



## **PHYTOPHTHORA RESEARCH AND MANAGEMENT IN AUSTRALASIA**

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Since the 3<sup>rd</sup> IUFRO meeting on Phytophthoras in Forests and Natural Ecosystems held in Germany 2005 there have been a number of advances and changes to the status of Phytophthora in Australasia.

- Molecular studies of cultures held in herbaria are indicating that many isolates given names based on morphology are now considered new species.
- The Commonwealth Department of Environment and Water has provided substantial funding to research various aspects of the biology, pathology and control (including eradication) of *P. cinnamomi* around Australia.
- New *Phytophthora* species have been isolated from a number of plant species.
- The Collaborative Research Centre for National Plant Biosecurity has funded two projects relating to *P. ramorum* and the susceptibility of Australian plant species.
- Commonwealth funded National Resource Management (NRM) groups are now providing substantial resources to the extensive and detailed mapping and management of *Phytophthora cinnamomi* in crown and non-crown managed estate and to the prioritising of which natural ecosystems are to be prioritised for management. These NRM's involve substantial involvement from the wider community.
- The Western Australian Government has provided substantial funding to the management and containment of *P. cinnamomi* particularly in the Fitzgerald River National Park which is listed as one of the global biodiversity 'hotspots'.
- The Centre of Phytophthora Science and Management has a number of research projects looking at
  - the mechanisms of action of phosphite (phosphonate) in planta as well as the use of other potential enhancers to increase the persistence of control.
  - new methods to determine the concentrations of phosphite *in planta*
  - development of a woody plant 'model' system as an alternative to understand the mechanisms of action of phosphite and pathogenicity of *P. cinnamomi*.
  - The role of *Phytophthora* species other than *P. cinnamomi* in tree declines in Western Australia.

The above will be discussed in detail.