



# Australia's National Plant Biosecurity Diagnostic Strategy

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# Plant Health Australia

- Not for profit, **public company**, member based
- Provide **national coordination** to improve for plant biosecurity
- Custodians of the **Emergency Plant Pest Response Deed**
- Work with Members to **build partnership arrangements** and broker and facilitate between government and industry in the national interest



# PHA members

## Government members



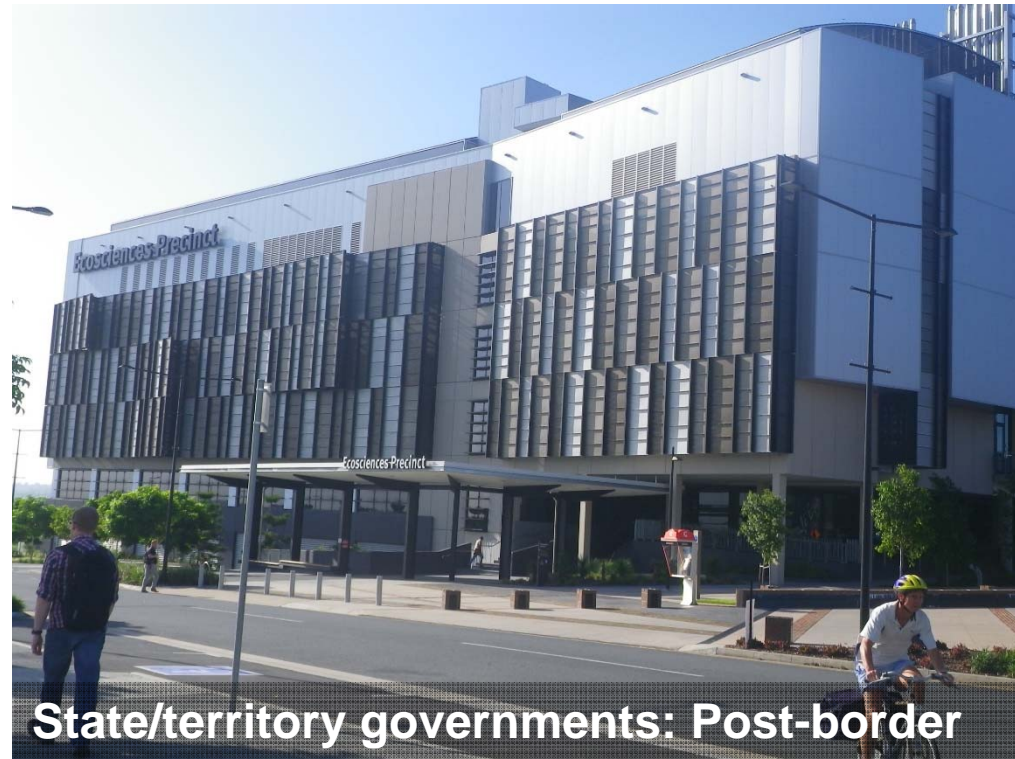
## Associate members



## Industry members



# Diagnostics in Australia



# A comparison



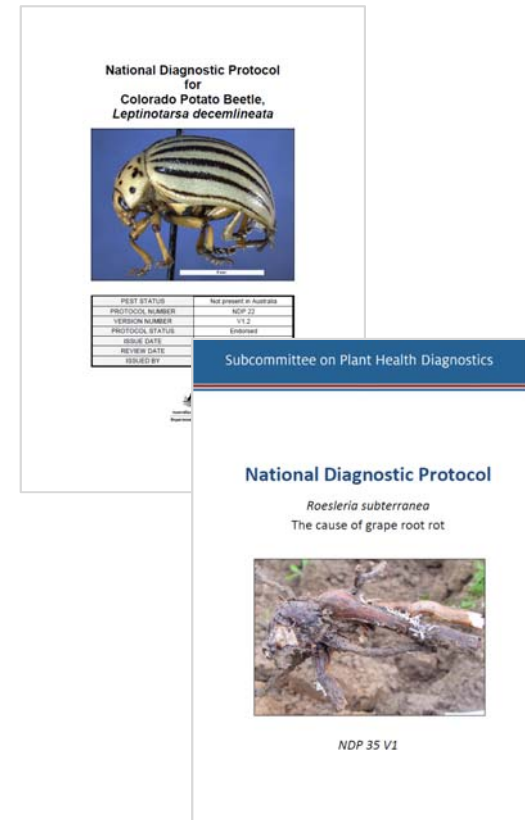
24 million

323 million

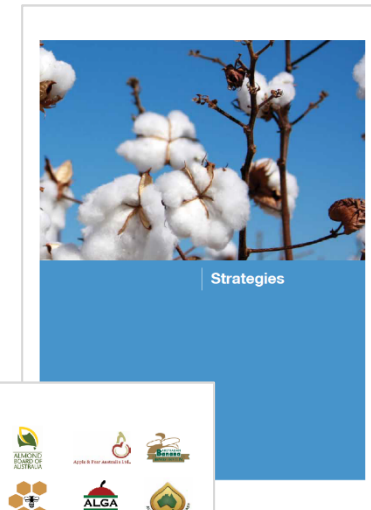
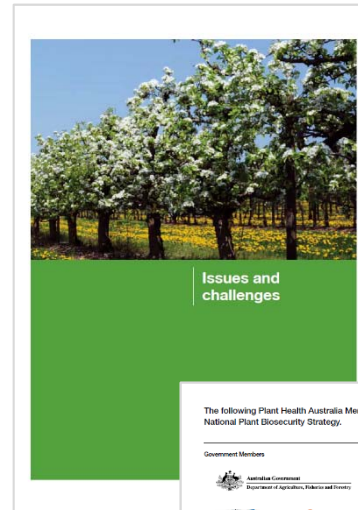
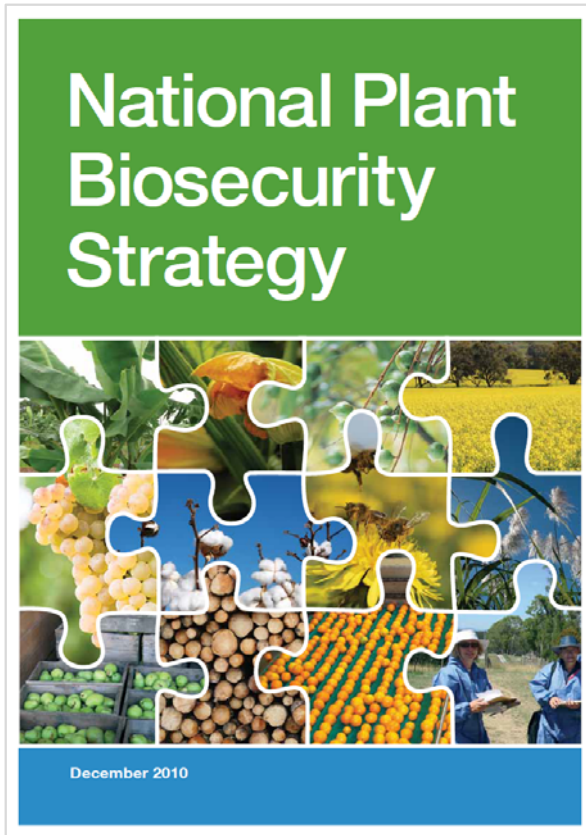


# Building on standards

- National Diagnostic Protocols were the **initial focus**
- Definitive **taxonomic identification** of pests
- **Nationally agreed** for use in emergency responses
- Supported by four **reference standards**



# Plant biosecurity – 2020



The following Plant Health Australia Members endorse the National Plant Biosecurity Strategy.

**Government Members**

- Australian Government - Department of Agriculture, Fisheries and Forestry
- ACT Government
- NSW Government - Industry & Investment
- Queensland Government
- South Australian Government - Primary Industries and Resources SA
- Tasmania Government - Primary Industries and Fisheries
- Victoria Government - Department of Primary Industries and Fisheries
- Western Australian Government - Department of Agriculture and Food

**Associate Members**

- LPPS
- BSES
- Plant Biosecurity
- Australian Government - Centre for Research and Prevention of Plant Quarantine
- GRDC - Grains Research and Development Corporation
- HAI - Horticulture Australia Limited
- FRAC - Fresh Produce Australia

**Industry Members**

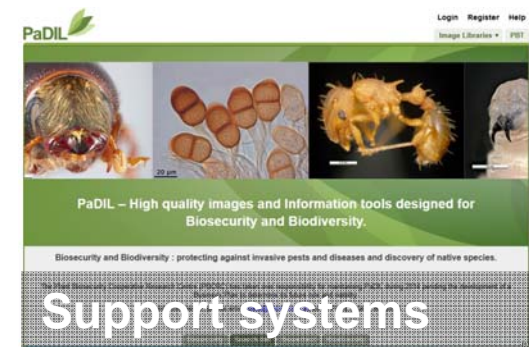
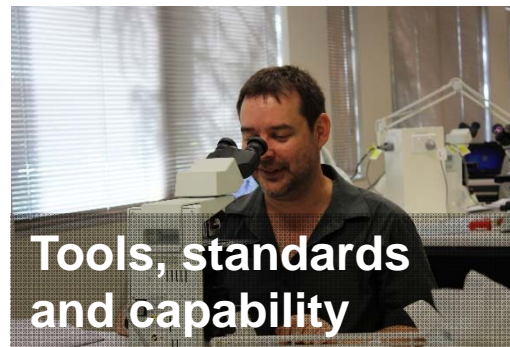
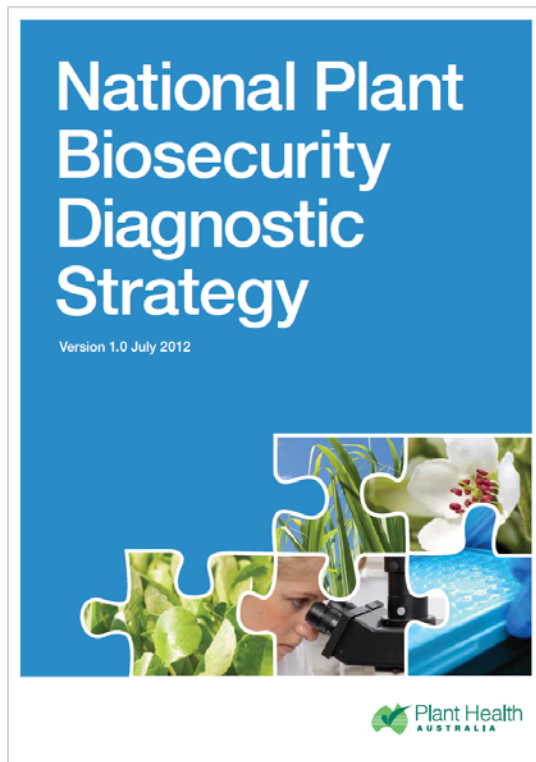
- ADFA
- AMTA
- ANIC
- ALGA
- ANCC
- AUSVEG
- CANEGROWERS
- CITRUS AUSTRALIA
- COFFIN AUSTRALIA
- GPA
- growcom
- Summerfruit
- WGGGA

[www.planthealthaustralia.com.au/npbs](http://www.planthealthaustralia.com.au/npbs)



**NPBDN**  
National Plant Biosecurity Diagnostic Network

# Diagnostic Strategy (NPBDS)



<http://plantbiosecuritydiagnostics.net.au/resource-hub/documents/national-plant-biosecurity-diagnostic-strategy/>





# Tools, standards and capability



~350 High Priority Pests

## Endorsed National Diagnostic Protocols

Brown rot	Black rot	Huanglongbing (asiatic strain)
Plum pox virus	Rice blast	Mal Secco
Avocado thrips	Potato mop top virus	American serpentine leaf minor
Poinsettia thrips	Potato wart	Russian wheat aphid
Sudden oak death	Peach X disease	Grapevine leaf rust
Pierces disease	Zebra chip	Lentil rust
Potato spindle tuber viroid	Karnal bunt	Pine gall rust
Bacterial ring rot of potato	Potato/tomato psyllid	Pyriform scale
Citrus canker	European canker	Pulvinaria scale
Blackline	Colorado potato beetle	Grape root rot
Chestnut blight	Glassy-winged sharpshooter	
European stone fruit yellows	Red turpentine beetle	



# National Plant Biosecurity Diagnostic Network

## NPBDS Recommendation D1

*Develop a nationally integrated plant biosecurity diagnostic network that underpins Australia's plant biosecurity system*

→ Launched in December 2011



# NPBDN drivers

- Improving communication and **linkages** between diagnosticians
- Diagnostic **capability** and **capacity**
  - Directed professional development opportunities
  - Proficiency testing program
  - National forum
- Addressing **national diagnostic** issues



# Positive NPBDN initiatives



Residential program



Training workshops



Diagnostician's workshops



# Annual Diagnosticians' Workshops

- National meeting for the NPBDN
- **Networking** opportunity for practicing plant biosecurity diagnosticians
- Linked to **basic training** workshops
  - 2014: Bioinformatics
  - 2015: Aphid-virus interactions
  - 2016: Reference collections





**ADW2014**



**ADW2015**



**ADW2016**

# International diagnostic linkages

- International Plant Protection Convention
- Asia and Pacific Plant Protection Convention
- QUADS
  - (US, Canada, New Zealand and Australia)
- Association of Southeast Asian Nations
- New Zealand



# National diagnostic priorities





# Acknowledgements



 **NPBDN**  
National Plant Biosecurity  
Diagnostic Network

# More information

The screenshot shows the homepage of the National Plant Biosecurity Diagnostic Network. At the top left is the logo, a red stylized plant with the text "National Plant Biosecurity Diagnostic Network". To the right of the logo is a navigation menu with links for "HOME", "ABOUT NPBDN", "SPHD", "RESOURCE HUB", and "NEWS & EVENTS". A red "SEARCH" button is located to the right of the menu. Below the navigation is a grid of eight content blocks, each with a representative image, a title, a short description, and a red button with the title in white text.

Join the network	Tools Directory	Members Directory	Professional Development
Read about the benefits of network membership and consider joining.	Access a range of diagnostic tools and rate useful ones.	Seek advice on your Australian plant diagnostic matter from other network members.	Find out about opportunities to further your diagnostic skills and knowledge.
MEMBERSHIP	TOOLS DIRECTORY	MEMBERS DIRECTORY	PROFESSIONAL DEVELOPMENT

Plant Biosecurity Links	Events	Diagnostic Resources	SPHD
Links to websites of interest to plant biosecurity diagnosticians.	Find out what is on around the country.	Includes National Diagnostic Protocols to help diagnose a plant pest.	About the Subcommittee on Plant Health Diagnostics.
PLANT BIOSECURITY LINKS	EVENTS	DIAGNOSTIC RESOURCES	SPHD

## Contact

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[www.plantbiosecuritydiagnostics.net.au](http://www.plantbiosecuritydiagnostics.net.au)

