

# Turf Nu's

May Edition 2011

## Technical Focus - The Importance of Potassium

Turfgrasses require potassium in relatively large amounts, second only to nitrogen. Potassium is referred to as the turf 'toughener' and its main purpose is to improve stress tolerance within the plant. It is an ideal element to be used in conjunction with Nitrogen, as while N produces cell growth, potassium strengthens the walls of the cell, hardening it to disease and pest infestation. Potassium is also important for many plant processes and it performs the following functions within the plant:

1. Regulation of the opening and closing of the stomata, which effectively improves heat and drought tolerance.
2. Production of proteins and carbohydrates. Potassium also assists in moving these compounds throughout the plant. This becomes very important for winter survival and recovery.
3. Controls uptake of certain nutrients.
4. Increases root development, enhancing greater branching of the root system. This contributes to improved drought and wear tolerance.

### How Much Potassium does Turf Require?

Nutrient	Minimum annual nutrient application levels that sustain turf growth	Maximum annual nutrient application levels that sustain turf growth
Potassium	80kg/Ha	240kg/Ha

(Handreck and Black, 1994)

### Key Sources of Potassium for Autumn / Winter Applications

Fertiliser	Nutrient Analysis	Product Description	Rate
<b>Black Label Balance</b>	22-0-18 + Fe 45% CRN	Provides a balanced N:K ratio and a boost of colour with iron and manganese for sportsfield, fairway and amenity use.	2.3kg/100m <sup>2</sup> 230kg/Ha
<b>Poly Smart Cool</b>	8-0-16 + TE 48% CRN	Poly Smart Cool Season fertiliser has been designed for use on cool season grasses through the highs and lows of seasonal temperature shifts. The higher K:N ratio is desirable at these periods to ensure cell turgidity and wear tolerance.	3.0kg/100m <sup>2</sup> 300kg/Ha
<b>Nutriplus 7-1-14</b>	7-1-14	Nutriplus 7-0-14 is high K analysis combination product of a compound fertiliser and nutriSMART, for use during stress periods.	3.0kg/100m <sup>2</sup> 300kg/Ha
<b>High K Elite</b>	14-0-21+Fe, Mn 71% CRN.	A controlled release nitrogen product that provides a high rate of potassium for improved tolerance to wear, cold and disease, when applied sufficiently in advance of stress periods. It is an ideal Autumn/Winter fertiliser.	1.8kg/100m <sup>2</sup> 180kg/Ha
<b>Activate K</b>	8-0-16	Activate K is a greens grade fertiliser, combining TX 10 organic complex with Methylene urea and a high level of plant available potash. Activate K is ideal for renovation and maintenance applications requiring higher levels of potassium.	1.5 -4kg/100m <sup>2</sup> 150-400kg/Ha
<b>KTS</b>	0-0-30	A completely soluble source of potassium and sulphur, in the form of potassium thiosulphate, that allows immediate plant utilisation through foliar and root uptake.	200 – 500ml/100m <sup>2</sup>

## May Rovral GT Promotion

### ROVRAL GT - Still the industry's fastest curative fungicide

#### The Problem = WINTER FUSARIUM

Winter Fusarium is an aggressive disease, favoured by cool and wet conditions. Temperatures ranging from 10 – 20 °C, high moisture and low light are ideal for disease development. Initial symptoms include small circular patches which develop in size, leaves become water soaked before death. Remove excess thatch and maintain a well-balanced fertilisation program to avoid disease development.



#### The Solution = ROVRAL GT

A key product in the fight against Fusarium disease is Rovral GT. Rovral GT is a premium Iprodione formulation, offering both excellent curative and preventative control (up to 28 days) of Fusarium diseases. Rovral GT is an oil based formulation, giving it the ability to control foliar based diseases extremely well, whilst maximising its longevity. The solvent package in Rovral GT significantly enhances movement of Iprodione into the plant, making it the quickest curative control option on the market. Rovral GT is a 250g/L Iprodione formulation. Rate of application is 9-18L/ha. When considering Winter Fusarium fungicides, Rovral GT is the one product you should have on hand.



#### The Promotion >> ROVRAL GT = Jacket

Option1 - Buy any **4 x 5L Rovral GT** and receive a high quality jacket valued at over \$100.00.

Option 2 - Buy **2 x 5L Rovral GT & 5 x Signature** and receive a high quality jacket valued at over \$100.00.

Option 3 - Buy **2 x 5L Rovral GT & 3 x Dedicate** and receive a high quality jacket valued at over \$100.00.



*Promotional Period: 1st May – 30th June 2011. Jacket may vary from that depicted.*

## Product Focus - EXPORSAN

The competitive nature of winter grass (*Poa annua*), its greater susceptibility to disease and its ability to disrupt green uniformity makes pre-emergent control the most effective option for a successful bentgrass greens maintenance program.

**Exporsan** selective turf herbicide still remains as the only pre-emergent herbicide registered for the control of winter grass in bent greens. **Exporsan** provides effective, long lasting control of winter grass and it is unique in that it can be safely applied to established bentgrass greens throughout the year. When applied to established and healthy turf, **Exporsan** only causes minimal disruption to root development without affecting turf density or quality. Importantly, incorporating **Exporsan** as a pre-emergent control option into an overall winter grass control program improves the degree of winter grass control in bentgrass greens.

## Product Focus - EXPORSAN cont'

### Benefits of Exporsan:

- Pre-emergent control of winter grass in bent – The only registered option to prevent winter grass germination.
- Reliable, residual control – provides extended control of winter grass germination that can continue to occur for several months.
- Breaks the wintergrass lifecycle, preventing further Poa germination. Is an important part of the wintergrass management strategy.
- Unique resistance management grouping (Group E) – an effective tool in resistance management programs for winter grass.
- Unlike other pre emergents, Bensulide efficacy is not reduced by coring or scarifying operations.
- High degree of safety to bentgrass. Research confirms that established bentgrass root systems are not significantly affected with bensulide applications.



### Mode of Action

Exporsan containing the active ingredient Bensulide acts through the inhibition of mitosis (or cell division).

### Application Considerations

- Organic matter (thatch / mat) and soil type will affect the degree of winter grass control.
- Higher levels of organic matter and microbial activity tend to reduce the activity of Exporsan on winter grass.
- Phosphate levels influence the level of winter grass germination, where excess P will stimulate germination and affect the degree of residual control.
- Calibrate spray equipment to ensure uniform distribution of the product on the green surface. The recommended water rate is between 150 – 200L of water per 100m<sup>2</sup>.
- Exporsan is a contact herbicide and immediate irrigation is required to move the chemical into the root zone to where it adsorbed on the roots of the winter grass.
- 6 mm of irrigation is advised to achieve this movement of chemical.
- Recent research from the United States suggests that more frequent applications at lower use rates tends to enhance the activity of Exporsan on winter grass.


## Pest Facts in Short - Black Cutworm

Black cutworm (*Agrotis* spp.) are the larval stage of nocturnal moths. Most larvae are grey, brown or black and may be distinguished from one another by their coloured bands. The larvae are 40-50mm in length. The pupae are reddish-brown and reach a length of approximately 16 mm. Adult cutworm moths have hairy bodies and are larger than sod webworm moths, with a wingspan of 35-55mm in length. Different species may be identified by the marking on their forewings.



Adult moths lay their eggs in clusters in turfgrass at night, laying between 300 – 2000 eggs per female adult. Some species produce enough generations that adult moths are present throughout the year. Cutworm larvae usually feed during the night and take shelter during the day. These insects typically cut off young plants at the crown level and pull them into a burrow before feeding. Cutworm activity usually observed in autumn and early winter.

They generally attack cool season grasses such as Bentgrass, Wintergrass and Fescues. Cutworms have two generations per year and overwinter as pupae. A full lifecycle usually takes between 4-6 weeks to complete.

BEST CONTROL OPTION	Insecticide	Active Ingredient & Mode of Action Group	Description	Rate
	Acelepryn	200g/L Chlorantraniliprole 28	Provides excellent control of all Lepidoptera pests including Black Cutworm. Excellent residual activity (up to 6 months) on Lepidoptera pests. Excellent safety profile for users and the environment.	750mL/Ha

# May Liquid Fertiliser Promotion



**TURF**  
**MAINTENANCE**

10-1-20 + Humic Acid

**STAND**  
**SKH**

20% Siroa, 15% Potassium, 1% Humic acid

**KELPAK**

100% Liquid Seaweed Concentrate

**SUPA**  
**STAND**  
**PHOS**

8 - 10 - 3 NPK + 10% Kelpak

**NITRO**  
**IRON**

8% Iron, 7.7% Nitrogen, 1% manganese, 5% Sulphur

**SUPA**  
**TURF**  
**IRON**

**GROCAL**  
**MGB**  
**TURF**

## Nuturf Liquid Fertiliser Promotion 2011

*How often do you test the pH of your spray tank, particularly when tank mixing products?*

Did you know **Supa Turf Iron** is acidic and should not be tank mixed with alkaline liquid products such as **Stand SKH** or that the solution to which **Kelpak** is added should be acidic (pH less than 7) or the key root stimulating auxin hormones will be destroyed.

These are just two examples of the importance of knowing the pH of your tank solution.

*To help you easily monitor the pH of your liquid tank solutions. Nuturf and Agrichem are pleased to offer the following special promotion:*

1) Place an order to the value of **\$1500** for any combination of these listed Agrichem products, to be delivered and invoiced between **1st May – 30th June 2011** and receive a **FREE Digital pH meter\***.



2) Place an order to the Value of **\$800** for any combination of the listed Agrichem products to be delivered and invoiced between **1st May – 30th June 2011** and receive a **FREE Polo Shirt\***.

\* Note while stocks last.

For more details on Agrichem products or this promotion please contact your Nuturf Territory Manager. See over for details of how to claim your FREE pH meter or Polo Shirt.