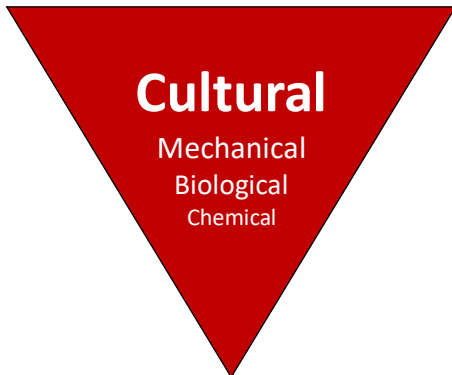


Managing Landscape Pests with an IPM System

Brad Hardison, Horticulture Agent – Sampson County

An Integrated Pest Management (IPM) system is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as cultural, mechanical, biological, and chemical controls.



1. Cultural
 - a. Soil sample
 - b. Soil composition/amendments
 - c. Irrigation
 - d. Right plant/right place/selection
 - e. Resistant plants/rotation
 - f. Aeration/Mowing heights
2. Mechanical
 - a. Hand weeding
 - b. Hand picking
 - c. Traps
 - d. Barriers/covers
 - e. Pruning/sanitation
3. Biological
 - a. Beneficial insects/parasites
 - b. Bacterium/Pathogens
4. Chemical
 - a. Insecticidal soaps/oils
 - c. Copper/sulfur sprays
 - d. Pyrethrum/Spinosad/Milky spore
 - e. Herbicides
 - f. Insecticides
 - g. Fungicides

Five Steps of IPM:

Step 1: Monitor plants/lawn on a regular basis. Know the plant species or cultivar name of the plants in your landscape. Inspect your plants at least twice a month or as much as twice a week in warm weather to recognize problems as soon as they arise.

Step 2: Accurately diagnose the problem. The only way to effectively combat a problem is to diagnose it properly. Wrong diagnosis costs money, time, and labor, and allows pests to increase damage and populations.

Step 3: Is action necessary? The level of injury that a plant can withstand without unacceptable harm is called a threshold. No pest control action is necessary if the pest or damage is below the threshold. You set the threshold by determining the level of acceptable damage to the plant's health or visual appeal.

Step 4: Implement a strategy based on **ALL options available.** Use the cultural, mechanical, biological, and chemical tools in your toolbox to manage pests.

Step 5: Evaluate. Once implemented, an IPM plan must be constantly re-evaluated. Landscape plants mature, roots occupy more area, shading increases, pH and nutrients deplete, and more insects arrive. Keep records of insects, pests, and treatments used to help make decisions in the future.

For more information on pests, contact the Sampson County Extension Master Gardener Plant Clinic at (910) 592-7161.