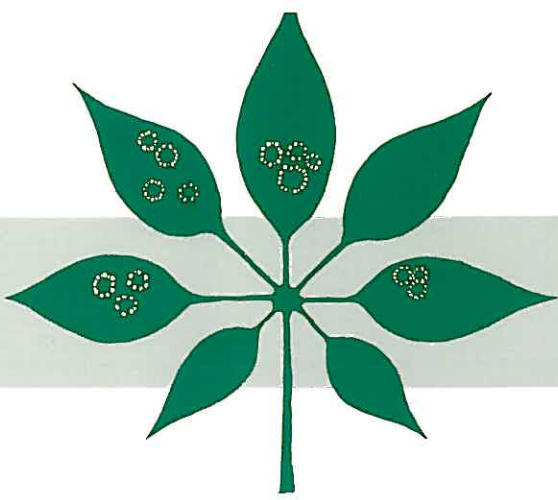


PLANT DISEASES



RED THREAD OF TURFGRASS

Red thread disease of turfgrass, caused by the fungus *Laetisaria fuciformis*, formerly referred to as *Corticium fuciforme*, is found in cool, moist regions and is common in western Washington. It is most serious on fescue and rye grasses and may occur on fescue at anytime of the year. The fungus may also infest bentgrass and bluegrass during periods when the grass is growing slowly.

Red thread develops most rapidly during periods of high moisture and cool temperatures. The effects of the disease are noticeable during the spring and fall, but especially during the winter. Symptoms begin as water-soaked, darkened, irregular areas from 2–24 inches in diameter. The disease becomes more obvious as these areas gradually become bleached or tan colored. Infected leaves are generally

interspersed with healthy ones giving the patch a ragged or diffuse appearance.

When the disease is well developed, light pink to red fungus strands, $\frac{1}{16}$ – $\frac{1}{4}$ inch or more long, grow from the tips of the leaves and from the leaf sheaths.

Red thread can be reduced by using fungicides and maintaining adequate nitrogen fertility. Proper fertilization not only helps reduce red thread, but also helps reduce Take-all (*Ophiobolus*) patch, rust, and other leaf diseases and weeds. Proper turf fertilization can be achieved with a fertilizer that contains nitrogen, phosphorus, and potassium in a 3-1-2 ratio. Some examples are 12-4-8 or 9-3-5 fertilizer. The numbers indicate the percentage of available nitrogen, phosphorus, and potassium.

For best results, apply 4-6 pounds of available nitrogen per 1,000

square feet each year. This amount should be divided into four applications—one in late fall (mid-November to early December), one in mid-April, one in late June, and one in mid-September. For example, 50 pounds of a 12-4-8 fertilizer will supply 6 pounds of available nitrogen. This means that 12½ pounds of the 12-4-8 fertilizer would be used per 1,000 square feet for each of the four applications. (One- or two-pound coffee cans are convenient measuring devices. Apply fertilizer with fertilizer spreaders set to deliver the proper amount.)

Fungicide applications once in the spring and again in the fall give satisfactory control of red thread. See *Disease Control in Home Lawns*, EB 0938, or *Disease Control on Commercial Turf*, EB 1133, for currently registered fungicides for red thread control.



Turf red thread.



Red thread disease as it appears in turf.

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