initially, light yellow flecks will appear on the leaves. If the disease progresses, these flecks will enlarge into spots that are parallel to the leaf vein. Eventually, orange pustules (spots) will form containing spores (Figure 1). These pustules will also be parallel to the leaf vein. The spores will rub off on your fingers (Figure 2). Heavily infected areas will appear thin and chlorotic (yellow to light brown).



Figure 2. Rust symptoms on zoysiagrass. Credits: G. W. Simone

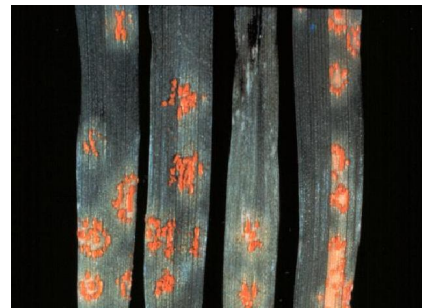


Figure 1. Rus symptoms on ryegrass. Orange spores will rub off. Credits: G. W. Simone

Cultural Controls: Maintain an adequate, balanced fertility program using slow-release nutrient sources. In shady areas, monitor irrigation closely to

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keep the leaves as dry as possible. In most situations, the disease will disappear as soon as the weather warms and the turfgrass starts to grow vigorously again. The disease may cause the turfgrass to look ugly, but it will not kill the turfgrass.

Chemical Controls: Azoxystrobin, mancozeb, myclobutanil, propiconazole, triadimefon, and trifloxystrobin.

Mancozeb can be applied to a residential lawn only by a certified pesticide applicator.

Refer to “Turfgrass Disease Management” section of the *Florida Lawn Handbook* for explanation of cultural and chemical controls.