Turf Nu's
April Edition 2011

Product Focus – Grocal MGB Turf

Sodium Fighter - Strengthen your Turf's Ability to Fight Sodium

Grocal MGB Turf is a high analysis and highly soluble sulphate free calcium solution that can be used in conjunction with granular calcium programs to fight the effects of the detrimental salt sodium. Sodium is often a significant component of non-potable irrigation water sources, and can build up in the soil and plant tissue over time. Sodium will weaken the turfgrass reducing its ability to withstand other pressures such as wear and disease. Calcium is the main nutritional weapon to deal with the negative effects of sodium both in the soil and plant. Significantly greater resistance to the weakening effects of applied sodium will result from using Grocal MGB Turfgrass as a regular foliar or soil drench application in conjunction with an appropriate granular calcium amendment program. The high analysis of 17% Calcium provides more 'bang for your buck' compared to other liquid calcium products on the market. Its high solubility means the calcium is available to fight the negative effects of irrigation applied sodium.

Analysis	Australia (w/v%)	International (w/w%)
Calcium (Ca)	17.0	11.3
Nitrogen (N)	10.0	6.6
Magnesium (Mg)	4.0	2.6
Boron (B)	0.1	0.07
Trace Elements		

CROP	RATE / ha	MIN DILUTION*	COMMENTS
TURF Maintenance	20L	1:10	Apply as a foliar fortnightly or as required. For bent grass under hot conditions, use 1 : 40
For sodium mitigation	40L		Apply as a soil drench to reduce the negative effects of sodium. Apply fortnightly or monthly depending on the severity of sodium problem. For soil drench applications, use a high volume of water or irrigate immediately following the application

April Fertiliser Promotion

FERTILISER PROMOTION

ENDS SOON

GET IN QUICK

ONLY 2 DAYS TO GO

1st - 15th of April 2011

FREE CALL 1800 631 008

Product Focus – Compel Insecticide

What is Compel Insecticide?

Compel is a broad spectrum insecticide containing 100g/L of the active ingredient bifenthrin. It is registered for the control of Lepidopteran pests such as Lawn Armyworm and Sod Webworm and adult stages of Coleopteran pests including Argentine Stem Weevil, Billbug and African Black Beetle in all recreational turf situations. Compel is also registered for the control of several ant species including Black Ant, Coastal Brown Ant, Funnel Ant, Meat Ant, Sugar Ant and Stinging Ants in turf situations.

Features of Compel Insecticide:

- Cost Effective form of Insect control
- Broad Spectrum Control of a range of pest species.
- High active ingredient loading of Bifenthrin (100g/L) resulting in lower application rates and reduced drum disposal costs.
- Available in heavy duty plastic (HDPE) packaging.
- Excellent UV stability – Enhances residual performance.
- Excellent turf safety characteristics.
- Contains an in-built surfactant.
- Good Tank Mix flexibility products.
- Australian Made.

Application Information:

Compel Insecticide is applied at a rate of 1.2 – 4.4L/ha (12 – 44ml/100m^2) in turf situations, depending upon the target insect. For application in turf, it is recommended that Compel be applied in a minimum of 200L of water per hectare with a medium sized droplet to obtain an even coverage over the turf surface. For soil borne insects, 4mm of irrigation maybe required to place the active ingredient into the rootzone. Apply after mowing to minimise loss of insecticide in clippings.

COMPEL AT A GLANCE	
Active Ingredient:	Bifenthrin
Pack Size:	5L
Turf Application Rate:	1.2 – 4.4L/ha
Poisons Schedule:	Schedule 6
Packaging:	Heavy Duty Plastic Container
Mode of Action Group	Group 3A Insecticide

Technical Focus – Hazard Index and Nematode Extraction

Turf Managers who send samples to a laboratory for nematode analysis may find the results are difficult to interpret, as many different nematode species may be present and counts are given for all of them. This article provides a brief guide on how to interpret the information provided.

Nematode species differ in their importance

More than 30 nematode species attack turf in Australia, and between 4 and 8 species will usually be present on most golf greens. Although all these species feed on turfgrass roots, the nematodes vary considerably in their capacity to cause damage. Some can cause severe damage at very low population densities, while others must be present in large numbers before damage occurs. Table 1 ranks the most common nematodes according to their pathogenicity.

Developing a hazard index from nematode counts

Because there is always a mixture of highly pathogenic and less damaging nematodes in soil samples from turf, the collective impact of all these nematodes must be determined. In our laboratory, we do this by calculating a hazard index from the nematode counts. The hazard index is a single figure that is usually between 0 and 7. It indicates the potential for damage from all the nematodes found in a sample.

Table 1. Nematode genera attacking turfgrass ranked according to their pathogenicity (i.e. their capacity to cause damage to roots).

Rating	Effects	Nematodes
Very high	Limit root elongation at low population densities.	Needle (*Paralongidorus*), dagger (*Xiphinema*), cyst (*Heterodera*)
High	Produce specific symptoms (stunting, forking, lesions) at moderate population densities.	Stubby (*Paratrichodorus*), sting (*Belonolaimus*), lesion (*Pratylenchus*)
Moderate	The root system becomes unthrifty and lacks fine roots when high nematode densities are present,.	Sheath (*Hemicycliophora*), lance (*Hoplolaimus*), ring, (various genera, including *Criconemella*), stunt (*Tylenchorhynchus*)
Low	Cause little damage, even at very high densities.	Spiral (various genera, including *Helicotylenchus*), reniform (*Rotylenchulus*), root-knot (*Meloidogyne*)

Effects of factors other than nematodes

The hazard index is a useful guide to whether nematodes are likely to be causing root damage in a given situation. However, when the index is being used to make management decisions, it cannot be viewed in isolation from the many other factors that influence turf growth. A green with a moderate or high hazard index, for example, may continue to thrive while it is well managed, whereas its nematode-damaged root system may be unable to cope when a stress is imposed (e.g. inadequate nutrition, excessive mowing, high summer temperatures). Thus to fully interpret the results of a nematode analysis, the possible role of environmental and stress factors needs to be considered.

Table 2. Relationship between hazard index and likely effects of nematodes.

Hazard index	Interpretation
<1.5	Low nematode population density. Nematodes are unlikely to affect growth.
1.6-3.0	Moderate nematode population density. Some reduction in root function is likely.
3.1-6.0	High nematode population density. Considerable root damage could be expected.
>6.1	Very high nematode population density. Severe nematode damage is likely.

THE NUTURF NEMATODE REPORT INCLUDES A HAZARD INDEX CALCULATION.

FOR MORE INFORMATION, CONTACT YOUR LOCAL NUTURF TERRITORY MANAGER.

Pest Facts in Short – Dollar Spot

The Causal Pathogen

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

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.

Typical Dollar Spot Symptoms

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 Methods

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.

Product	Active Ingredient	Mode of Action Group	Key Points	Contact / Systemic	Rate (per 100m2)
Rovral GT	Iprodione	2	• Curative Activity • Broad Spectrum control • Up to 21 days protection • Proven Performer	Contact (Translaminar)	180ml
Banner Maxx	Propiconazole	3	• Excellent activity on Dollar Spot • Good residual performance	Systemic	50 – 100ml

Did you know?

• Yuma in the state of Arizona has over 4,000 hours of sunshine per year - making it the sunniest place on the planet! The South Pole is the least sunny place - only 182 days a year get sunshine.

• The windiest place on earth is Commonwealth Bay, Antarctica where winds of 200mph have been recorded.

• On 14th April, 1986 Bangladesh was hit by the biggest hail stones ever recorded - weighing in at over 1kg each - killing 92 people.

NUTURF by Amgrow