



BAYER SOLUTIONS

Leaf Spot and Melting Out

The Problem:

Leaf spot and melting out are diseases of cool-season turf caused by fungal pathogens in the genera *Dreschlera*, *Mariellottia*, *Bipolaris* and *Exserohilum*. Formerly, diseases caused by these were grouped into *Helminthosporium* and other diseases. These pathogens can be active on cool-season turfgrass throughout the year under wet conditions and during periods of plant stress. Disease pressure is typically highest when daytime temperatures are between 15-19°C during the spring and fall, but may also occur at high temperatures under periods of heat or drought stress, followed by rain or heavy irrigation. Poor irrigation or fertility practices (e.g. too much or too little), shade and soil compaction can contribute to disease development.

What to Look for:

Leaf spot and melting out fungi cause leaf spot as well as crown, stolon and root rots. Symptoms on cool-season turf include the development of irregular patches of reddish-brown, thinned turf. Dark lesions with tan to white centres develop on leaves and may completely blight out infected tissues. Leaf lesions may be confused with those caused by gray leaf spot. Brown to reddish-brown lesions and streaks may be associated with some fescues and ryegrasses. Infected crowns and stolons will often take on a dry rotted appearance. Signs of the pathogen include the presence of dark oval or cigar-shaped conidia formed on infected tissue. Often, infected tissue will sporulate profusely and be covered with dark spores after overnight incubation in a moist chamber.

Bayer Solutions:

Leaf spot and melting out diseases often occur under stress conditions, and proper cultural practices will help avoid these diseases. Some cultural practices include: raising the mowing height, mowing regularly to prevent scalping, and avoiding excessive nitrogen and thatch. Reduce leaf wetness periods by improving air movement, soil drainage and using proper irrigation practices. If plants are experiencing heat and drought, syringe the turf to prevent stress and wilt. Protect cool-season turfgrass during periods of stress with preventive fungicides. Start preventive fungicide applications in the spring and/or fall when average maximum air temperatures range from 15-19°C in moist or wet weather. Additional applications may be needed when weather conditions are extreme; either excessively wet and overcast, or hot and dry conditions can stress cool-season turf and trigger leaf spot outbreaks. Interface Stressgard™, Exteris Stressgard™ and Compass 50WG are all great solutions for controlling leaf spot and melting out. The active ingredient of trifloxystrobin found in all these products controls the fungi causing these diseases and helps reduce the turfgrass stresses that allow these diseases to develop. Interface Stressgard™ and Exteris Stressgard™ contain dual-action active ingredients including trifloxystrobin and Stressgard™ Formulation Technology to help reduce the turfgrass stresses that allow these diseases to develop.

Leaf Spot Solutions

SOLUTION	RATE (PER 100 m ²)	APPLICATION INTERVAL*
Exeris Stressgard	140 - 200 mL	14 - 21 days
Interface Stressgard	95 - 160 mL	14 - 21 days (greens and tees) 14 - 28 days (fairways and other turf areas)
Compass 50WG	3.1 - 6.1 g	14 - 21 days

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



Irregular, diffuse patches of leaf spot developing on a cool-season turfgrass rough. Photo: Derek Settle, Bayer.



Leaf spot symptoms on individual leaves of Kentucky bluegrass. Photo: Derek Settle, Bayer.