



IVMP
INTEGRATED VEGETATION
MANAGEMENT PROJECT

Newsletter Spring 2009

Finding a better way to manage vegetation

Project Manager Update



Welcome to the Spring edition of the IVMP Newsletter.

This edition takes a closer look at the IVMP Project's Lead Partner Technigro, highlighting their commitment to finding better ways to manage vegetation, along with some of the successes they have realised through implementing integrated vegetation management practices into their work practices.

A link to the project update for Year Two is also provided, keeping you up to date with the progress being made with this ground breaking project.

With details on the successes of the recent visit by collaborating Research Scientist Travis Gannon, from North Carolina State University and our Project Partner's Forum, be sure to look out for our Summer edition in your inbox soon.

Kind Regards, Steve.

Introducing Technigro - IVMP Lead Partner

Technigro is the lead partner in this collaborative research project. A first for Australia, the IVMP was established with the fundamental aim of finding a better way to manage vegetation.

Mowing is costly, dangerous and resource intensive. With the knowledge that current practices are unsustainable, the clear goal for the IVMP team is to develop a sustainable model for managing mown vegetation in public open spaces, such as parks, reserves and roadsides.

Over 3 years the project will trial innovative strategies using plant growth regulators, herbicides and nutrition, in combination with mowing and other practices, to determine the most economical, environmentally friendly and sustainable approach.

Technigro is proud to partner with other industry leaders as we work to develop smarter solutions that are safer, more cost effective and better for our planet.

Technigro has already begun to utilise an integrated approach to vegetation management on their Road Maintenance Performance Contract with the Department of Main Roads. Read more about the success of this approach on this contract in the article below

For further information about Technigro, visit www.technigro.com.au



Top: The Technigro Team
Above: Working in Natural Areas

Project Partners



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IVM Practices Implemented on DMR Contract

In 2008, Technigro was awarded a Road Maintenance Performance Contract (RMPC) with the Department of Main Roads (DMR) to provide all vegetation management requirements for the network of roads on the western side of the M1 in the South Coast Hinterland District. Maintaining this particular road network involved a combination of vegetation management practices including clearing, mowing, herbicide application, declared weed management and other specialist activities such as the management of roadside trees and roadside litter collection.

A variety of major grass species populated the roadside environment which made managing the mown environment a particular challenge, given the propensity of many of the species present to quickly breach intervention heights and prematurely trigger a costly off-schedule mowing event. For this reason, a wide range of strategies have been implemented specifically to manage the taller growing species responsible for this problem.

Through implementation of this integrated approach to vegetation management, Technigro has been able to achieve significant efficiency and productivity gains that in turn have delivered many benefits to the customer. These benefits include improved quality, safety and environmental benefits, all of which have contributed to a 25% reduction in the net cost associated with the mown vegetation management.

"The lessons learned from a season on this contract, along with innovations borne from our partnership on the IVMP Project, will now be made available to other customers to assist them in the coming growing seasons" advised Technigro CEO, Nick Bloor, during a recent presentation to Council Vegetation Managers. "Our ultimate aim is to lower the net cost of vegetation management and in the process, help our customers to stretch each maintenance dollar even further".

Field Efficacy Trials for Year Three of the IVMP Project were finalised during a visit from Travis Gannon from North Carolina State University in August. Travis met with the IVMP Project Technical Team and conducted several educational forums. For more information on these events or the proposed field efficacy trials you can contact us or sign up for the IVMP newsletter at www.ivmp.com.au



Top & Above: IVM practices in use.

IVMP Year Two Field Efficacy Trials

Preparation for Year Two of the IVMP commenced in August 2008 through September 2008, with the Technical Team reviewing Year One trial data, finalising the protocols for the Y2 Phytotoxicity trials and developing protocols for the field efficacy trial work.

Members of the Technical Team also sought approval for the use of suitable trial sites for the field efficacy trial work in both Queensland and New South Wales throughout October and November 2008. Project Partners Brisbane City Council approved a site within the Tinchi Tamba Wetlands Reserve at Boondall, Gold Coast City Council approved a site within Albert Park, Broadbeach Waters and with support from Hornsby Council in Sydney a trial site within Fagan Park was established.

The continuation of screening trials to evaluate products considered to have potential in assisting in the management of the undesirable grass species was undertaken in Y2 by the Turf Research Scientists at the DPI Redlands Research Station.

Evaluations commenced in December 2008 assessing the phytotoxic effects of the IVMP products on twenty eight desirable turfgrass species during the summer season of 2008. The trials were placed over the same plots as the Y1 Phytotoxicity trials, ensuring two years of data over corresponding plots undertaken during two different seasons; Autumn Year 1 and Summer Year 2.

Field efficacy trials also commenced in December 2008, with Valencia Ecosystems engaged to complete the trial work at two sites, Tinchi Tamba in Brisbane and Fagan Park in Sydney. The focus of these field trials was to evaluate the efficacy of selected growth regulators and herbicides in managing problematic grass species in open space reserve situations, with particular emphasis as to their effects on growth regulation, seed head suppression and species composition conversion.

The field efficacy trials ran for a period of three months with repeat applications of sixteen different treatments, as determined in the trial protocols, applied throughout the peak growing season. The results of the field efficacy trials were particularly encouraging, highlighting both seed head suppression and control options for the target weed species Bahia grass (*Paspalum notatum*) and other *Paspalum* species including a widespread problem in Australian amenity turf, Common *Paspalum* (*Paspalum dilatatum*).

Results from Y2 trial data suggest a number of IVMP treatments with potential in suppressing growth and seed head production. This would translate into significant broad ranging benefits to asset owners and those managing mown vegetation.

As an example, in situations where areas are dominated by an undesirable such as Bahia grass, the trial data suggests that there would be a range of environmentally responsible, sustainable options available to significantly reduce mowing requirements during the peak growing season.

Further to this, in situations where areas are dominated by desirable species, the trial data suggests that the IVMP has unearthed a number of tools that may be suitable for use in the removal of undesirable *Paspalum* species using either unscheduled or Schedule 5 herbicides with a far greater degree of human and environmental safety than the arsenate based products currently used.



Top: Field efficacy trial site.

Above: Redlands trial site

To further explore these exciting developments, in June 2009, Dr Sheldon Navie from the University of Queensland joined the IVMP Technical Team in a Research Support role. Dr Navies' focus is to review the IVMP trial data, other IVM research data from similar projects and to communicate with the various project partners, collaborators and research agencies both in Australia and internationally.

Also in August 2009, the IVMP has arranged for Research Scientists from the North Carolina State University (NSCU) to visit Australia. This visit has been planned to coincide with a number of events in Australia, including:

- the Vegetation Manager's Forum to update the IVMP Project Partners,
- a review of Integrated Vegetation Management (IVM) Programs implemented by Technigro to manage roadside vegetation and amenity turf in partnership with Gold Coast City Council and the Queensland DOT, and
- the final planning meetings of the IVMP Technical Team to determine the strategy for Year Three of the project.