Avocados for Life

Preparing for Biosecurity Issues

Achieving National Biosecurity Outcomes Through Partnerships

Plant Health AUSTRALIA

Structure of Presentation

- Plant Health Australia
- Beale Review
- Emergency Plant Pest Response Deed (EPPRD)
- Industry Biosecurity Plan
- Farm Management Plans
- Current activity focused on eradication of an exotic pest

Plant Health Australia

- Peak body providing national coordination to improve:
  - biosecurity across Australia's plant industries
  - capacity to respond to plant pest emergencies
  - Custodians of the Emergency Plant Pest Response Deed

- Not-for-profit company.

- Work with Members to build partnership arrangements and broker and facilitate between government and industry in the national interest.

Members

Government Members:

- Australian Government
- ACT Government
- Northern Territory Government
- NSW Government
- Queensland Government
- South Australian Government
- Tasmanian Government
- Victorian Government
- West Australian Government

Associate Members:

- Australasian Plant Pathology Society
- AWB Services
- BSES Ltd
- CRC National Plant Biosecurity
- CSIRO
- Grains Research and Development Corporation
- Horticulture Australia Ltd

Industry Members

- A3P (Plantation Timber)
- Almond Board of Australia
- Apple and Pear Australia
- Australian Banana Grower's Council
- Australian Citrus Growers
- Australian Cotton Grower's Research Association
- Australian Dried Fruits Association
- Australian Honey Bee Industry Council
- Australian Macadamia Society
- Australian Nut Industry Council
- Onions Australia
- Australian Table Grape Association
- Canned Fruit Industry Council
- AUSVEG
- **Avocadoes Australia**
- CANEGROWERS
- Cherry Growers of Australia
- Grains Council of Australia
- Growcom
- Nursery and Garden Industry Australia
- Ricegrowers Association of Australia
- Strawberries Australia
- Summerfruit Australia
- Winemaker's Federation of Australia
- Australian Passionfruit Industry Association
- Australian Processing Tomato Industry
- Winegrape Growers Australia
- Australian Olive Association

Beale Review

Report based on three core principles:

1. An integrated biosecurity continuum
2. Rigorous science based risk assessment
3. Shared responsibility – Commonwealth, states& territories, industry and community

Biosecurity continuum

Industry biosecurity
Protection from risks posed by pests to the industry through exclusion, eradication and control

Pre-Border

Identifying exotic pest threats.

Managing quarantine risks offshore.

Undertaking offshore research and development where pests are endemic.

Border

Implementing effective quarantine for people, machinery, plants, and goods.

Establishing trapping and surveillance.

Networks for pests that may bypass checkpoints.

Post-Border

Minimising risk of regional and property entry and establishment.

Preparing for timely detection, minimised spread and rapid response to emergency pests.

Achieved through effective partnerships between industry, government and the community

Beale Review

- Recommended changes to the structure within DAFF
- Strategic and comprehensive post border monitoring and surveillance are needed
- Biosecurity plans must be implemented at an individual business level
- DAFF negotiating a new National Biosecurity Agreement (NBA)with States and territories
- NBA will be underpinned (in part) by three Deeds:
  - EPPRD
  - EADRA
  - New Intergovernmental Agreement for Responding to [Non Deed] Incursions of Nationally Significant Pests and Diseases

The EPPRD

- Established in 26 October 2005
- Legal document
- Partnership between industry and government
- Articulates responsibilities for each party (preparedness / emergency response / risk mitigation)
- Basis for a number of other key industry government partnership arrangements
- EPPRD signed by all governments and 27 industries with more expected
- EPPRD was implemented in the post border detection of Khapra beetle in April 2007

Key drivers for the EPPRD

- **Shared role** in decision making
- Sharing of costs (**public vs private benefits** of eradication)
- Potential liabilities are **known in advance**
- **Reimbursement to growers** for crop destruction for approved response plans
- **Nationally consistent** and agreed approach to incursion management
- Government agreement to underwrite industry liabilities
- **Trained and accredited personnel** to work on response
- Commitment to **risk mitigation**

Avocado IPB

Plant Health AUSTRALIA

National Avocado Industry Biosecurity Plan

Version 1

February 2007

Some high priority pests

- Avocado blast complex
- Avocado scab (*Sphaceeloma perseae*)
- Cercospora spot (recorded in Atherton tablelands but under active control)
- Bacterial canker
- Small avocado seed weevil (*Conotrachelus aguacatae*)
- Large seed weevil (*Helipus lauri*)
- Pyriform scale (*Protopulvinaria pyriformis*)
- Thrips (*Scirtothrips perseae*)
- Stenomid (avocado) moth, avocado fruit borer, seed moth (*Stenoma catenifer*)
- Avocado sunblotch viroid (recorded in Atherton tablelands but under active control)
- Various fruit flies

Nothing will protect your crops more than a good hard look!

Australian Government
Department of Agriculture, Fisheries and Forestry

Avocados Australia

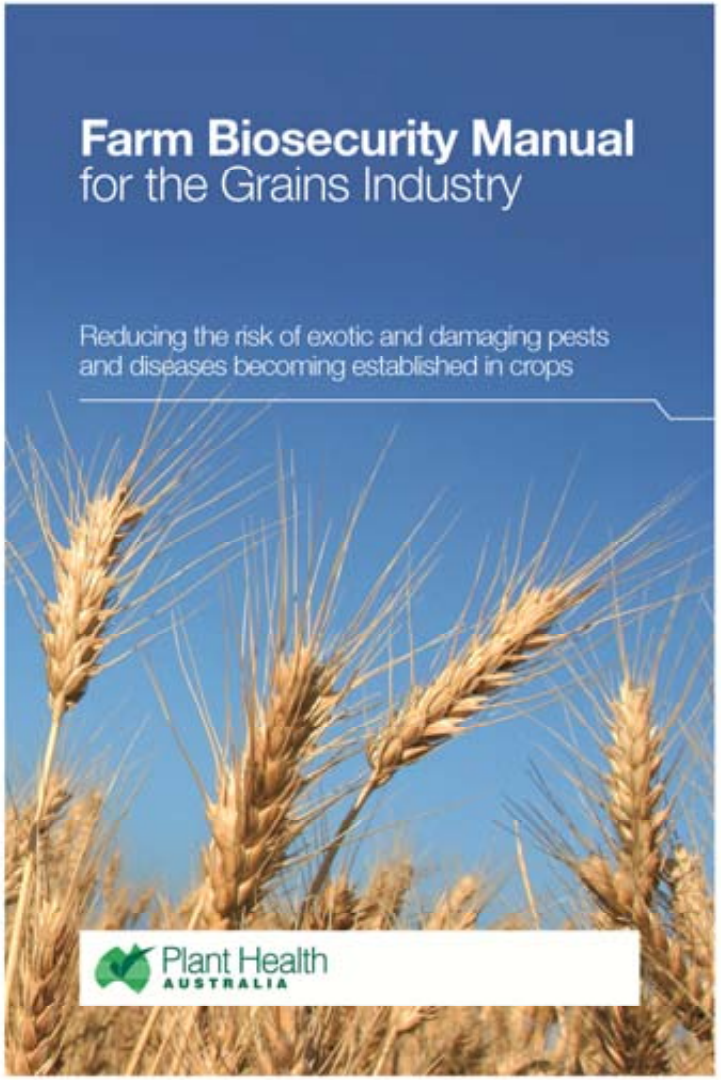
Plant Health AUSTRALIA

LOOK. BE ALERT. CALL AN EXPERT. **1800 084 881**

Avocado growers are the key to protecting Australia's orchards from emergency pests and disease. It is important that you are aware of the risk, and if you spot anything unusual on your orchard you should always check it out and call the exotic plant pest hotline on 1800 084 881. The call is free (except from mobiles) and early detection will help protect your industry.

On-farm Biosecurity Program

- Farm Biosecurity Manual
- Grains Biosecurity Officers
- Ongoing training
- Collection of surveillance data



Avocado Farm Biosecurity Manual

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Farm biosecurity checklist

Farm name:
Date of biosecurity check:

RECOMMENDED PRACTICES	YES	NO	Comments
Pests			
Crops regularly inspected for pests			
Farm staff know how/where to report pests			
Are you familiar with the high priority pest threats for the banana industry?			
Active crop monitoring is regularly conducted			
Survey activities are recorded, even when nothing is found			
Product movement			
Planting material is free from pests and crops regularly checked for pests			
Certified planting or propagation material comes from a reputable supplier			
Mother plants used for selecting suckers or bits for propagation inspected to ensure they are healthy and pest-free			
Register of planting material and its source maintained			
Can you identify the symptoms of banana pests that can spread in banana planting material?			
An effective monitoring/pest management program maintained			
No soil, leaf material or insects are left adhering to, or are left in, the container where fruit has been packed in the field			
Fruit loaded onto trucks on a concrete or bitumen pad outside the production area			

RECOMMENDED PRACTICES	YES	NO	Comments
People movement			
Biosecurity signs at main entrances with contact details of house phone, mobile and UHF channel			
All visitors sign a Visitor Register book on arrival to track on-farm movements			
All visitors clothing, footwear and tools are free of loose soil and plant matter before entering or leaving the farm			
All people recently returned from overseas have clean footwear and clothes before entering the farm			
Footbaths and scrubbing brushes provided for people entering and leaving, or moving from contaminated to clean areas of the farm			
Farm vehicles used to transport visitors around the farm			
Farm staff are aware of biosecurity procedures in place on the farm			
Equipment and vehicles			
Designated parking area for visiting vehicles and contractor equipment			
Cleaning and wash-down facilities, preferably concrete, provided for people, machinery and equipment			
Sump installed in wash-down facility to catch unwanted pests, weeds and stop excess run-off			
Farm vehicles kept clean by regularly cleaning the vehicle floor of soil, weed seeds and insects			
Vehicle movement kept to a minimum in production areas of the farm			
Vehicle movement limited to regular pathways through each block			
High pressure water or air used to remove plant material and soil from equipment and machinery			
Borrowed and second-hand machinery and equipment is cleaned of all plant material and soil before use			
Tools and equipment are cleaned regularly, particularly between blocks, preferably with a disinfectant solution			
Machinery cleaned down before being moved off the property			

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Visitor register

Please enter your details to assist us with our farm biosecurity records

Date	Name	Reason for visit	Vehicle registration or mobile phone	Time arrived	Details of last contact with fruit or plants

If you see anything unusual on your farm call the Exotic Plant Pest Hotline on 1800 084 881.

EXOTIC PLANT PEST HOTLINE
1800 084 881

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Pest record/surveillance data sheet

Property Name:
GPS (optional):

Date	Name of person inspecting	Location description (e.g. row number, farm block)	Pest/symptom observed (or being looked for)	Estimated pest level (e.g. high/medium/ low/nil or number/% plants affected)	Action taken (e.g. sample sent for diagnosis, pest treatments)

If you see anything unusual on your farm call the Exotic Plant pest Hotline on 1800 084 881

EXOTIC PLANT PEST HOTLINE
1800 084 881

Reasons for surveillance

- Failure to supply **evidence of absence data** will result in:
  - Loss of existing access to markets
  - Increased difficulty in establishing new markets

- Early detection of pests increases the chance of eradication

- WTO agreements now state the need to prove pests are **"known not to occur"** i.e. we must provide "**evidence of absence**

Pollination

'Crunch time' for pollinators

BEEKEEPERS who provide pollination services are providing the biggest kick to an industry still struggling with falling returns, a study from ABARE has found.

The study revealed that revenue continues to increase, with more growth tipped in the future, where honeybees are placed in crops to facilitate or improve yields, based on figures from 2006-07 compared with 2001-02. But there could be a sting in the positive tale for horticulture producers, with analysts now concerned about pollination service providers keeping up with demand from farmers. The finding comes from the Australian Honeybee Industry Survey 2006-07, prepared by ABARE and commissioned by the Rural Industries Research and Development Corporation (RIRDC).

The report presents results from a survey conducted by ABARE in June last year, of 135 beekeepers and presents estimates of production, socioeconomic and financial characteristics of honeybee businesses during 2006-07. The report states that an estimated 28% of honeybee businesses provide pollination services, but that this was likely to grow, with 36% of beekeepers expecting to commence or expand pollination services in the future.

● The report can be downloaded from the RIRDC website www.rirdc.gov.au

Bees and the Avocado Industry

European honeybee (*Apis mellifera*)

Varroa Mite (*Varroa destructor*)

Blue banded bee (*Amegilla sp*)

Bees and the Avocado Industry

Do I need bee hives during flowering?

Yes, if you do not have good bee activity around the orchard. Two to four hives per hectare of trees are recommended. Introduce hives when about 10% of the flowers have opened. Make sure you plan ahead and place an early order for the required number of hives. In some areas, native bees help pollinate avocado flowers. (NSWDPI & QDPI&F, 2007)

Avocado yield with and without honeybees. (Vithanage, V. (1989) *Proc. 2nd Aust and Intnl Bee Congress*, pp. 142-43)

	Without hives	With hives	
Mean fruit weight	270	238	ns
Mean number of fruit per tree	227.2	788.2	P=0.05


Quarantine Area
KEEP OUT

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