# DEVELOPMENT AND IMPLEMENTATION OF PLANT INDUSTRY SURVEILLANCE PROGRAMS IN AUSTRALIA

IPPC International Symposium for Pest Free Areas and Surveillance

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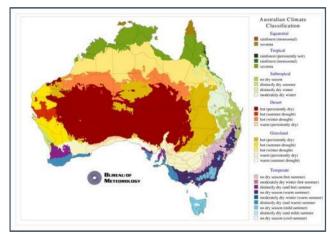
Plant Health Australia



# Surveillance challenges in Australia

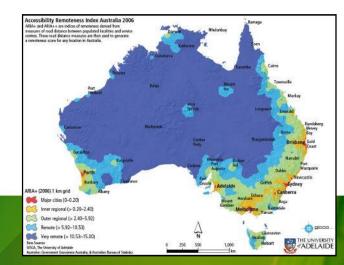


Large area to cover; Large coastline; Many ports of entry



Much of Australia is considered remote Population 26 million centred around 5-6 cities; long distances between cities

Climate ranges from Wet
tropics → Subtropical → Desert
→Grassland →Temperate
= wide range of crops grown and
unique flora and environments
suitable to a wide pest range



# Plant based agriculture in Australia

# Figures from 2017/18

Plant industry	Annual value of production	Number of high priority pests
Grains (mainly wheat, barley, canola, sorghum)	\$14.9 billion	53
Plantation Timber	\$2.2 billion	21
Citrus (mainly sweet oranges)	\$627 m	22
Banana	\$479 m	11
Pineapples	\$47.3 million	6
Lychees	\$26.7 million	7

# Plant Health Australia (PHA)

- Not for profit, public company, established in 2000
- PHA is the national coordinator of the government-industry partnership for plant biosecurity in Australia
- PHA works with its members to improve plant biosecurity outcomes
- Member-based company
  - 9 Government members (Australian government and all states and territories
  - 39 plant industry members
- Custodians of the Emergency Plant Pest Response Deed
- Similar Deeds exist for livestock industries and native flora and fauna.



National Bee Pest Surveillance Program

# Partnership approach

- Funded and assisted by honey bee industry
- Expertise and activities undertaken by government personnel
- Raising awareness through the Bee Biosecurity Program

## **Surveillance areas**

- 33 ports
- High density commercial areas and hobby bee keepers

## Surveillance

• 178 sentinel hives inspected 6-week intervals, 170 catchboxes, Sweep netting floral resources

## **Surveillance targets**

- Internal and external mites (Tracheal, Tropilaelaps, Varroa)
- Exotic viruses
- Pest bees (Asian honey bee, Red dwarf honey bee, Giant honey bee)









# **Grains Farm Biosecurity Program**

# Partnership approach

Funded and assisted by grains industry

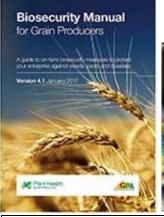
## Surveillance

- Extension-focused program to build education and awareness for a range of exotic pest threats
- Facilitate evidence of absence for Khapra beetle
  - Sampling techniques appropriate for host material/environment. (e.g. traps, grain sieving, vacuuming
  - Multiple samples per site; traps serviced 4-6 weeks over summer
- Biosecurity Blitz campaigns

### **Future**

- Moving towards a National Grain surveillance program
- Improved planning, prioritisation and coordination
- Broaden the skills and capacity base for surveillance







#### Monitor your crops for the presence of pests

Check your crops regularly for peets. Record crop monitoring activities. Be aware of the serious exotic peets of grains and the expreptions they cause. Keep within and photographic records of all unusual observations. Constant vigilations is vital for early detection of any exotic plant peet threat. See page 9.

#### Report anything unusual

If you suspect a new post - report it immediately to the Exotic Plant Pest Hottine. Early detection

#### Manage people movement

People can inadvertently carry posts with them as they move about. Use farm biosecurity signs to direct all visitors to notify you of their presence, record visits and make sure visitors have oben to obviers and obting. Issle particular care with contractors, utility providers and visitors from oversees. Irain farm workers about your requirements. See page 12.

#### Reduce risks posed by vehicles and equipment

Direct all visitors to park in a designated parking area that can be mentioned for new posts. Ensure that all meditnings and vehicles that enter production areas are clean. A wash-down facility provides good protection. See page 16.

#### Manage produce carefully

Purchase seed from reputable sources and record where it came from, Monitor stored grain regularly, keep the area around them time of split grain and areats it to keep conditions too cool for insects to bread, if pasters are bound, furrigate with a suitable pesticide. Only furrigate in seeled (gas-flyin) silcs. Always follow all label instructions when using turnigents. See page 18.

#### Manage risks posed by livestock and feed

Ensure that fodder or grain bought to feed livestock is free from weed seeds. Buy locally when possible and

If you see anything unusual, call the Exotic Plant Pest Hotlin

1800 084 881



# **National Citrus Biosecurity Program**

# Partnership approach

- Funded and assisted by the Australian citrus industry
- Expertise and activities undertaken by government and industry personnel
- Improved planning, prioritisation and coordination

## **Surveillance areas**

Production regions

## Surveillance types

- Extension-focused program to build education and awareness for exotic pest threats
- Working with 'First Detector Network'
- Build on surveillance undertaken in Export Protocols

# **Surveillance targets**

 Citrus canker, Huanglongbing and its psyllid vectors, Glassy winged sharpshooter



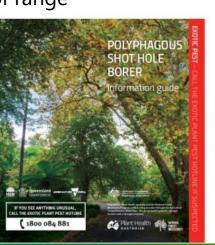


# Programs under development

- National Forest Biosecurity Program
  - Establishing stronger partnerships and defining roles and responsibilities
- Botanic Gardens Surveillance Network
  - Working with Botanic Gardens staff to improve surveillance
  - Criteria for targets for surveillance
    - Visible
    - High priority or extension of range









BIOSECURITY SURVEILLANCE STRATEGY

2018-2023





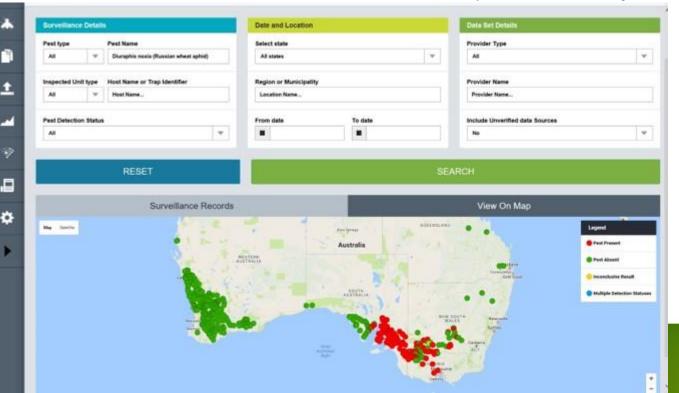




# Surveillance data curation

## **AUSPest***Check*<sup>™</sup>

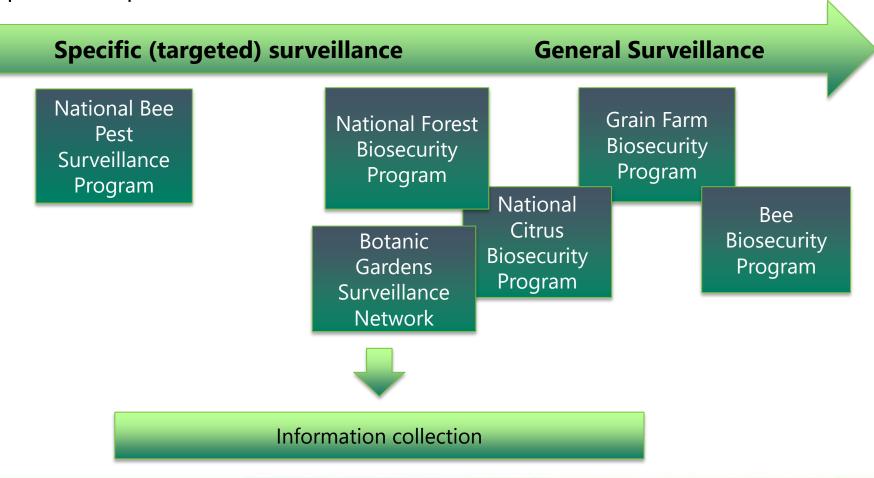
- Links surveillance databases and systems
- Provides an integrated national surveillance data repository
- Receives and provides information back to stakeholders according to needs and with appropriate data security
- Scalable and accommodates tiered permission system





# Summary

A range of industry and government programs being developed under partnership models in Australia



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