

## IPM for Victorian Farmers

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## IPM

- What is IPM?
- How is it different to current practice?
- What does it involve?
  - Elements of IPM
- Advantages of IPM
- Why not more widely used?
- Successful examples

## Pest Management

- Select Pesticide for appropriate Pest
- Spray at label rate
- Simple
  
- Why do anything else?
- Eg - Integrated Pest Management (IPM)
  - different, more information involved

## Choosing the wrong pesticide makes problems worse

- Resistance
- Induced Pests
- Secondary Pests

## Do insecticides always make things better?



- Potato Crops
- Spray for "aphids"
- Pest Flare
- Wrong pesticide chosen

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## Reasons for changing pest control

- *Usually:*
- Insecticide Resistance
- Pesticides withdrawn
- Pesticide Residue issues (especially export)
- Avoid handling broad-spectrum insecticides
- Environmental safety

### Better Reasons for using IPM

- Better Control of Pests
- Avoidance of secondary pests
- Avoidance of induced pests
- Increased yield
- Better marketability
- Sustainable control of pests

### Photos of insects and mites

- Insecticide resistant pests
- Biological control agents

### Integrated Pest Management IPM

1. Biological control
2. Cultural control
3. Chemical control (support)
4. Decisions based on Monitoring

### Cultural Controls

- Many different options-
- For Example:
- Variety selection
- Irrigation
- Time of planting
- Weed management

### Selective Pesticides

- Don't kill all pests, but
- Don't kill all beneficial species
- Difficult to determine
  - Acute
  - Sub-lethal
  - Chronic
- Essential information

### Adoption of IPM

- Is IPM better than just spraying?
- *Obviously Yes!*
- Sustainable
- Better Pest Control
- Environmentally better
- Safer for workers
- Less risk of chemical residues

### IPM Adoption

- If IPM is so good – why doesn't every grower use it?

### Adoption of IPM

- More Complicated
- Decisions based on monitoring
- Who does monitoring?
- Skills to ID beneficials
- Info on pesticide effects
- Fewer pesticides suitable
- Application problems
- Crisis in pest management
- Resistance/ Residues/
- Withdrawal of pesticides

### Adoption of IPM

- Social issues, not only entomology
- Change: from something familiar to something unfamiliar
- Locally (on this farm) unproven (**RISKY**)
- Timing of alternative sprays
- Eg One brother responsible
- Pest control a small part of production
- Savings in pesticide small overall

### IPM Adoption

- If IPM is so good – why doesn't every grower use it?
- If pesticides (familiar) are available and work, why change?

### Could IPM work in NZ arable crops?

- Trial to test that question
- Done on commercial farms/crops
- 5 Collaborating farmers
- IPM paddock versus Current practice