

Best practice IPM - Overview

What is IPM (Integrated pest management)?

This is an approach to improve management and profitability using regular crop monitoring to determine if, when and what treatments are needed for effective control of pests. Effective IPM employs a combination of chemical, cultural and biological strategies to keep weeds, insect pests, disease pressure and other crop production problems low enough to minimise economic crop loss.

IPM decision making tactics:

Good forward planning, careful design of the production system and management can reduce the dependence on and improve the use of chemicals for pest control.

- Plants stressed through poor irrigation or nutrition are more prone to disease and pest problems than healthy plants.
- Good management practices include crop rotation, identification of your best production windows, efficient irrigation and drainage systems
- An understanding of available weed, disease and pest control products including their IPM fit is essential.

Scouting/Monitoring crops for pest, disease, weed, beneficial activity and general crop health is essential.

Scouting (inspecting crops in the field) and monitoring provides a good picture of pest, disease, weed and beneficial insect activity in your crop. Effective monitoring includes:

- Count numbers of pests and beneficials as well as the incidence of disease and level of weeds in the crop and surrounding headlands.
- Record this information, the actions you take and results for future reference.

Crop scouting

A picture of the pest and disease levels in each crop can be provided by:

- Scouting each area or block regularly.
- Cover a good cross section of the block as pests and diseases can occur in patches or hot spots.
- The number of plants to inspect will depend on the crop stage and the total area of crop.

Crop monitoring

Monitoring uses traps to assess the level and presence of key pests and beneficials around a crop.

- This will help to determine how often to scout the crop.
- Activity may indicate the likelihood of damage but is not a substitute for scouting the crop.
- Traps available for monitoring pests include pheromone traps (hormone traps which attract males of specific pests) yellow sticky traps and light traps.
- If a high pest pressure is indicated then crop scouting should be more frequent.
- Monitor weeds for they can host pest and diseases but may also provide habitat for beneficials.

(For more detailed information on scouting, scouting patterns and monitoring see the ute guide or there are a range of crop IPM guides available.)

Standard IPM practices that apply to most pests and diseases

There are a range of standard practices that apply to most pests, diseases, viruses, weeds and nematodes.

Farm hygiene

Good farm hygiene is the most often overlooked method of IPM. It reduces the risk of bringing new weeds, diseases and pests onto the farm, and reduces the spread of existing problems.

- Restrict access and movement onto the farm, or farm areas by suppliers, contractors and visitors who do not comply with your hygiene practices.
- Avoid moving soil around the farm on dirty equipment, vehicles or worker's boots.
- Work from young to old plantings when scouting and inter row cultivating and do known problem areas last.

Good farm hygiene includes these management practices:

- **Production break.** To avoid carrying over a weed, pest or disease problems from one season to the next.
- **Good land preparation.** To assist with plant establishment, weed control and reduces the risk of water logging and plant losses from damping-off and other soil borne diseases
- **Selecting the right crop variety and site.** To maximise your chance of success. Keep records to build a picture of weed, disease and pest risks on different parts of the farm.

(Note: For pesticide IPM ratings see associated charts and for more detail on specific control measures for pests and diseases see the ute guides.)

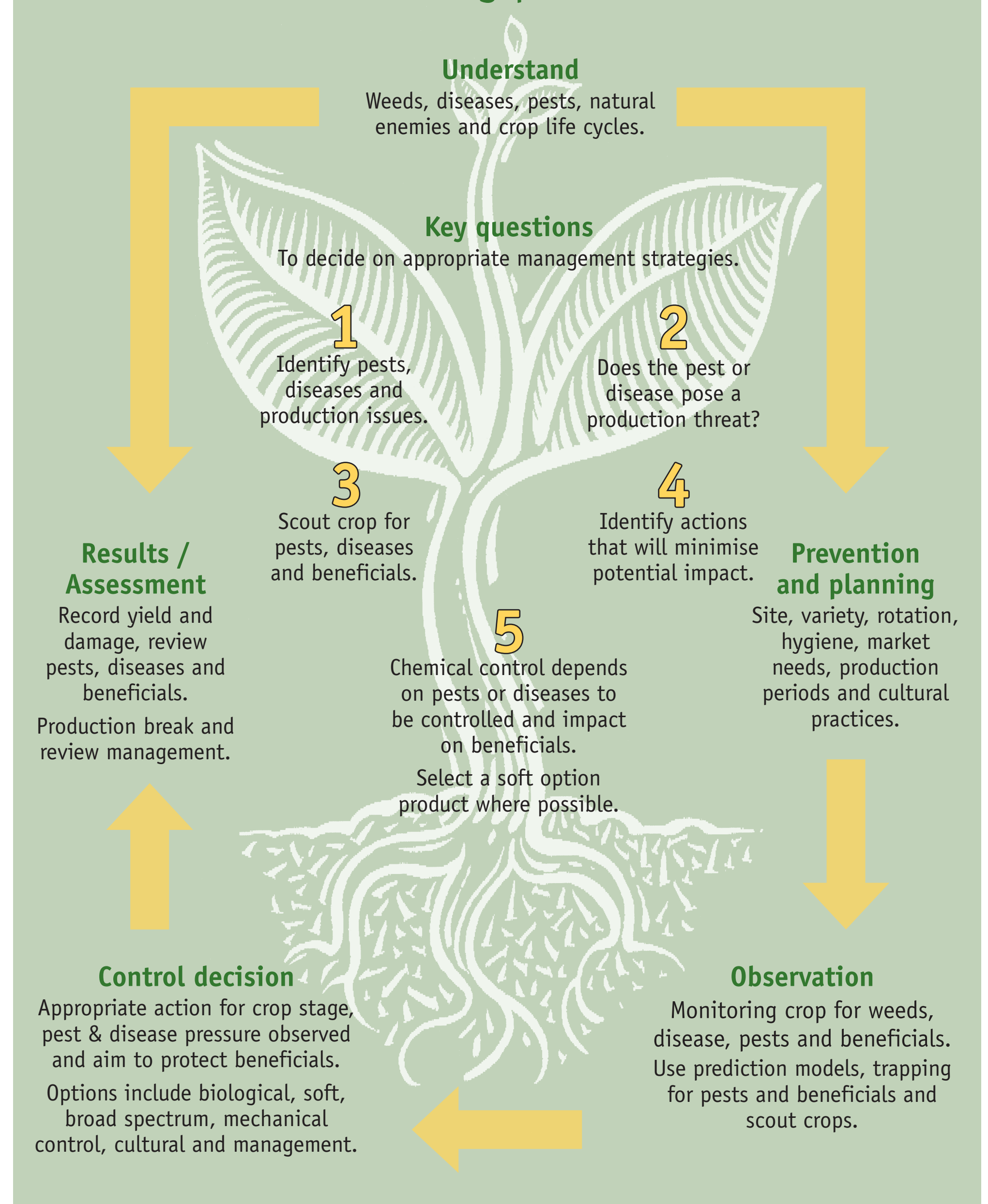
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Published by the Department of Primary Industries, Farm Services Division, December 2010.

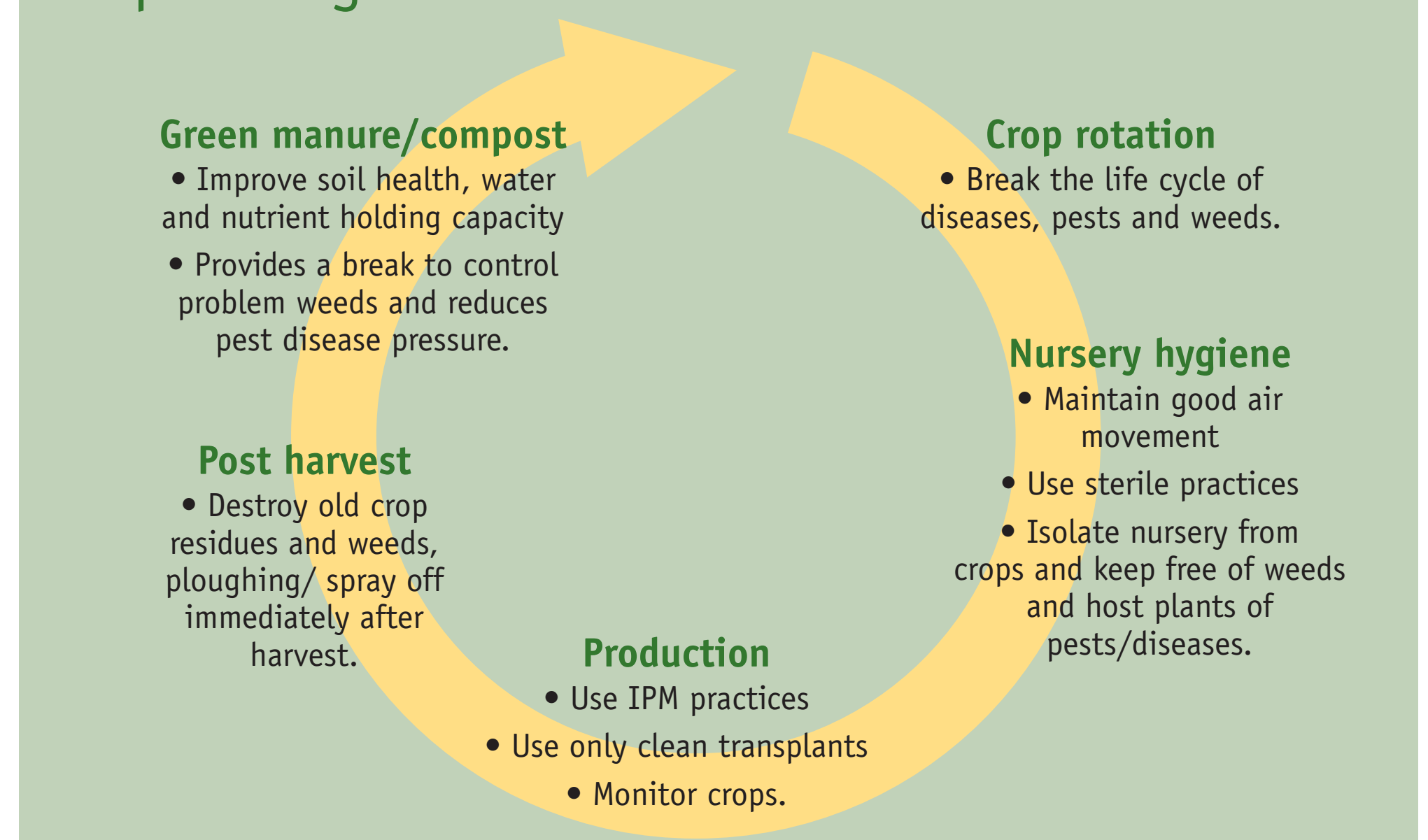
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Authorised by the Department of Primary Industries, 1 Spring Street, Melbourne 3000.

The IPM decision making process



Crop management



ISBN 978-1-74264-597-1 (print)
ISBN 978-1-74264-598-8 (online)

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