

In 2004 the Australian Government committed \$40 million to a national programme to identify Australia's most threatening weeds and to implement measures for their control. That commitment has since been increased to \$44.4 million.

The National Weeds Strategy prepared in 1999 drew attention to the fact that "Weeds are among the most serious threats to Australia's primary production and the natural environment". Through their effects on production, operating costs and access to markets for a diversity of agricultural products, weeds are estimated to cost Australian agricultural industries around \$4 billion per annum. They are also known to adversely affect water quality, biodiversity and the integrity of many of our natural ecosystems.

Weed competition is considered an increasingly major threat to the survival of various plant species.

In addition to investments in strategic on-ground control and eradication of weeds and awareness-raising, the Defeating the Weed Menace programme is also funding research into cost-effective control and management for key target weeds.

The Department of Agriculture, Fisheries and Forestry and the Department of the Environment and Water Resources which together are responsible for the Defeating the Weed Menace programme, have commissioned Land & Water Australia to manage a national research component of the programme.

The goal of the research and development component of Defeating the Weed Menace is

To generate new knowledge to prevent the development of new weed problems, to reduce the impacts of existing weeds of national priority, and to build capacity for their management into the future.

The scope of the Defeating the Weed Menace research work encompasses weed issues across Australia that are having an impact on extensive land systems and conservation areas, where the benefit is largely to the community as a whole.

What are the research priorities?

The Australian Government has identified three priority themes, each of which includes a number of sub-themes, to guide the funding of research to improve the eradication and control of weeds that are nationally significant.

These can be summarised as follows.

Theme 1 Reducing the rate of emergence of new weed problems

- Assessing risk of different pathways of weed ingress.
- Land use change impacts on weed incursion.
- Developing 'best practice' early detection, survey and eradication of potential weed species.
- Developing efficient methods for surveying and eradicating agreed emergent weeds, and options.

Theme 2 Reducing the impact of existing weed problems of national priority

- Identifying biocontrol agents for priority weed species.
- Developing new integrated weed management strategies that incorporate an understanding of landscape scale ecological processes.

Theme 3 Supporting national frameworks and capacity for sustainable weed management

- Quantifying the impacts of weeds on sustainability and the environment (including the ecological costs of weeds) and the relative benefits and costs of different control measures.
- Providing knowledge to support a national information system for weeds.

Each of these themes and sub-themes is being addressed either through research projects selected from among responses to a call for research proposals, or through commissioned research.



More information about projects currently in progress can be obtained by visiting:

- <http://www.lwa.gov.au/weeds>

Building partnerships for better weed management

As is widely recognised, weeds are a major problem of national significance, in which many different sectors and individuals have a considerable interest. Agricultural producers both in the pastoral industry and in more intensive agriculture, bear the burden of weed impacts. National Park managers, local governments, and others responsible for public lands struggle to prevent weed invasion and spread. The nursery industry is striving to reduce the extent to which plants introduced for garden use have added to Australia's weed problem. Both State and Australian governments are responsible for policy and management aspects of weed control and eradication.

The need for new knowledge to assist in improving both the prevention of weed invasion and eradication ranges over a diversity of subject areas reflected in the research themes and sub-themes of the Defeating the Weed Menace programme. There are numerous organisations and individuals able to contribute to such knowledge.

Partnerships and shared institutional arrangements are vital to ensuring both maximum return on research investment and the likelihood that the results generated will be of value to the range of potential users.

As the manager of the Defeating the Weed Menace R&D, Land & Water Australia is very aware that there are many other activities contributing to the eradication, control and management of weeds across Australia. Partnerships with others involved in weeds research, collaboration and a quest for synergies with existing work are being sought throughout the life of the Defeating the Weed Menace R&D component.

Managing knowledge to maximise adoption

As a research investor, Land & Water Australia recognises that research needs to be relevant and useful in order to facilitate its uptake. Defeating the Weed Menace research is largely directed to generating new knowledge based on high quality science that is designed to improve weed management. Knowledge generated by the Defeating the Weed Menace research projects will be synthesised with other weed related knowledge sources and delivered through communication efforts that meet the needs of stakeholders.

One important aspect of achieving this integration of sound scientific results into weed management, policy and practice is to ensure that research projects identify stakeholders early in the project phase, and accordingly identify stakeholder needs and opportunities for facilitating adoption of knowledge.

This will be done by applying Land & Water Australia's Knowledge and Adoption strategy to these projects. This includes preparation of knowledge and adoption plans at the individual project level and across the broader Defeating the Weed Menace research portfolio.

For more information on Land & Water Australia's Knowledge and Adoption strategy, visit

- www.lwa.gov.au



For further information about the national R&D component of the Defeating the Weed Menace programme, please contact:

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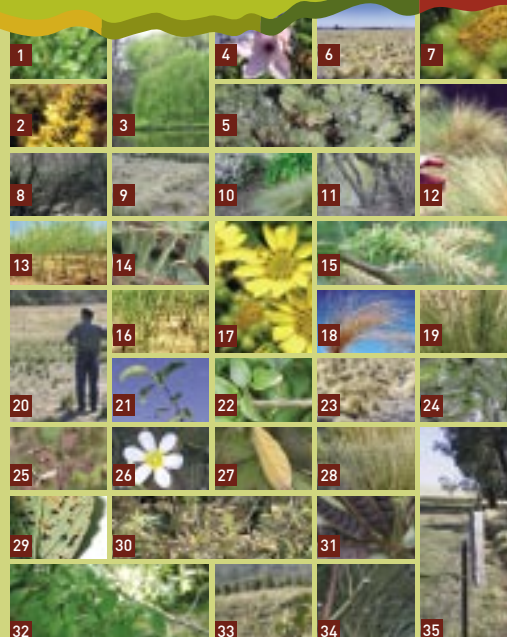
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