Submission 073.1
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Australian Government
Department of Agriculture, Fisheries and Forestry

House of Representatives Standing Committee on Climate Change, Environment and the Arts, inquiry into Australia's biodiversity in a changing climate public hearing on 12 October 2012.

The following information is provided in response to a question on notice from Ms Marino (page 11) on public funds invested in research and management of myrtle rust across portfolios, and state portfolios. The question was referred to Department of Agriculture, Fisheries and Forestry from the Department of Industry, Innovation, Science, Research and Tertiary Education (see submission 87).

Myrtle rust - eradication program

The Australian Government and state and territory governments provided $3.53 million to fund the national eradication program for Myrtle rust that operated between April 2010 and December 2010 under the Emergency Plant Pest Response Deed. The Australian Government contributed half of these costs or $1.75 million. Eradication proved to be not possible because of the nature of the rust, which produces millions of microscopic spores that can be readily spread by wind. As a consequence it was agreed by all jurisdictions that the only option was to transition to living with Myrtle rust, but undertaking several lines of investigation to assist this transition to be managed to the greatest extent possible.

Myrtle rust - transition to management program

- The Australian Government is investing $1.5 million from July 2011 to June 2013 to fund a transition to management program for Myrtle rust. The *Plan for the Transition to Management of Myrtle Rust* [1] comprises a series of research projects aimed at improving knowledge of the disease, immediate actions to manage and slow down spread, chemical control options and resistance breeding options.
- The plan and implementation progress reports are available on http://myrtlerust.net.au.
- A transition to management group chaired by the Department of Agriculture, Fisheries and Forestry and comprising affected state and territory agencies, forest industry representatives and some technical specialists has been established to oversee the implementation of the program and monitor its delivery of the program outcomes. Details for projects and funds committed to date[2] by the Australian Government are as follows:

<u>Taxonomy and identity of the pathogen</u>

Agency	Project	Funding
NSW Department of Primary Industries	3.1 Genome sequencing of Myrtle rust and guava rust.	$175,000
CSIRO	3.2 Determining infectivity of Myrtle rust at specific developmental stages and investigating nuclear behavior using microscopy techniques.	$23,549
NSW Department of Primary Industries	3.3 Collection of guava rust in South America for genome sequencing and classification projects - pending Brazilian export requirements.	$60,000
University of Tasmania	3.4 Classification and diversity of the	$60,000

[1] Available at http://myrtlerust.net.au/wordpress/wp-content/uploads/2011/11/Transition-to-Management-Plan-v1-Nov-2011.pdf

[2] Some projects differ from those presented in the plan due to revisions

	guava rust complex using molecular and morphological characters.	
Sydney Royal Botanical Gardens	3.5 Family placement of Myrtle rust and guava rust, by DNA extraction from both myrtle and guava rust families to determine exact species.	$60,000

Potential impact and distribution

Agency	**Project**	**Funding**
The University of Sydney	Genetic basis of the virulence of Myrtle rust across its geographic range in Australia. Evaluating resistance of selected Myrtaceous species. Establishing a national myrtle rust resistance screening facility.	$385,836

Chemical control options

Agency	**Project**	**Funding**
The University of Sydney and NSW Department of Primary Industry	Gathering efficacy data to identify the most effective chemicals for controlling myrtle rust.	$223,859

Resistance breeding options

Agency	**Project**	**Funding**
Research School of Biology, Australian National University	6.1Discovery of genetic markers for resistance to Myrtle rust infection in Myrtaceae (excluding members of tribe Eucalypteae).	$121,460
CSIRO	6.2 Discovery of genetic markers for resistance to Myrtle rust infection in members of tribe Eucalypteae.	$100,000

In addition, CSIRO has made the following contributions to Myrtle rust research:

CSIRO	Taxonomy and Identity of the Pathogen.	$190,000 ($25,000 from the Myrtle rust transition to management program)
CSIRO	Resistance Breeding Options.	$178,000 ($100,000 from the Myrtle rust transition to management program)
CSIRO	Strategic management of *Uredo rangelii* rust.	$87,500 ($69,000 from the eradication program)

Related projects

The Australian Government, through the Department of Sustainability, Environment, Water, Populations and Communities has allocated $311,300 to mitigate the impact of the disease on World Heritage rainforest areas in Queensland.

The Queensland Government has committed $850,000 for complementary Myrtle rust projects to increase knowledge of Myrtle rust under Queensland conditions; engage communities to reduce the impact of the rust; and assist the hardwood plantation industry to manage the impacts of the rust.

The Cooperative Research Centre for National Plant Biosecurity has committed $200,000 for projects to increase understanding of eucalyptus rust epidemiology and host specificity to determine disease impact in Australia.

The Rural Industries Research Development Corporation (RIRDC) has made a commitment of $300,000 over three years (2011-12 to 2013-14), for Myrtle rust research. This work is complemented by funds provided by the Australian Native Food Industry Ltd ($21,250) (2011-12 to 2012-13) and the Australian Tea Tree Industry Association ($37500) (2011-12 to 2013-14).

A RIRDC report *Assessing Myrtle rust in Lemon Myrtle Provenance Trial* released in October 2012 was funded from RIRDC core funds that are provided by the Australian Government.