



The Vegetation Manager

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Note from the CEO



The Spring dry spell is finally at an end with rain falling over much of South East Queensland over the past few weeks and more forecast for the remainder of the month. The latest Brisbane Summer forecast is for above average rainfall for December, January & February with the potential for concentrated storm activity.

This should see your turf, landscape and natural areas begin to flourish. Our dams have come through this period in good shape with our combined SEQ capacity at over 73%, compared with Melbourne's which is currently under 38%.

Technigro is proud to be the lead partner in the Integrated Vegetation Management Project (IVMP). This project is identifying the best practices for vegetation management, with a focus on mown vegetation. Weed species are often responsible for triggering expensive mowing rotations as they grow faster and taller than turf. IVMP is trialing strategies using plant growth regulators and herbicides in combination with mowing and other activities, to create a more economical, sustainable and environmentally friendly approach. The year one results of the IVMP project can be found in this edition.

Enjoy the warm South East Queensland weather and I look forward to talking with you again next month.

Kind regards, Nick

In the News: Here comes the rain!

During Spring 2009 we have experienced some unusual weather patterns in South-East Queensland, with several areas recording record lows in terms of rainfall. Coupling this with frequent dry North-Westerly winds has caused the little amount of rain we have received to evaporate before it can supply the vegetation with any real benefits. The past few months have caused limited weed growth and some of our hardier established natives have begun to suffer.

Fortunately the weather bureau has predicted that the recent rainfall is signaling the end of the extended dry spell and the beginning of more traditional, stormy conditions. In the coming months we should begin to experience typical summer type weather patterns, with warmer temperatures and fine days punctuated by afternoon thunderstorms and rain events.

Now is the time for us all to be pro-active. Programmed work usually undertaken at this time of year has been held off due to the unusual weather which has caused minimal weed growth.

However, to ensure you are prepared for a hectic summer period, please contact the appropriate Technigro representative to assist you with any reprogramming that may be required to ensure your parks, roads, road reserves, sports fields and natural areas are adequately maintained coming into Christmas.

The weather is unpredictable and we will endeavor to keep you up to date with the weather as the season progresses.

South East Queensland 28-day Rainfall Forecast

Sun	Mon	Tues	Wed	Thu	Fri	Sat
						7 <i>low</i>
8 <i>high</i>	9 <i>high</i>	10	11	12	13 <i>low</i>	14
15 <i>high</i>	16 <i>high</i>	17 <i>high</i>	18 <i>high</i>	19 <i>high</i>	20 <i>med</i>	21 <i>high</i>
22 <i>high</i>	23 <i>high</i>	24 <i>low</i>	25	26 <i>low</i>	27 <i>high</i>	28 <i>high</i>
29 <i>low</i>	30	Dec 1 <i>low</i>	2 <i>high</i>	3 <i>high</i>	4 <i>high</i>	

Chance of rainfall			
nil < 25%	low 25% to 50%	med 50% to 74%	high >75%

In the news: Protecting your green assets during periods of drought

Hydrophobic soil



Top & Above: Water repellent soils

Due to a lack of rainfall and the current water restrictions, many of us have been wondering how to make the best use of available water on our gardens and turfed areas. The problem is, as soils dry out in periods of low rainfall the ability to absorb water is markedly reduced to the point where they become hydrophobic, or water repellent. This causes the plants and turf to become stressed and they struggle to survive; often against strong competition from the weeds that thrive under such conditions. Fortunately, help is at hand.

What are hydrophobic soils?

Soils that repel water are considered hydrophobic and while this condition is far more common during extended dry periods, it can and does occur for other reasons. For instance, soil with a high sand content is often used in turfed areas and this type of soil can sometimes develop a waxy film just on or beneath the surface that prevents the water penetrating to the root structure. This waxy surface develops from the decomposing grass clippings left behind during mowing. In other instances, a thin layer of soil at or below the soil surface can become hydrophobic after extended dry periods, purely because the soil has dried out and lost its ability to absorb water. Left untreated Hydrophobic layers can persist for a number of years, especially if they are relatively thick.

How are these layers detected?

Water run-off soon after watering is a good indication you may have a problem. However, the only way to be certain is to scrape away the ash layer and expose the mineral soil surface. Place a drop of water on air-dry soil and wait 1 minute. If the water

beads, the soil layer is hydrophobic. Once a water-repellent layer is found, continue to scrape additional layers of soil, repeating the water drop test on each layer until a non-hydrophobic layer is reached. This procedure will indicate the thickness of the hydrophobic layer.

What can we do to solve this problem?

Technigro recommends the use of Stamina 90, the longest residual non-burn wetting agent on the market to overcome water repellent hydrophobic soils. At the recommended rates, the long lasting polar "head" of the molecule continues to attract water for a period of twelve to sixteen weeks. Stamina 90 has been proven to have better efficacy over the 3-4 month period compared to industry standards.

Once hydrophobic conditions have been resolved, both dry and liquid chemicals applied will be more evenly distributed through the soil profile, therefore water savings will result.

Stamina 90 is in liquid form and can be applied through a wide range of Technigro's equipment. The tank mix flexibility of Stamina 90 ensures the product can be applied in combination with many other products such as pre and post emergent herbicides, plant growth regulators, soluble or liquid fertiliser applications and fungicides. This makes applying Stamina 90 a cost effective option when having Technigro apply other treatments at the same time for you.

Why not call us now and see how you can save up to 50% on the cost of application by combining your wetting agent application to existing treatments.

It's that time of the year

SmartWiper® - The breakthrough solution

Technigro's SmartWiper® is a major breakthrough in the control of problem tall weeds. This unique sprayless technology uses a wiping action to apply a concentrated dose of Glyphosate to taller weeds such as Wiregrass without contacting the underlying surface. To learn more about this innovative piece of equipment, read our Weed Wiping Factsheet on page 4 or talk to one of our turf specialists on 1800 678 611

Weed Wiping



Lawn grubs



Watch out for these creepy crawlies!

Two turf pests commonly referred to as 'lawn grubs' can cause serious damage to turfed areas during the growing season. Our inspection programs for customers, as part of our programmed approach to turf management, have identified damage occurring now in southern parts of Brisbane, Logan and the Gold Coast. For this reason Technigro recommend the proactive treatment of turfed areas with Bifenthrin, a synthetic pyrethroid with extended residual activity that controls a wide range of damaging pests for up to eight weeks. To find out more or have Technigro complete surveillance inspections for you before serious damage occurs, read our Grub Fact Sheet on page 5 or call us on 1800 678 611

Innovation Update: IVMP year one results

IVMP



Top & above: Using native grasses & low flowering trees in transition zones

Background research commenced in December 2007 with a focus on identifying and reviewing relevant literature and prior research activities related to the IVMP Project.

Following the initial review and following consultation with members of the IVMP Technical Team, the team met in Sydney for the first Technical Team Meeting in February 2008. At this meeting the team developed formal meeting ground rules, reviewed the criteria for potential trial sites, discussed refinements to draft trial protocols and confidentiality, and discussed the use of the internet as a vehicle to communicate project information to project partners and other stakeholders. It was also decided that quarterly reporting should mirror the format HAL require for the Milestone Reporting, with each quarterly report building towards the Annual Milestone Report.

In February 2008 planning commenced for the project web portal. The Technical Team finalised the scope and a web brief and quotation was received for the build of the IVMP portal. Project reporting and communication requirements were considered and it was decided that the secure web portal was the preferred communication vehicle for both confidential and public project information sharing and communication.

Construction of Stage One of the web portal commenced and was completed in July 2008 and final communication systems were implemented in September 2008. The Technical Team met again twice in March and June to finalise trial site locations and requirements, trial protocols and project communication. Access into the DPI trial plots for the initial phytotoxic trials was also negotiated with Syngenta who had leased half of the trial plots at the Redlands Research Facility for a three year period.

In February 2008 work also commenced on the development of the trial protocols for the field efficacy trials. Trial sites for efficacy trials were investigated along with terrain and climate conditions. In May 2008 approvals for the use of field trial sites were sought. Initial efforts

focused on the undesirable species to be targeted, along with species lifecycles, seasonal cycles, composition, population dynamics, seed head heights and prevailing environmental conditions.

In March, April and May 2008 presentations introducing the IVMP project were delivered to a wide range of stakeholders involved in vegetation management in SEQ including Local Government Managers and Supervisors, Vegetation Management Contractors, Golf Superintendents and Industry supporters. During the same period educational forums were conducted with staff with vegetation management responsibilities who are employed by project contributors / partners.

In May 2008, screening trials of a range of products began at the DPI&F facility at Redlands. The products tested in these trials were considered to have potential in assisting in the management of the undesirable grass species. The trials were conducted to evaluate the phytotoxic effects on desirable turfgrass species.

In July 2008, a research trip to the USA was completed by project representatives. The purpose of the visit to the US was primarily to look at mown vegetation management in the US, specifically Integrated Vegetation Management (IVM) strategies from nutrition and appropriate species selection, through to the use of Plant Growth Regulators (PGR's) and herbicides with growth regulatory effects. The project representatives met with a broad spectrum of professionals involved in vegetation management in the US so as to better understand the successes and challenges faced by asset owners, asset managers, Vegetation Management service providers and product suppliers.

Fast Facts

- > Approximately 80% of the pollutants in oceans, rivers, bays, streams, lakes, and other bodies of water is derived from land based activities
- > The King River in Western Australia is Australia's most polluted river, suffering from a severe acidic condition related to mining operations.
- > Pollution of freshwater (drinking water) is a problem for around half of the world's population. Each year there are approximately 250 million cases of water-related diseases, resulting in roughly 5 to 10 million deaths.

Upcoming Events

- > **National Recycling Week**
9th - 15th November
- > **Coast Care Week**
19th - 23rd October, Pakistan
- > **National Recycling Week**
9th - 15th November

WEED WIPING



Technigro's SmartWiper® is a major breakthrough in the control of problem tall weeds in mown areas that do not respond to conventional treatment with selective herbicides.

Wiregrass is a common weed of most sport and park surfaces in South East Queensland due to its prevalent seeding and lack of an effective selective herbicide control. The unique sprayless technology of the SmartWiper® uses a wiping action to apply a concentrated dose of Glyphosate to taller weeds such as Wiregrass without contacting the underlying surface.

Although Wiregrass is the main weed targeted by the SmartWiper®, it can be used to gain control on areas affected by almost any weed that breaks mowing intervention heights such as Giants Rats Tail, Bahia and Crowsfoot.

Accuracy is assured through the use of a foam marking system, ensuring complete coverage and eliminating the costly wastage of product.

Benefits

- > Provides true selective control of problem weeds
- > Computerised 'no drip' control ensures no off-target damage
- > Foam markers ensure complete and accurate coverage
- > Precise 'terrain following' height control prevents scalping
- > 360 vision and excellent manoeuvrability makes it extremely safe
- > Can be used in multiple situations such as on sportfields, parks and roadsides

Application

Technigro recommend a dual application program for best results. This program is best applied in conjunction with a pre-emergent program as each Wiregrass plant can produce thousands of viable seeds per season.

Repeated weed wiping applications have proven to achieve consistent, long-term control when combined with good turf management practices. For best results, at least 75mm of separation is needed between the desired turf and the seed head of the wire grass plant.

Due to the separation pre-requisite, it is recommended to contact our specialist Turf Services Team to inspect and devise a suitable program for your specific turf needs. Contact us today to see how we can help you.

Your Provider of Vegetation Management Solutions

Gold Coast: 2-10 Rudman Parade, Andrews, QLD. 4220

Brisbane: Unit 3, 128 South Pine Road, Brendale, QLD. 4550

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for smarter solutions

SOD WEBWORM & LAWN ARMYWORM



Sod Webworm



Lawn Armyworm

The damage caused by Sod Webworms usually appears in early Spring. The damage shows up as small dead patches of grass among the normally growing grass. The Summer generation may cause general turf thinning or even irregular dead patches. Sod webworms prefer sunny areas and the larvae are often found on south facing, steep slopes and banks, where it is hot and dry. Heavily shaded turf is seldom attacked by the larvae.

The Lawn Armyworm larvae pupate in chambers they construct in the soil. They are deep brown in colour and measure about 15 mm in length and 5 mm in width. Egg masses are seldom laid directly on the host plants, and are more commonly found on adjacent vegetation and under the eaves of buildings. Young Armyworms have well developed 'silk glands' and may use silk threads to lower themselves to the ground. They prefer sheltered feeding sites. Feeding commences immediately after hatching and continues at night until larval maturity.

These two turf pests commonly referred to as 'lawn grubs' can cause serious damage to turfed areas during the growing season. For this reason Technigro recommend the proactive treatment of turfed areas with Bifenthrin, a synthetic pyrethroid with extended residual activity that controls target insects via contact and ingestion for up to eight weeks. The residual nature of this treatment controls these pests over longer periods when compared to traditional, more hazardous insecticides that have commonly been used in the past.

Benefits of Bifenthrin

- > Outstanding efficacy as an Adulticide and larvae of Lepidoptera species
- > Long-term residual control – limits the number of pesticide applications
- > An odourless product, rainfast once dry
- > Low solubility in water and high affinity for soil particles combine to ensure low leaching potential

Application

Bifenthrin is also registered for the control of a range of ant species, mosquitoes and flies in situations where their activity can affect the public. The residual nature of Bifenthrin offers the asset manager a proven ability to control a wide range of insect pests of amenity horticulture over an extended period.

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