

I.P.M.

INTEGRATED PEST MANAGEMENT

WHAT IS IPM?

"Integrated Pest Management, or IPM, is an approach to solving pest problems by applying our knowledge about pests to prevent them from damaging crops, harming animals, infesting buildings or otherwise interfering with our livelihood or enjoyment of life. IPM means responding to pest problems with the most effective, least-risk option."

- IPM Institute of North America



WHAT IS A PEST?

We consider a pest to be an organism that interferes with the viability of a desirable plant. Pests might carry diseases that harm plants or animals, or cause physical damage to a plant that affects its ability to survive.

THIS MEANS:

- Pests are only controlled if they are likely to cause significant damage.
- Pest management is planned with consideration for its impact on the whole ecosystem.
- Applying pesticide is a last resort.
- Systems are designed to prevent pest problems from occurring.

IPM PRACTICES in Hydroponics & Aquaponics

Planting - By paying attention to planting time and proper spacing, growers can reduce the risk of pests traveling from one plant to another.

Pest Trapping - Insect traps are used so that growers know which pests are present and when. This helps determine what control methods are needed, if any.

Monitoring - Growers use monitoring methods to determine if pests are damaging plants.

Thresholds - Growers only treat plants for pests after reaching an established threshold that could cause economic loss.

Cultural Controls - These practices disrupt the pest's environment. Some examples are sanitizing tools and harvesting early.

Biological Controls - Pests have natural predators that can control their populations. For example, ladybugs eat aphids.

Chemical Controls - Especially in aquaponics, chemical pesticides are the very last resort. This is because the fish in an aquaponics system can be harmed by chemicals in the water. As an alternative, many aquaponics growers use garlic extract products or certified organic pesticides to keep pests at bay.

Recordkeeping - Growers keep records of pest traps and past practices to inform future decisions.