

Red thread/Pink patch

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INTRODUCTION

Two diseases commonly found on turfgrasses grown in New England include red thread and pink patch. These diseases are caused by two different fungi, but often occur in the same location.

Red thread and pink patch can both occur on a variety of turfgrasses including ryegrasses, fescues, bluegrasses, and bentgrasses. Red thread, however, is generally the most severe of the two and may cause significant injury to both perennial ryegrass and creeping red fescue.

Symptoms of red thread and pink patch can occur throughout the year, but pathogen growth is favored by temperatures between 59 and 77°F. Both diseases are encouraged by prolonged periods of high relative humidity, dense fog, or overcast conditions, which commonly occur during the spring and fall.

SYMPTOMS

Affected turfgrass often becomes necrotic and dies in circular patches of varying sizes (Fig. 1). In severe situations, patches will coalesce to form large diffuse areas of disease turf. The most distinguishing characteristic of red thread are the red thread-like structures (sclerotia) that emerge from the tips of infected leaf tips (title inset photo).

CAUSAL AGENT

As previously mentioned, red thread (*Laetisaria fuciformis*) and pink patch (*Limonomyces roseipellis*) are caused by two different organisms. In addition to producing red sclerotia, *L. fuciformis* may also be identified by the production of pink, cottony flocks of mycelium (Fig. 2). The pathogen



Figure 1



Figure 2

causing pink patch does not produce either of these fungal signs. Instead, *L. roseipellis* produces a pink or red film of mycelium that adheres to the leaves of infected plants. This mycelium can be distinguished from that of the red-thread pathogen by the





presence of clamp connections (Fig. 3).

MANAGEMENT

Both diseases are favored in situations where the turfgrass has not received adequate fertility. In particular, applications of a water-soluble nitrogen prior to or at the onset of symptoms can help to reduce disease severity.

Water management is another important cultural practice that can help to reduce disease incidence. Irrigation should be deep and infrequent and applied early in the morning to reduce prolonged periods of leaf wetness.

In areas where red thread and/or pink patch represent a chronic problem, trees may need to be selectively pruned or removed in an effort to promote increased light penetration and/or air movement to the site. Increasing air circulation around the area may also be accomplished by removing underbrush or densely planted shrubs.

Improving the previously mentioned cultural conditions can help to alleviate disease symptoms, therefore, fungicides generally are not recommended. In severe situations, an application of azoxystrobin, iprodione, propiconazole, or pyraclostrobin can suppress disease symptoms.



Figure 3