

Dollar Spot Management in Turf

Causal Pathogen

The causal pathogen of Dollar Spot was formerly known as *Sclerotinia homoeocarpa*. More recent information suggests that Dollar Spot is now considered species of *Lanzia* and *Moellerodiscus* fungi.

Microscopic identification of Dollar Spot is undertaken via its distinctive granulated hyphae which appears after a period of incubation.

Symptoms

The disease is characterised by round, bleached out / straw coloured spots ranging in size from a few centimetres to several centimetres. The spots appear as sunken turf. Individual spots coalesce and destroy turf in large areas. Recovery from severe dollar spot can be extremely slow. With dew, greyish white, fluffy mycelium can be observed in the mornings.

When the diseased spots have progressed to bleached straw like stage, dollar spot lesions called 'stroma' can be found on leaves. These lesions are shaped like an hour glass.



Picture 1. Typical Dollar Spot Symptoms



Picture 2. Mycelial present in Dollar spot in dew.

Occurrence

The Dollar Spot fungus overwinters in the form of sclerotia and as dormant mycelium in plant crowns and roots of infected plants. The sclerotia appear as tiny, thin black flakes.



Research conducted by Mills & Rothwell established that Dollar Spot Infection was high when maximum ambient temperatures are above 25 Degrees Celcius and Maximum relative humidity is greater than 90% during any 3 days in 7. Disease pressure is known to be more severe in dry soils.

Cultural Control Practices

Low nitrogen levels intensify Dollar Spot damage. During periods of severe dollar spot infection, the nitrogen levels should be increased. Tank mixing Dollar Spot fungicides with a nitrogen source can be a useful strategy. Light and frequent Nitrogen applications is most efficient. Removing dew or guttation water is a common practice on golf course greens which may assist in limiting dollar spot infection.

Chemical Control Options

There are a number of systemic and contact fungicides registered for the control of Dollar Spot in turf in Australia. These are outlined in greater detail below;

Product	Pack Shot	Mode of Action Group	Contact/ Systemic	Key Points	Application Rate/100m ²
Compass Active Ingredient: Fluazinam A registered trademark of Adama.		29	Multi-site contact	<ul style="list-style-type: none"> Greater residual activity (up to 21 days) Excellent control of dollar spot that other chemistries fail to have activity on Multi-site activity that has very low risk of developing resistance 	1 – 1.5 L/ha in 400 - 800 L of water
Rovral GT® Active Ingredient : Iprodione A registered trademark of Bayer Environmental Science.		2	Contact (Translaminar)	<ul style="list-style-type: none"> Curative Activity Broad Spectrum control Up to 21 days protection Proven Performer 	180mL
Bayfidan® Active Ingredient : Triadimenol A registered trademark of Bayer Environmental Science.		3	Systemic	<ul style="list-style-type: none"> Proven Performer on Dollar Spot Good systemic activity 	30 – 60mL
Headway MAXX® Active Ingredient : Azoxystrobin Propiconazole A registered trademark of Syngenta.		11/3	Systemic	<ul style="list-style-type: none"> Strong residual activity Up to 28 days preventative activity 	90mL
Dedicate® Active Ingredient : Trifloxystrobin Tebuconazole A registered trademark of Bayer.		11/3	Contact/ Systemic	<ul style="list-style-type: none"> Both curative and preventative activity Systemic and contact action 	20-30mL
Banner MAXX® Active Ingredient : Propiconazole A registered trademark of Syngenta.		3	Systemic	<ul style="list-style-type: none"> Excellent activity on Dollar Spot Good residual performance 	335-415mL
Daconil Wetherstik® Active Ingredient : Chlorothalonil A registered trademark of Syngenta.		M5	Contact	<ul style="list-style-type: none"> Effective contact fungicide Good protection for up to 14 days. 	200mL
TMTD 600™ Active Ingredient : Thiram A trademark of Ecofertiliser Pty Ltd.		M3	Contact	<ul style="list-style-type: none"> Contact fungicide providing preventative activity up to 14 days. Dust free easier to use formulations than other thirams. 	160mL