



BAYER SOLUTIONS

Dollar Spot

The Problem:

Dollar spot, caused by *Sclerotinia homoeocarpa*, is a widespread and very destructive turfgrass disease that can be observed throughout the year in Canada. Dollar spot is known to attack most turfgrass species including annual bluegrass, bentgrasses, fescues, Kentucky bluegrass, perennial ryegrass, bermudagrasses, zoysiagrasses, centipede grass and St. Augustine grass.

What to Look for:

Dollar spot is favoured by air temperatures ranging from 15-32°C (optimum 21-26°C) with extended periods of high humidity (>85% at night). The disease tends to be most severe under the following conditions: warm days, cool nights, infrequent rain but long dew periods, daily ground fogs that extend leaf wetness periods, and low nitrogen fertility. When the fungus is active and leaf surfaces remain wet, a fine, white, cobwebby mycelium covers the infection centres or diseased patches during early morning hours.

Symptoms of dollar spot can vary based on the turfgrass species and height of cut. Under close mowing heights, as with intensively maintained bentgrass or annual bluegrass, the disease appears as small circular straw-coloured spots of blighted turf about the size of a silver dollar. On coarser textured turf maintained under higher mowing practices, such as Kentucky bluegrass or perennial ryegrass, the blighted areas are considerably larger, straw-coloured patches 3-6 inches in diameter.

Affected patches frequently coalesce and involve large areas of turf. Grass blades generally die back from the tip with distinct hourglass shaped lesions that are straw-coloured or bleached white. Hourglass bands may not appear on warm-season grasses.

Bayer Solutions:

Implementing proper cultural practices is crucial to reducing disease severity. Management tactics include:

- Maintaining adequate nitrogen when dollar spot is active
- Making light frequent nitrogen applications, avoiding drought stress
- Removing dew by mowing, poling, or rolling
- Aerifying to reduce compaction and thatch
- Removing trees or adding fans to increase air circulation.

Fungicides are a key part of an integrated dollar spot management program. Since dollar spot is a foliar disease, select spray nozzles and spray volumes that provide good coverage to maximize fungicide activity. Early spring applications of fungicides after the 2nd true mowing can control early dollar spot infections. Preventive applications of DMI fungicides, like Mirage Stressgard® fairy ring and summer patch (average soil temperatures of 13°C at a 5-10 cm depth) also provide early dollar spot control. Routine fungicide applications are commonly needed when air temperatures are 21-32°C; extended periods of temperatures above 32°C may significantly slow dollar spot development. Integrating cultural and chemical control strategies provides the most effective control of this fungal disease.

Dollar Spot Solutions

Interface Stressgard™ is an ideal choice for dollar spot control in all weather conditions. Interface is especially helpful in hot weather, since it is not a DMI and can be used without risk of negative plant growth effects, as well as for fall dollar spot applications when *Bipolaris* leaf spot and other cooler-weather diseases are active and the impact of DMI resistance is highest.

Resistance to certain classes of fungicides can be significant for dollar spot. Resistance to the benzimidazole fungicides is common, and DMI resistance can also be problematic. Preventive applications and rotating fungicide classes, including the use of multi-site fungicides, are important for reducing the risk and impact of resistance. All Bayer solutions for dollar spot will control benzimidazole-resistant populations. Interface is effective against DMI-resistant populations. If DMI resistance is present, increasing the rates or shortening the application interval of Mirage Stressgard®, or using a combination fungicide like Trilogy Stressgard™, will help keep DMI fungicides effective in these situations.

| SOLUTION | RATE (PER 100 m ²) | APPLICATION INTERVAL* |
|-----------------------------|--------------------------------|--|
| Interface Stressgard | 95 - 160 mL | 14 - 21 days (Greens) 14 - 28 days (Fairways) |
| Exteris Stressgard | 140 - 200 mL | 14 - 21 days (Greens) 14 - 28 days (Fairways) |
| Mirage Stressgard | 32 - 64 mL | 14 - 21 days |
| Trilogy Stressgard | 65 mL | 14 - 28 days |

*See fungicide labels for complete details. Always read and carefully follow label instructions.



Dollar spot symptoms on a creeping bentgrass research green showing the bleached-out lesions and coalescing of symptoms in heavily infested areas. Photo: Derek Settle, Bayer.



Symptoms and signs of dollar spot on Kentucky bluegrass showing hourglass shaped lesions on leaves and aerial mycelium. Photo: Dan Dinelli, North Shore Country Club.



Close-up of symptoms on putting green height creeping bentgrass. Photo: Rob Golembiewski, Bayer.



Close-up of symptoms and signs of dollar spot infecting an annual bluegrass leaf. Photo: Paul Giordano, Bayer.