

Strategy 4

Pest management options that are non disruptive to natural enemies

Know pesticides that are less harmful to natural enemies and ways of applying them to minimise risk on friendly organisms.

Spray pesticides on alternate rows of the crop to avoid contact with natural enemies.

Use botanical pesticides to minimise harm to friendly organisms. Information on relevant botanicals may be obtained from extension agents or agrochemical shop.



Spotted wasp *Sphex*



Thrichogramma



Preying mantis



Lady bird larva



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Know and multiply beneficial organisms in your farm



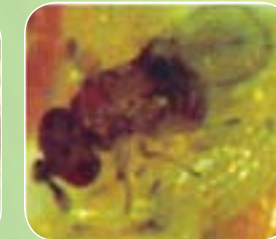
Spotted wasp *Sphex*



Preying mantis



Lady bird beetle



Thrichogramma

Introduction

A lot of beneficial organisms exist in horticultural crop fields and may be used as biological control agents of pests and disease pathogens.

Biological control is pest management by use of predators, parasitoids and pathogens. These organisms multiply and migrate naturally and if available in adequate numbers, they effectively manage pest populations.

Farmers ought to know these organisms and also how to build up their populations.

Harmful insects

It is critical for farmers to recognize the pests that are harmful on a crop.

Examples of pests



Spider mites



Whitefly



Bollworm



Aphids

These pests can be managed using the following strategies

Strategy 1

Recognize the beneficial organisms in the field

Predators of insect pests are always present and therefore, do not need to be introduced.

Examples include:-



Webbing spider



Preying mantis



Spotted wasp



Lady bird



Tree frog



Lizard

Strategy 2

Select appropriate crop variety

It is advisable to choose crop varieties that are tolerant/resistant to pests and diseases.

- Information on crop tolerance or susceptibility to a particular pest (s) can be obtained by talking to other farmers, extension staff and seed retailers.



Tolerant cabbage

Strategy 3

Conserve natural enemies by cultural means

Protection and multiplication of natural enemies may be ensured through various cultural practices on farms. Such include:

- Cultivation and maintenance of flowering plants like fennel, thistle, coriander, Indian mustard, flowering cabbage and kales.
- Mulches for providing shelter and multiplication sites.
- Providing water sources for predators with aquatic life stages.
- Maintenance of live fences such as tree, hedge rows and shelters.



Calliandra hedge row