

Dollar spot is the most prevalent disease on high-quality turf in the northern temperate region of the United States. It is often active from mid-spring through late fall.

The chronic occurrence of dollar spot makes it the centerpiece of any disease-control program. Traditionally, dollar spot is one of the easiest diseases to control given the number of labeled fungicides and the availability of cultural practices that can reduce its severity.

Yet, achieving acceptable dollar spot control, like the disease itself, is a chronic yearly battle. Culturally, reducing dollar spot severity is associated with fertility, primarily nitrogen, and reducing the dew period. Maintaining optimum nitrogen levels in the plant can significantly reduce the amount of dollar spot. The tendency, however, is to maintain golf course turfgrass (primarily greens and fairways) with lower levels of nitrogen.

Research at The Ohio State University over a five-year period found that nitrogen applied weekly at 0.25 pounds actual nitrogen per 1,000 square feet significantly reduced the amount of dollar spot present compared to the lesser amount of nitrogen treatments. Interestingly, after five years of treatments, more *Poa annua* encroachment was found in the 0.25 pound treatment. There are always tradeoffs in golf course management.

Although levels of nitrogen will not likely rise to levels where control is achieved, appropriate adjustments can reduce the severity, and most likely make fungicide applications more effective.

The dollar spot fungus overwinters as dormant mycelium or sclerotial flakes. The amount present during the winter influences the arrival and severity of the disease in spring or summer.

Research (Mike Boehm, et al., 2005) has shown that a fungicide treatment at approximately the second true mowing of the season (not counting removal of winter growth) has been effective in delaying the initiation and severity of dollar spot during the growing season. A systemic fungicide that controls

The Best Bets to Control Dollar Spot

BY KARL DANNEBERGER



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dollar spot or a combination of a systemic and contact fungicide at this time would be recommended.

If dollar spot is traditionally a chronic problem from late spring through summer, a preventive program is more effective than a curative one. Again, this would be in the case where dollar spot pressure remains for months at a time. From both a cost and material applied perspective, it might be worth calculating out a preventive program based on rate and interval compared to a curative program based on rate and duration of control.

Finally, fungicides mixed at sub-label rates with the expectation of a synergistic control has been disappointing in field trials to control dollar spot. Fungicide or any pesticide synergism is defined as "the simultaneous action of two or more compounds in which the total response of an organism to the pesticide combination is greater than the sum of the individual components." (Nash, 1981)

A recently published study by Drs. Lee Burpee and Richard Latin (2008), who looked at various types of dollar spot fungicides (systemic and contact, differing modes of action) used in combination at low rates, found "there is a low probability for turfgrass managers to take advantage of fungicide synergism to control dollar spot with the products and rates tested."

My advice: Follow the label when developing your disease-control program for dollar spot.

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