Examples of Integrated Pest Management (IPM) Success

Dr Paul Horne, IPM Technologies
IPM Technologies

- Entomologists
- Support growers/advisors to adopt IPM
- IPM research and training
- Independent advice
- Experience in a wide range of crops
- Work worldwide
Conventional pest control
Why do anything different?

- Crisis
  - Pesticides stop working (resistance)
  - Pesticides withdrawn
  - Residues in produce
  - Worker and environmental safety

- Induced pests (pest flare)
Integrated Pest Management

All three control measures:

1. Biological
2. Cultural
3. Chemical (support)

➢ Used together in a compatible way
➢ Decisions are made based on monitoring
Cultural controls

- Very powerful tools, yet often forgotten

Examples:
- Provide habitat and alternative food for beneficials
- Rotation
- Weed control
- Irrigation and soil management
- Trap crops
- Variety
Cultural controls
Pesticides in IPM

- Use chemicals only as a support tool
- Consider impact on beneficials, not just efficacy against target pest
- We test chemicals for their effects on beneficials
- Need to know “is it safe?”
- Need to consider “what beneficial species do I want to look after?”
Shallots in Indonesia

OVER 90 INSECTICIDES IN 9 WEEKS
Shallots in Indonesia under high pest pressure:

- Spraying every day
- Tank mixing up to 11 products
- Spraying at up to 50 x label rate
- Up to 100% crop loss
Shallots in Indonesia

IPM success

IPM TECHNOLOGIES PTY LTD
Leaves with aphids (%)

Axe

Sprayed
Unsprayed

10-Feb-10  17-Feb-10  24-Feb-10  03-Mar-10  10-Mar-10  17-Mar-10
Intensive Horticulture

**Strawberries**

**Victoria and South Australia**

- Western Flower Thrips
- Two-spotted mite
- Lannate every 3 days?
Strawberry production
Insecticide resistance

- Western flower thrips
- Two-spotted mite
IPM in strawberries

- 100% adoption
- Victoria
- South Australia
- Tasmania (all berries)
Regular insecticide applications to none in 10 years
IPM in any crop

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<th>Pests</th>
<th>Beneficials (1)</th>
<th>Cultural controls (2)</th>
<th>Chemicals (3)</th>
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Thanks

Nick Koch
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