BioSecure HACCP
Nursery Production Biosecurity System

On-farm Biosecurity Delivers Market Access

Science Protecting Plant Health
28 September 2017
Biosecurity risk promoters increase farm pressures

• **Off-farm risk promoters**
  - Increasing international travel
  - Increasing domestic travel
  - Domestic & international migration
  - Increasing international & domestic trade
  - Declining government biosecurity investment
  - Reduced government biosecurity service delivery

• **On-farm risk promoters**
  - Source of planting material (high health)
  - Location of planting material (interstate/international)
  - Continuity of input supply (reliability)
  - Labour movement (domestic & international)
  - Vehicle & equipment (on & off farm movement)
  - Risk management system (internal verification)

“On average Australia records between 30 – 40 plant pest incursions each year.” Source: Plant Biosecurity CRC

“Biosecurity risks are growing due to increased global trade and travel, increased agricultural expansion and intensification, increased urbanisation close to farmlands, and other factors such as climate change.” Source: IGAB Draft Report December 2016

“Between 2013 and 2025, containerised imports are forecast to rise by 50%, non-containerised imports by 27% and air cargo imports are expected to be double that of air cargo exports with inbound air travel arrivals expected to rise by 93%.” Source: IGAB Draft Report December 2016
Australian Domestic Biosecurity

Domestic market access legal instruments:
1. Government Plant Health Inspector
2. Interstate Certification Assurance Scheme (ICA)
3. BioSecure HACCP Certification Scheme

State & Territory governments have a constitutional obligation to manage biosecurity risks within their jurisdictions.
Each interstate movement requires compliance to the receiving jurisdictions quarantine entry conditions.
Nursery Production Supply Chains

Nursery Production in Australia

• Located in every state & territory – a broadly dispersed industry, underpinning most horticulture plant industries, propagating >10 000 cultivars across all cropping systems.

• A national annual value of approximately $3 billion.

• Supply chains (varied):
  • Urban retail e.g. Bunnings, etc.
  • Landscape greenlife e.g. Urban development
  • Fruit & Vegetable e.g. Citrus, tomato, capsicum, etc
  • Forestry e.g. Pine or eucalypt timber plantations
  • Revegetation e.g. Riparian zones & mine sites
BioSecure HACCP

A Systems Approach

- BioSecure HACCP is the on-farm biosecurity program for Australian production nurseries that integrates ‘biosecurity’ into normal plant pest management.

- BioSecure HACCP Guidelines provide a systematic approach for production nurseries to assess their biosecurity hazards and identify critical control points – achieved through documented procedures and compliance records.

- The program seeks to identify internal and external pest threats (endemic and emergency) to the integrity of a business’s biosecurity preparedness.

- Recognises business skill sets and capacity in pest risk management progressing to self certification for market access.
Hazard Analysis Critical Control Point (HACCP)
Nursery Production Flow Chart
Market Access through BioSecure HACCP

• Implement 43 procedures and record across 26 templates

• Upload completed records to the Audit Management System (AMS)
  • Web based platform for certified growers to store data and client information
  • Each grower has protected business folder in AMS with restricted access
  • AMS generates interstate Biosecurity Certificates for plant movement

NOTE: AMS has various access levels for Growers, Administration & Government

• Implement pest specific Entry Condition Compliance Procedures (ECCP’s)
  • ECCP’s developed by NGIA and submitted and approved by receiving jurisdiction
  • Business nominates competent staff and train against ECCP criteria (on-line eLearning)
  • Apply for approval and certification against the specific ECCP(s) to NGIA
  • Audited for compliance against the ECCP(s) by NGIA
  • Self certify for market access (BioSecure HACCP Biosecurity Certificate)
# BioSecure HACCP

<table>
<thead>
<tr>
<th>Procedures (43)</th>
<th>Records (26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growing media storage procedure</td>
<td>Approved Supplier Register</td>
</tr>
<tr>
<td>Growing media production procedure</td>
<td>Materials Import Inspection Record</td>
</tr>
<tr>
<td>Growing media quality procedure</td>
<td>Material Despatch Inspection Record</td>
</tr>
<tr>
<td>Fertiliser storage procedure</td>
<td>Register of Authorised Inspection Persons</td>
</tr>
<tr>
<td>Cleaning &amp; disinfestation</td>
<td>Register of Authorised Person Record</td>
</tr>
<tr>
<td>Visitor procedure</td>
<td>Register of Certification Signatory(s) Record</td>
</tr>
<tr>
<td>Incoming plant quarantine</td>
<td>Visitor Record</td>
</tr>
<tr>
<td>Pest, disease &amp; weed monitoring</td>
<td>Vehicle Inspection Record</td>
</tr>
<tr>
<td>Site surveillance procedure</td>
<td>Corrective Action Report</td>
</tr>
<tr>
<td>Despatch inspection procedure</td>
<td>Equipment Calibration Register</td>
</tr>
<tr>
<td>Growing media disinfestation procedure</td>
<td>Calibration Record</td>
</tr>
<tr>
<td>Sticky trap use procedure</td>
<td>Crop monitoring Record</td>
</tr>
<tr>
<td>Indicator plant monitoring procedure</td>
<td>Site Surveillance Record</td>
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<tr>
<td>Insect proof facility procedure</td>
<td>Weed Monitoring Record</td>
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## BioSecure HACCP

### Entry Condition Compliance Procedure (ECCP) and Importing State

<table>
<thead>
<tr>
<th>Entry Condition Compliance Procedure (ECCP)</th>
<th>Importing State</th>
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<tbody>
<tr>
<td>Blueberry rust</td>
<td>VIC &amp; TAS</td>
</tr>
<tr>
<td>Melon thrips</td>
<td>SA</td>
</tr>
<tr>
<td>Spiraling whitefly</td>
<td>NSW &amp; VIC</td>
</tr>
<tr>
<td>Tomato yellow leaf curl virus</td>
<td>NSW &amp; VIC</td>
</tr>
<tr>
<td>Red imported fire ants</td>
<td>NSW, VIC &amp; SA</td>
</tr>
<tr>
<td>Green snail</td>
<td>NSW, NT, VIC, SA &amp; TAS</td>
</tr>
<tr>
<td>Citrus red mite</td>
<td>NSW &amp; VIC</td>
</tr>
<tr>
<td>Myrtle rust</td>
<td>SA</td>
</tr>
<tr>
<td>Potato cyst nematode</td>
<td>SA &amp; QLD</td>
</tr>
<tr>
<td>Pyriform scale</td>
<td>QLD, NSW &amp; VIC</td>
</tr>
<tr>
<td>Cucumber green mottle mosaic virus</td>
<td>SA</td>
</tr>
<tr>
<td>Regulated &amp; unwanted quarantine pests</td>
<td>Tasmania</td>
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BioSecure HACCP
“Trialling the System”

• Trial duration – Oct 2013 – April 2014 = 6 months (QLD & VIC)
  • Oversight via Project Control Board (SDQMA members)
• Trial results were independently audited August/September 2014
• Independent audit report presented to SDQMA October 2014
• NGIA accepted report’s 21 administrative recommendations, no non-conformances recorded
• Independent close-out audit April 2015
• Close-out Audit Report accepted by SDQMA 29 April 2015
• NGIA approved for a 3 year National trial (2016 – 2019)
• National Plant Health Committee endorsement of SDQMA approval 11 November 2015
• Legal Authorities in place: QLD, NSW, VIC, TAS, SA with NT & WA progressing.

Trial data from production nurseries show a 2.5% - 3% productivity gain (excluding market access) through improved efficiencies in plant protection across the cropping system.
NGIA acknowledges the support from Australian state and territory biosecurity agencies in the progression of BioSecure HACCP.

Thank You