

Introduction to Integrated Pest Management



IPM is a Multi-Pronged Approach to Pest Management. Components Include:

- ❖ The use of practices to Prevent pest invasions.
- ❖ The regular Inspection of plants for damage and pests.
- ❖ Correct Identification of the pest or disease before undertaking treatment.
- ❖ Thresholds for pest control .
- ❖ An Integration of compatible, environmentally sound control methods.

IPM Requires Forethought and Understanding of the Ecosystem

- ❖ What kinds of pests are present and when?



- ❖ What kinds of pests cause what kind of damage and under what conditions?



Inspect your garden regularly. Look closely.
Learn to differentiate kinds of damage.



Correctly Identify the Problem!

“There are holes in the leaves. What can I spray?” is pointless unless you know what you are looking at!



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How much damage is too much? When do I need to take action?

- ❖ Young plants are most vulnerable to damage.



- ❖ Recognize problem pest levels.



IPM Practices. Determine what action to take. Sometimes that will mean doing nothing... or planning for the future!

❖ Remove Pests Before Planting

- ❖ Remove plant debris in places they can harbor pests (Example: codling moths under apple trees.)
- ❖ Go out in the winter and hunt snails and slugs.
- ❖ Trap earwigs and sowbugs in rolled up newspapers and return them to the compost pile where you need them.



❖ Practice Crop Rotation

- ❖ This reduces soil pathogens.
- ❖ It also confounds soil-borne pests like wireworms and onion maggots.



❖ Plant Seasonally!

- ❖ Thwart pests by planting susceptible crops when they are dormant or absent .
 - ❖ Plant Brassicas in fall and early spring to avoid aphids, cabbage loopers, scale, whiteflies etc.
 - ❖ Plant Chard and Spinach in winter to thwart leaf miners.
 - ❖ Plant Peas in late spring or early fall to miss migratory birds.



❖ Keep Pests at Bay with Barriers

- ❖ Use Row Covers or Bird Netting to keep pests out and from laying eggs on your plants.



- ❖ Use Wood Ash, Iron Phosphate baits or Copper strips to keep Slugs and Snails away from seedlings.



❖ Use Fully Decomposed Organic Matter

- ❖ Partly decomposed compost harbors Sowbugs, Earwigs and Wireworms.
- ❖ The first two are great in the compost pile and not so great in the garden.



❖ Provide Food, Water and Shelter to Beneficial Organisms

- ❖ Plant Shrubs where insectivorous birds and insects can hide. California natives & Mediterranean plants thrive in our climate and can provide food as well as shelter.



❖ Birds, Bats, Lizards all eat herbivorous insects. Owls will tackle larger pests!



❖ Don't Forget a Water Source. Everything needs water!



❖ Provide Food for Different Life Stages.

- ❖ Ladybug and Lacewing Larvae eat mostly insects,



- ❖ But the adults need pollen too.



- ❖ Many Predatory Insects have short mouth parts.
- ❖ Be sure to plant flat, open faced flowers. |



- ❖ Umbelliferous flowers also provide food for many insects.



❖ If All Else Fails...You May Need to Spray.

❖ Sometimes pest populations are just too overwhelming.



❖ Or the pests have a protection racket going!



- ❖ Go For the Least Toxic Solution First.

- ❖ A strong spray of water or insecticidal soap can control scale, aphids and other soft bodied insects.



- ❖ Add a sticky barrier if they are protected by ants.



With a little knowledge and planning, you can reduce pest damage in your garden and enjoy the fruits of your labor!

