

Integrated Pest Management (IPM) Learning Module Fact Sheet
Introduction to IPM in commercial agriculture and community sectors
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IPM uses a variety of tactics in combination to bring pest populations down to reasonable levels while considering the ecosystem and environmental effects. IPM is applied in many different sectors including agriculture, areawide projects, county and state management programs, forestry, homeowner, etc.

Surveillance and scouting

It is important to identify the pest(s), estimate density, and develop a management plan based on threshold levels.

IPM Methods include: Cultural, mechanical, physical, biological, chemical, genetic, and regulatory.

IPM in Agriculture*

Nonchemical pest control methods used on large scale commercial farms include:

- Crop rotation: Planting different crops every other year to retain soil nutrients and prevent overwintering pest populations.
- Trap crops: Plant crops that attract and retain pest in less valuable crops and keep them away from the economically valuable crop.
- Tillage of soil: Turning the soil interrupts overwintering insects and weeds.
- Variation in planting time: Plant two sets of crops at different times to concentrate pests in one area.
- Exclusion netting: Using physical barriers against insects or avian pests.
- Light traps and sound deterrents: Traps used to capture night flying insects and sounds from birds of prey as deterrents from crop.
- Mating disruption, sterile release: Methods employed to decrease successful mating.
- Biological control: The use of natural enemies such a predators, parasitoids, and pathogens to decrease pest populations.

Chemical control in IPM is meant to be used as a supplementary means of pest control if populations have not decreased to acceptable levels using nonchemical controls. Pesticides are used within accordance of the label and rotated to prevent chances of resistance from the target pest.

Monitoring

Use of biosurveillance to track populations movement and invasion. This can be done using drones, trapping, visual surveys and other areawide applications.

Pesticide evaluation and monitoring section (SEMS) 1985

A statewide pesticide survey addressing licensing pesticide used in New Jersey reviewing pesticide use records required to be held by all operators to insure legal use of all products.

**List does not include all management tactics used in IPM.*