



Australian Government

Land & Water Australia

Defeating The Weed Menace R&D: Project Summaries

Fourteen projects addressing four separate themes were selected during an initial funding round. These are:

Developing 'best practice' early detection, survey and eradication of potential weed species

- **Managing weeds under future scenarios for environmental flows in the Murray River**
CSIRO Entomology

This project aims to determine site indicators that will clarify risk with respect to weed invasion, and how this risk is affected by patterns of flooding. This will assist in reducing the spread of weeds in riparian and floodplain environments and in restoring native vegetation in systems that are degraded.

Assessing risk of different pathways of weed ingress

- **Modelling climate change impacts on sleeper and alert weeds**
CSIRO Entomology

This project will model the change in distribution of sleeper and environmental alert species due to climate change, and will assist in preparing a climate change weed risk map for Natural Resource Management regions across Australia.



- **Pathway risk analysis for weed spread within Australia**
University of New England

This project is designed to ascertain the ways in which weeds spread once in Australia and to assess the relative risks or threats from different pathways of weed spread. This will enable better targeting of efforts to reduce the movement of high risk weeds around Australia.

- **Serrated Tussock: Managing native pastures to prevent invasion**
Charles Sturt University

This project aims to develop better management practices to stop the spread of Serrated Tussock to new paddocks, new regions and uninfested native grasslands, by better understanding the management and biophysical factors that affect its spread on-farm.

For more information on these research projects, please contact:

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Identifying biocontrol agents for priority weed species

- **Biological control & ecology of Alligator Weed**
CSIRO Entomology

This project builds on the outcomes of an NHT-funded project (2003-06) to continue host testing of insects for the biological control of Alligator weed and to continue ecological studies to underpin better management of the weed in Australia.

- **Development of new biocontrol agents for Parkinsonia**
CSIRO Entomology

This project will continue surveys of Parkinsonia in Central America, to identify a larger pool of potential biological control agents and to prioritise them, based on safety and efficacy, ready for use in controlling this Weed of National Significance in Australia. Working in parallel with studies on Bellyache Bush, currently funded by Meat & Livestock Australia, will bring significant efficiencies for this project.

- **Improving management of Salvinia in temperate aquatic ecosystems**
University of Wollongong

This project is designed to improve understanding of the effects of invasion by the aquatic weed Salvinia, a Weed of National Significance in temperate regions, and to test biocontrol agents showing promise for controlling it in non-tropical areas.

- **Importation and release of a new biological control agent for Scotch Broom**
Victorian DPI

This project aims to introduce and test a new biocontrol agent, currently available in New Zealand, to better control the invasive weed, Scotch Broom.

- **Boneseed Rust: A highly promising candidate for biological control**
CSIRO Entomology

This project aims to improve the effectiveness of the biological control program against Boneseed, a Weed of National Significance, which occurs mainly in Victoria, South Australia and Tasmania, using a rust species likely to bring good results.

- **Enhancing Noogoora Burr biocontrol in northern Australia**
CSIRO Entomology

This project aims to improve biological control of the highly invasive weed Noogoora Burr in tropical northern areas of Australia, using a rust species with good prospects of activity.

- **Importation, rearing and field release of the Cape Broom Psyllid**

SA Research and Development Institute

This project is designed to enable the importation, rearing and trial release of a sap-sucking insect (psyllid) effective in controlling the invasive woody legume Cape Broom, infestations of which occur across all temperate states in Australia.

Land use change impacts on weed incursion

- **Land use effects on soil nutrient enrichment: Risks for weed invasion**
CSIRO Entomology

By improving understanding of interactions between disturbance levels associated with land use change, nutrient levels in the soil and weed invasion, this project will assist in reversing the degradation of native remnants on productive land and in near-urban areas which are heavily impacted by weeds.

- **Effect of land use and peri-urban development on aquatic weeds**
CSIRO Entomology

By quantifying the current aquatic weed problems in peri-urban areas that are undergoing rapid development, and determining the extent to which both weed introduction and changed environmental factors influence aquatic weed spread, this project will assist in improving management practices to reduce weed impacts.

- **Understanding and determining mechanisms to prevent weed invasion in coastal vegetation**

University of Wollongong

By improving understanding of which types of land disturbance influence weed invasion and how weeds replace native species, this project will assist in designing management practices to restore native vegetation in coastal areas without the need for long-term maintenance.

