

Note from the CEO



The end of the year is fast approaching and the past 10 months have been both rewarding and successful for Technigro. In June we were a finalist in the 2011 Telstra Business Awards Queensland and also received the Family Business Award from the Gold Coast Business Excellence Awards. Over the past month we have accepted another two significant accolades; the Jason Lea Award received from Family Business Australia and Owner/Manager of the Year, Gold Coast Region, awarded by the Australian Institute of Management. While it is a humbling experience competing against such high calibre businesses and entrepreneurs, these awards are a reflection of the fantastic team that we have here at Technigro. We are both honored and proud of these achievements and hope to sharing more exciting news with you in the future.

Also this month we are pleased to announce the appointment of two new members to the Technigro Team. Mitch McGuire has accepted the role of Chief Innovation Officer. Mitch brings with him a wealth of knowledge in the areas of innovation management, IP strategies and commercialisation planning, as well as facilitating, designing and attracting funding for R&D. Mitch's appointment will ensure that Technigro's passion for innovation is able to thrive. The Technigro Consultancy team welcomes Vin Naidoo into the role of General Manager. Vin has extensive knowledge of environmental management issues faced by the private businesses, governments, the industry and the community. This will enable Vin and the Consultancy Team to forge great new partnerships with current and new customers. Having both Mitch and Vin on board is a real coup for Technigro and only further enhances our service offering to our customers and partners.

Finally, I would just like to take this opportunity to reiterate that it is the Technigro way to work in partnership. Your vast experience and knowledge is invaluable to our industry. As such, if you would like to contribute to The Vegetation Manager in any way I encourage you to contact Tara Looby (tara.looby@technigro.com.au) with your feedback and suggestions.

Have a fantastic month and I look forward to talking to you again soon,

Cheers,

Nick Bloor

It's that time of the year

Amendments & Fertiliser



It's renovation season!

October is part of the busy renovation period - the perfect time to apply soil amendments and fertiliser to get your turf growing. When applied correctly these products will greatly improve the vigour and health of your turf, ensuring it has the best chance to resist the stresses of drought, wear and weed infestation. To learn more about how Technigro can help you with this important turf management process, read our Soil Amendment and Fertilising fact sheet on page 5 or call us on 1800 678 611 to talk to one of our Turf Services specialists.

Fast Facts

- > The Technigro SmartWiper® utilises unique wiping technology to apply a concentrated dose of product to taller weeds without contacting the underlying desirable vegetation.
- > The SmartWiper® has computerised 'no drip' control of herbicide feed to the wiping pad which ensures there is no off target damage and zero spray drift.
- > The SmartWiper® pads are able to be completely wet and ready for application with 75% less product than the next most efficient machine available on the market. This represents a significant saving of product which would otherwise be washed out and wasted at the end of the job.

Dwarf Tamarillo



Dwarf Tamarillo (*Solanum abutiloides*) is a member of the Solanaceae plant family native to a small region of South America. It has become established in south-eastern Queensland and is beginning to spread. Dwarf Tamarillo grows as a weedy plant on stream banks, in bushland, and in rocky sites. However, it also has the potential to invade open forests and gaps and margins in rainforest habitats meaning it has the potential to become a serious environmental weed. Learn more about Dwarf Tamarillo on page 6.

Upcoming Events

> EIANZ Forum

The Future for Environmental Professionals - what we can learn from the past.
24th October, Brisbane, QLD.

> 6th International Weed Science Congress

Dynamic Weeds, Diverse Solutions
17th - 23rd June 2012, Hangzhou, China.

> 18th Australasian Weeds Conference

10th - 12th October 2012, Sebel, Melbourne, VIC.

In the news

Technigro to pioneer vegetation management with natural

Integrated Vegetation Management company Technigro has set the wheels in motion to reduce synthetic chemical use, with the business exploring a range of new, natural products to add to their suite of services.

Meetings held in the US last month with green herbicide producer Bioprodex have seen Technigro exploring possibilities with products such as SolviNix-a powerful tool in the combat of tropical soda apple, which is a new and emerging threat to vegetation in Australia.

The exploration of these types of products forms part of Technigro's 10 year plan to become the industry leader in non-chemical strategies for combating weeds and controlling vegetation.

Technigro CEO Nick Bloor says this is a strong first step in order to achieve the company's goal.

"The processes that we have in place to use herbicides are absolutely best practice, which is evident in our tireless R&D efforts to ensure the most precise spray delivery techniques that help to eliminate spray drift and significantly reduce chemical use," Mr Bloor says.

"For example, developments like the DriftProof Sprayer and the SmartWiper are both technologies developed in-house that provide much more precise product delivery in the management of vegetation.

"While these innovations provide the absolute most efficient way of using the products at our disposal, we want to take our commitment to sustainable practices further by exploring the range of natural products, such as those produced by Bioprodex.

"As we all move towards cleaner, more sustainable ways of doing things, green options such as those produced by Bioprodex are going to become more and more prominent-it is my intention

that Technigro will be the leader in the use of such products."

Mr Bloor says that there is now a clear shift in the broader market, where consumers' environmental sentiment is starting to shape the ways that companies go about certain facets of their business.

"On a micro level, consumers are becoming more and more savvy about the environmental credentials of the products they use in their day-to-day lives," Mr Bloor says.

"This is something we're seeing extended on a global level, where companies that are able to prove a green point of difference are more likely to win contracts than those that are still relying on outdated technologies and processes.

"Since day one, we have always done everything in our power to ensure that we're carrying out our work in the most sustainable ways possible-exploration of products from companies such as Bioprodex is an extension of that."

He says that Technigro's moves toward reducing chemical usage is inherent in their Integrated Vegetation Management (IVM) approach to finding solutions.

"I don't believe that having an environmental conscience and being economically viable are mutually exclusive ideals, and as such, we are looking to introduce greener options wherever possible," Mr Bloor says.

"As vegetation managers, we are all extremely passionate about achieving high quality results for the the public, the environment and our clients, and we see investing in new and natural products as a smart investment in our future.

"Our IVM promise is to provide solutions are low cost, with less risk, and with guaranteed results-finding natural solutions is totally congruent with this promise."

In the news

Technigro CEO wins top management gong for Gold Coast

Technigro CEO Nick Bloor has taken out the title of Australian Institute of Management's (AIM) 2011 Owner Manager of the Year in the award's Gold Coast division.

The award ceremony, held today, saw managers from across the Gold Coast vie for a number of different titles, including Young Manager of the Year, Professional Manager of the Year, and Not-for-Profit Manager of the Year.

Mr Bloor says the award is the culmination of over 20 years at the helm of Technigro.

"From Technigro's inception in 1987, I've been adamant about ensuring we adhere to industry best practices, and in order to achieve this, I've maintained a strong 'hands on' approach to running the business and interacting with staff," Mr Bloor says.

"Having started life as a weed control company, Technigro is now one of the largest urban vegetation management companies in South East Queensland, and this award is really a reflection on the fantastic group of people that make up Technigro-their consistently outstanding effort makes my job a lot easier.

"I'm honoured to receive such a prestigious award from Australia's most widely recognised management organisation-particularly given the significant talent I was up against in this category."

The company recently launched its new Integrated Vegetation Management (IVM) approach, which Mr Bloor says is a holistic technique for managing public open spaces.

"IVM is the result of two decades of research and development, and marries industry leading technologies, best practice products, and integrated delivery processes with ISO certified safety practices.

"We create all-encompassing, long-term solutions at a lower cost, with less risks and guaranteed results, and it's our adherence to IVM techniques that allows us to do this.

"Since starting in 1987, it's been our mission to change the way vegetation is managed in Australia, and our ability to now be able to provide IVM solutions is a true testament to the quality of our staff and management team-all of whom have been so central to our success."



Technigro appoints Mitch McGuire to the position of Chief Innovation Officer

Mr McGuire was previously with the Australian Institute for Commercialisation (AIC), where over the last five years he has been consulting and coaching clients on innovation management, IP strategies and commercialisation planning, as well as facilitating, designing and attracting funding for many R&D collaborations between researchers and businesses.

At AIC, he also consulted to Queensland Health at the Gold Coast Hospital for several years implementing the hospital's first clinical innovation and commercialisation program.

More broadly, Mr McGuire has been involved in the health services, medical technology, environment and clean energy sectors, and has worked with a number of well-known Gold Coast businesses to implement innovation management systems, business model improvement frameworks, commercialisation advisory, and has provided extensive support to partner businesses with researchers.

His earlier work at AIC contributed to the development of their emerging consulting business, positioning the AIC as the national 'go-to' repository for commercialisation solutions and innovation advisory services.

Before the AIC, Mr McGuire worked for several years in regional development with the Gold Coast City Council's Economic Development branch, delivering a variety of economic development programs targeting job creation, trade and export development and investment attraction outcomes in the environment, health, medical and biotech sectors.

Mr McGuire says his position as Technigro's CIO will enable

him to draw on all of this previous experience supporting and managing innovation, and bringing it to fruition through various commercial pathways.

"My work to date has emphasized optimising firms' practices that make their business more competitive and profitable," Mr McGuire says.

"I've been involved with many stages of the new technology and business lifecycle in a variety of different businesses and industries, so I will be well-prepared to provide the latest, most relevant and practical advice to Technigro to help manage innovation, R&D and grow the business.

"I was inspired by the strength of Technigro's commitment to creating new value through innovation, and that this support cascades from the top down, permeating all facets of its operations. I look forward to working with the Technigro team to help build on this great work."



In the news

Technigro appoints Vin Naidoo as General Manager of Consulting

Technigro has appointed experienced environmental manager Vin Naidoo to the position of General Manager of Consulting.

After completing a Bachelor of Business degree at Queensland University of Technology in 1991, Mr Naidoo entered a role with Management Training Specialist Treasury, where he was promoted within a matter of months to the role of director of promotions and marketing.

Following this, he held managerial roles with Queensland Business Magazines, before moving on to the Local Government Association of Queensland (LGAQ) in 1994, where he took positions including senior marketing officer, Queensland Resource Exchange register project officer, and environment and health project officer.

After finishing with LGAQ in 2003, Mr Naidoo commenced working with Greening Australia Queensland as environmental services unit manager, where he moved to the position of executive manager of the organisation's southern Queensland operations by the end of his tenure in 2010.

In 2010 he became the Spotless Facility Services regional environmental manager for the south Queensland Defence Contract. In this role Mr Naidoo managed all issues related to the environment in delivering contract management and garrison support services to the Department of Defence in south Queensland.

Mr Naidoo says his prior experience at the helm of environmentally focused companies, working closely with

land managers, local, state and federal government, and the community sector will allow him to bring some new ideas to Technigro.

"Technigro have an already outstanding reputation within the market place, and I plan on utilising my prior experience and extensive networks to provide potential new directions to the company," Mr Naidoo says.

"Being able to operate in environmentally-conscious ways is integral for almost all businesses in the present climate, and Technigro's move to provide high-quality Integrated Vegetation Management (IVM) certainly sets them apart in the field.

"I have a fantastic team of consultants-when coupled with our passionate on-ground practitioners and astute management team, it provides me with every confidence in delivering results for Technigro as the head of the consulting division."



SOIL AMENDMENT & FERTILISER SPREADING



Soil amendments and fertiliser greatly improve the vigour and health of turf grass when correctly scheduled into a proactive management program. The application of soil amendments and fertiliser is a crucial component of any turf management program as it provides the desirable species with the nutrition required to stay healthy and out-compete the undesirable weed species.

The use of our quad mounted spreading equipment is perfect for the application of soil amendments and granular fertilisers due to their lightweight nature, eliminating surface damage and compaction issues.

Accuracy is assured through the use of a foam marking system, eliminating the costly wastage of product and uneven growth patterns due to missed areas or overlapping applications.

Benefits

- > Highly accurate and uniform application
- > Lightweight and suitable to go on any class of turf
- > Manoeuvrable with safe 360 degree vision
- > Low centre of gravity for maximum stability when working on uneven terrain
- > Safe operation with highly visible safety lighting and signage utilised
- > Ability to accurately and efficiently spread all granular amendments
- > Low sided hopper for easy filling and reduced risk of product wastage
- > Time efficient application ensures large programs can be completed quickly
- > Versatility in applications over a wide range of products and situations

Application

Our experienced team specialise in the precision application of all granular products using quad mounted spreading equipment. This includes combination products such as Ronstar + Starter or Pre M that allow the application of a pre-emergent weed barrier whilst applying fertiliser to the area being treated.

Technigro recommend conducting a soil test prior to amendment application to accurately identify and rectify soil deficiencies. This information is used in the development of an effective soil amendment and nutrition program that will ensure your turf is receiving the nutrition it requires all year round.

Our specialist Turf Services Team is available to support Turf Managers with every aspect of their turf management program from soil testing through to program development and service delivery. Contact us today to see how we can help you.

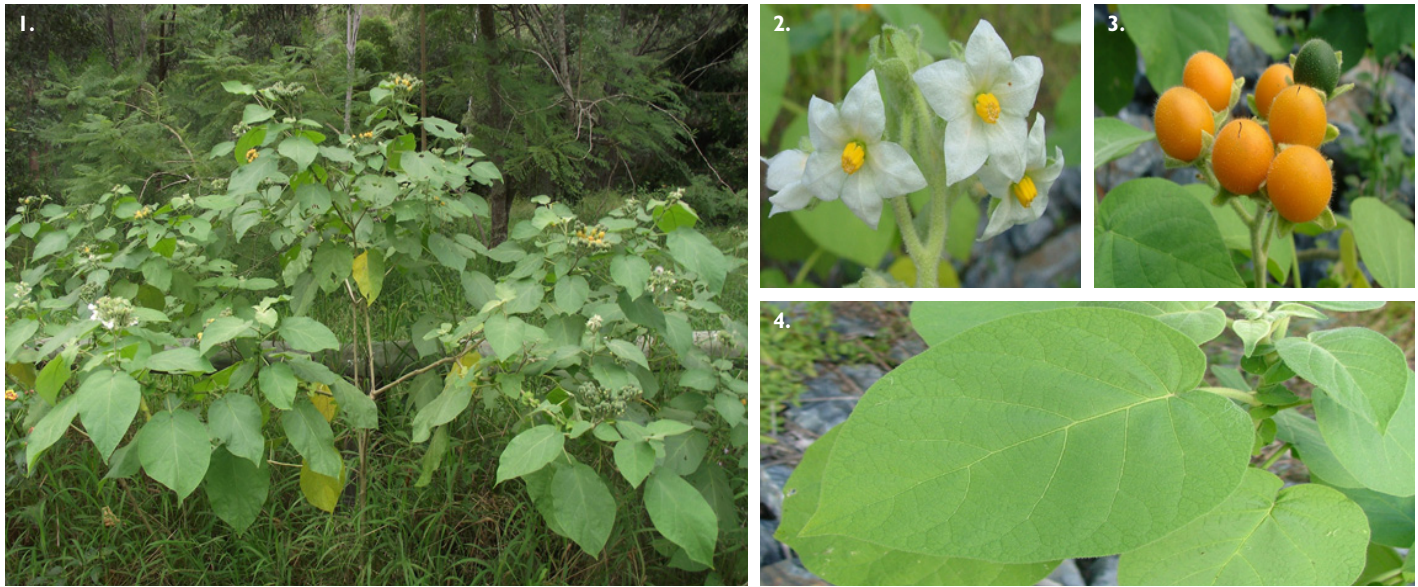
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for **smarter** solutions



1. Habit growing along Gap Creek Road in Kenmore Hills. 2. White star-shaped flowers. 3. Bright orange mature fruit. 4. Heart-shaped leaves.



Dwarf Tamarillo (*Solanum abutiloides*)

Introduced

Not Declared

Dwarf Tamarillo is a member of the Solanaceae plant family native to a small region of South America (i.e. north-western Argentina and Bolivia). This species has does not have any history as a weed overseas, but has become established in south-eastern Queensland and is beginning to spread.

Distribution

This species was first recorded growing in disturbed woodland on the edge of the Mt Coot-tha Botanic Gardens in Brisbane in 1985. Several further specimens of this plant were collected growing in the Mount Coot-tha area between 1998 and 2006. However, over the last couple of years there have been concerning reports of it appearing in surrounding suburbs including Toowong, Bardon and Kenmore Hills. For example, it is an emerging weed at the top of the Ithaca Creek catchment.

Description

Dwarf Tamarillo is a shrub (or rarely a small tree) usually growing 1-3 m tall. Its stems and leaf undersides are densely covered with tiny matted hairs and its alternately arranged leaves are borne on stalks 5-10 cm or more long. These leaves (10-22 cm long and 8-17 cm wide) are heart-shaped in outline with pointed tips and entire margins. Their upper surfaces are usually dark green while their undersides are greenish-white in colour. At the base of each leaf stalk is a pair of small, stalkless, leafy structures 15-30 mm long and 10-30 mm wide.

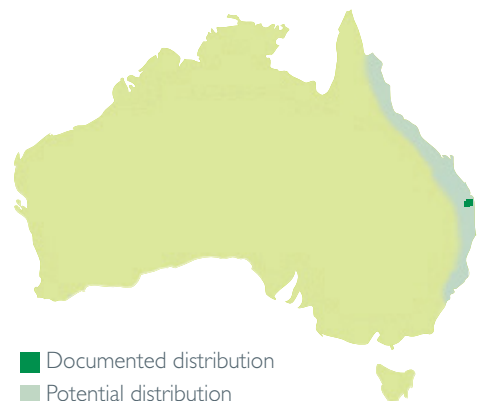
The white flowers are borne in clusters at or near the tips of the branches, with each cluster usually containing about 20 flowers (rarely up to 50). Each flower is about 2 cm across and is borne on a short stalk 5-7 mm long. These star-shaped flowers have five green sepals that are fused together at the base, five partially fused white petals, and five bright yellow stamens. The fruit are borne in an upright position and are usually covered with spreading hairs. These small egg-shaped fruit (about 10 mm long) turn from green to orange in colour as they mature. They contain numerous yellowish-brown seeds, each about 1.5 mm long.

Quick Facts

- > A shrub usually growing 1-3 m tall
- > Each of the heart-shaped leaves has a pair of small leafy structures at its base
- > Its white star-shaped flowers are usually borne in clusters of about twenty
- > Small egg-shaped fruit that turn from green to bright orange as they mature

Habitat

Dwarf Tamarillo is a potential weed of open forests, rainforest gaps and margins, riparian vegetation, urban bushland, forestry plantations and disturbed sites in sub-tropical, tropical and warmer temperate regions.





1. Young plant. 2. Close-up of hairy stems showing pairs on small leafy structures in leaf forks.

Reproduction and Dispersal

This species mainly reproduces by seed, though it may sucker if damaged. The seeds are almost certainly dispersed by birds and other animals that eat the bright orange mature fruit.

Why is it an Emerging Threat?

In its natural range, Dwarf Tamarillo grows as a weedy plant on stream banks, in bushland, and in rocky sites. In Australia, this plant has been found growing in disturbed bushland, along roadsides and in riparian vegetation along creeks. It also has the potential to invade open forests and gaps and margins in rainforest habitats. Like other species in this genus, it appears to be readily spread by animals that eat its fruit and has the potential to become a serious environmental weed.

Control Methods

Individual plants can be manually removed with the aid of suitable tools, but care must be taken to remove the crown, as plants may regrow from the base. There is no information readily available on the control of Dwarf Tamarillo with herbicides, but it is very similar in nature to Wild Tobacco and may respond in a similar way. Some of the products registered for control of Wild Tobacco can be used to control similar environmental weeds such as Dwarf Tamarillo via APVMA off-label Permit 11463 (see <http://permits.apvma.gov.au/PER11463.PDF>).

For example, some formulations of triclopyr + picloram, fluroxypyr or 2,4-D may be applied as a foliar spray directly to the target plants. Other formulations of these same chemicals can be applied as a cut stump or basal bark treatment. Please read the permit carefully for the exact products and rates to use and, unless otherwise stated in this permit, the use of these products must be in accordance with the instructions on their labels. Within other state boundaries, it is recommended that all managers consult any relevant permits or government legislation applicable to their region.

Look a-likes

Dwarf Tamarillo is very similar to some other introduced species including Wild Tobacco (*Solanum mauritianum*) and Tamarillo (*Solanum betaceum*). However, Wild Tobacco has purple flowers and rounded fruit, and its leaves are not heart-shaped. Tamarillo does have heart-shaped leaves and white flowers, but it has larger fruit that hang downwards and its leaves do not have a pair of small leafy structures at their bases.



Top. Purple flowers and round fruit of Wild Tobacco.

Bottom. Heart-shaped leaves and drooping fruit of Tamarillo.

The control methods referred to in Weed Watch™ should be used in accordance with the restrictions (federal and state legislation and local government laws) directly or indirectly related to each control method. These restrictions may prevent the utilisation of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, Technigro does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

This information has been developed with the assistance of Dr Sheldon Navie. Photographs are also courtesy of Dr Sheldon Navie © Technigro Australia Pty Ltd 2011

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