

## **Fungicide efficacy on dollar spot in sports, commercial, and residential turf**

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Wide-spread incidences of dollar spot have been observed across Michigan in 2005, and that means “beyond the golf course”, too. The pathogen, *Rutstroemia floccosum* (syn. *Sclerotinia homoeocarpa*), has been unusually active as the temperatures have hovered between 60 and 70 °F. with high humidity. It exists solely as mycelia that form on leaves and can sometimes be seen during early morning when dew persists. A lesion forms a band across an infected leaf. Most of the lesion is lightly colored and its edges are much darker. The lesions enlarge until leaves become blighted and shrivel away.

On a putting green it’s easy to see how the disease got its name. However, the infected patches become less distinguishable at higher mowing heights. Their sizes reach self-regulated limits and adjacent patches can coalesce. Still, an area of affected turf has an overall mottled appearance. Moderate drought stress exacerbates the symptoms of dollar spot. Disease activity continues until lower temperatures return, especially at night. However, dollar spot can again become active if stretches of warm weather occur in the fall. The pathogen is seldom lethal to turfgrass crowns so the plants will recover. An application of nitrogen coupled with adequate soil moisture hastens this process.

Fungicides are commonly used on golf courses and high visibility sports-turf venues. Residential and commercial lawns are rarely treated. However, if there ever was a year when the use of a dollar-spot fungicide in these areas might be warranted, 2005 is it. Fewer fungicides are labeled for dollar spot on residential lawns than on golf courses. The most notable of these are chlorothalonil, a contact fungicide, and iprodione and vinclozolin, which are both dicarboximides. This narrows the choices to the dimethylation inhibitors (DMIs), of which there are several, and thiophanate-methyl, a benzimidazole. There have not been any reports of suspected dollar-spot resistance to fungicides on any turf sites other than golf courses.

This study compares the efficacies of the DMI Banner Maxx (propiconazole); Chipco 26 GT (iprodione), which can be used on commercial and athletic turf; Heritage (azoxystrobin), a member of the QoI (strobolurin) class of fungicides; and Armada, a new product from Bayer Environmental Sciences. Armada contains triadimefon (DMI) and trifloxystrobin (QoI), sold respectively as Bayleton and Compass. Armada is labeled for “institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries.” It’s the first professional use turf fungicide that’s not labeled for golf courses.

The plot area is maintained as an irrigated home lawn receiving ½ lb N/M monthly. The plots are 6 ft. by 9 ft. and arranged in a randomized-complete block design with four blocks. Treatments began on July 7 and were reapplied once 28-day later, except for 26 GT applied at 14-day intervals. The next scheduled application of fungicides is August 17, the day after the 2005 Michigan Turf Field Day.