

IPM PROGRAMS & PRINCIPLES:

These IPM principles and practices are combined to create IPM programs. While each situation is different, six major components are common to all IPM programs:



Pest identification.



Monitoring and assessing pest numbers and damage.



Guidelines for when management action is needed.



Preventing pest problems.



Using a combination of biological, cultural, physical/mechanical and chemical management tools.



After action is taken, assessing the effect of pest management.



WHAT IS IPM?

INTEGRATED PEST MANAGEMENT



WHAT IS INTEGRATED PEST MANAGEMENT (IPM)?



IPM is a process used to solve pest problems while minimizing risks to people and the environment. Long-term pest prevention is accomplished through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed.

WHAT IS A PEST?

Pests are organisms that cause damage to structures or desirable plants or animals. Pests also include organisms that impact human or ecosystem health. Pests may transmit a disease to humans or other animals or may be just a nuisance.

There are many kinds of pests but the ones that cause the most problems include weeds, animals, insects, nematodes, or disease-causing agents such as bacteria, viruses, or fungi.

HOW DOES IPM WORK?

The best strategy for long term prevention is to stop a problem before it starts, by creating environmental conditions that are unfavorable for the pest.

Begin by monitoring your field or building to determine if the pest is still present and what kind of damage was caused.

Correctly identifying the pest and its life stages is key to knowing whether it will become a problem, and determining the most effective and least environmentally-harmful management strategy.

MANAGEMENT STRATEGIES

Management strategies are best used in combination in order to increase their effectiveness. Strategies are grouped into the following four categories:



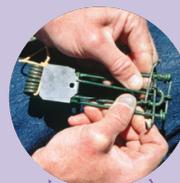
BIOLOGICAL CONTROL:

The use of natural enemies—predators, parasites, pathogens, and competitors—to control pests and their damage.



CULTURAL CONTROL:

Practices that reduce pest establishment, reproduction, dispersal, and survival. For example, changing irrigation practices can reduce pest problems, since too much water can increase root disease and weeds.



MECHANICAL & PHYSICAL CONTROL:

Kill a pest directly, block pests out, or make the environment unsuitable for it. Examples include rodent traps for mechanical control, and physical controls include row covers for excluding insects.



CHEMICAL CONTROL:

In IPM, pesticides are used only when needed and in combination with other approaches for more effective, long-term control. Pesticides are selected and applied in a way that minimizes their possible harm to people, non-target organisms, and the environment.



Learn more about IPM at:
ipm.ucanr.edu

