



TURFAX™

of the International Sports Turf Institute, Inc.

Volume 8, Number 1



January–February 2000

The International Newsletter about Current Developments in Turfgrass

IN THIS ISSUE

- Dollar Spot: Getting Tougher to Manage in Creeping Bentgrass
- Springtime Preventive Control of Black Turfgrass Ataenius
- The Effects of Primo on Penncross Creeping Bentgrass Root Growth
- Low-Temperature Kill
- European Trends
- Research Summary: The Influence of Humic Substances on Rooting and Nutrient Uptake
- JB Comments: USGA Root Zone Specialization
- Ask Dr. Beard: Crown Hydration

Dollar Spot: Getting Tougher to Manage in Creeping Bentgrass

Peter H. Dernoeden

Dollar spot (*Sclerotinia homoeocarpa*) is widespread and extremely destructive to turfgrasses. The taxonomy of *S. homoeocarpa* is unclear, and this fungus may be referred to as an unknown species of either *Moellerodiscus* or *Lanzia*. **Dollar spot is known to attack most turfgrass species**, including annual bluegrass (*Poa annua*), bentgrasses (*Agrostis* spp.), fescues (*Festuca* spp.), Kentucky bluegrass (*Poa pratensis*), perennial ryegrass (*Lolium perenne*), bermudagrass (*Cynodon* spp.), zoysiagrass (*Zoysia* spp.), centipedegrass (*Eremochloa ophiuroides*), and St. Augustinegrass (*Stenotaphrum secundatum*).

Symptoms. The symptomatic pattern of dollar spot varies with turfgrass species and cultural practices. Under close mowing conditions, as with intensively maintained bentgrass, annual bluegrass, bermudagrass or zoysiagrass, **the disease appears as small, circular, straw-colored**

spots of blighted turfgrass about the size of a silver dollar (4 cm diameter). With coarser-textured grasses that are suited to higher mowing practices, such as Kentucky bluegrass or perennial ryegrass, the blighted areas are considerably larger, and **straw-colored patches range from 3 to 6 in. (7.6–15.2 cm) in diameter.** Affected patches frequently coalesce and involve large areas of turf.

Grass blades often die from the tip, and have straw-colored or bleached-white lesions that are shaped like an hour glass. The hour-glass banding on leaves is often made more obvious by a definite narrow brown, purple, or black band, which borders the bleached sections of the lesion from the remaining green portions. Hour-glass bands may not appear on warm-season grasses, and are difficult to find on close-cut bentgrass or annual bluegrass on putting greens. On close-cut putting greens and warm-season grasses, the lesions are oblong or oval-shaped, but there is a brown band of tissue where the tan or white lesion and green tissue meet. Tip die-back of leaves is common and blighted tips appear tan to white in color, and also have a brown band bordering dead and green leaf tissue. A fine, white, cobwebby mycelium covers the diseased patches during early morning hours when the fungus is active and leaf surfaces are wet.

Environmental Influences. The disease is **favored by warm and humid weather, and when night temperatures are cool long enough to permit early and heavy dew formation.** In cool-season grasses, disease severity usually peaks in late spring to early summer and again in late summer to early autumn. In the upper Midwest, however, the disease tends to be most damaging during autumn. In some regions, dollar spot can remain active during mild periods throughout autumn and into early winter.

Dollar spot was widely regarded as a disease favored by warm days and cool nights. Therefore, in most regions in the United States it was generally believed to be primarily a problem from late spring to early summer and autumn in cool-season grasses. In 1999 in the Mid-Atlantic region, however, dollar spot was extremely active in July and August, and there were serious outbreaks as late as

Continued on page 2