

## ***Puccinia psidii* ? what next?**

**Morag Glen and Caroline Mohammed**

Tasmanian Institute of Agriculture, University of Tasmania, AUSTRALIA

*Puccinia psidii* was first described from guava in Brazil in 1884. Several other rust species from Myrtaceous hosts in South America have subsequently been described, but more recently have been considered synonyms of *P. psidii*. This species was first recorded on *Eucalyptus citriodora* (now known as *Corymbia citriodora*) in 1943 and became a major pest of *Eucalyptus* plantations in Brazil. The impact on eucalypts, the wide host range in the Myrtaceae and the high risk of undetected spore movement prompted concerns about the likely impact of this pathogen should it become established in Australia, which is a centre of Myrtaceae biodiversity. Biosecurity reviews of the plantation forestry and garden nursery industries identified *P. psidii* as an emergency plant pest (EPP) in Australia. Concerns were heightened when incursions of this rust were detected in Hawai'i in 2004 and Japan in 2007. In 2010, this rust was detected in Australia. It was initially observed on *Agonis flexuosa*, the first of many new hosts for this pathogen. The distribution and host range of the rust grew rapidly, with geographic spread greatly enhanced by human-mediated movement of infected plants. The source of the incursion has not been determined, though microsatellite analysis has established links to populations from North rather than South America. A range of studies have been initiated with a view to advance knowledge of this rust and to inform management strategies in affected industries. *P. psidii* continues to spread around the globe, with a report from China in 2011. Managers of *Eucalyptus* plantations in countries that are currently free of this disease should consider their biosecurity practices in light of the lag time that occurs between arrival and establishment of a pest incursion, its detection and publication of disease reports.

Corresponding Author:

Morag Glen, Senior Research Scientist

Tasmanian Institute of Agriculture

Private Bag 98, Hobart, Tasmania, Australia, 7001.

e-mail: Morag.Glen@utas.edu.au