

Integrated Pest Management (IPM) in the Home Landscape

Integrated Pest Management (IPM) is a fairly new approach to managing pests that includes the use of some old ideas.

Before the advent of generally available pesticides, people had to learn to live with pests to some extent. To reduce pest problems people had to find ways to resist pests, manipulate their environments or physically remove them. There is no doubt that chemical pesticides have made it much easier to control pests and have greatly reduced their ravages on crops, public health and our enjoyment of our environment. However, pesticides are not the panacea (defined by Webster as a cure for all ills or difficulties) some once thought them to be.

Pests began to show resistance to their effects, environmental problems arose and, in some cases, costs became prohibitive. It became clear that pesticides needed to be used more judiciously to reduce these problems. To do that, we can return to some of the old ways of non-chemical management of pests. But, in agriculture, chemical pesticides still may be necessary to maintain pest levels below some point where they become intolerable.

What is IPM? Integrated pest management (IPM) is the use of various compatible pest control techniques to keep pest numbers below a level causing economic or aesthetic damage (known as an economic or aesthetic threshold).

Control is only employed, at a point somewhere below the actual economic or aesthetic threshold, when a pest population is likely to reach it. This is known as an action threshold. With IPM, it is necessary to understand the biology of a pest and its interactions with other organisms and its environment (this is the definition of an ecosystem). It is also necessary to foresee the impact of our actions on this ecosystem. The IPM approach takes into account the effects of all pest control practices on the pest and its natural enemies, other pests, potential pests, the crop, people, wildlife, the environment and last, but certainly not least, the cost of managing the pest. In this article, are some of the basic components of an IPM program.

The Basics of IPM. As mentioned earlier, IPM uses a combination of compatible control techniques. These include genetic, cultural, biological, physical and personal tolerance for the pest or its effects on landscape plants. Some may say that the homeowner should be more tolerant of pests than the farmer, since his livelihood doesn't depend on his plants. However, appearance of the landscape may affect the resale value of one's home, so pests may have an important economic effect in suburbia, too.

Once action thresholds have been established for plants in the landscape, how do you tell when they have been exceeded? Regular pest monitoring, or scouting, is usually necessary to estimate pest populations and the need for control. This may consist of actually counting the number of some pests on a set number of plants or making an estimate of percent of an area that is infested.

Sometimes certain traps may be used to assess pest numbers. This can point out whether a pest population is increasing or decreasing and whether an action threshold has been exceeded.

Scouting methods and action thresholds exist for some landscape plants in some parts of the country. However, research is needed to adjust them for each particular area in which they're used. The economic, social and environmental costs and benefits of different pest control tactics and action thresholds, in different communities, must be weighed. For instance, what is the cost of applying some pesticide to a lawn in terms of dollars and its effect on the environment versus the benefit of resale value of the property and increased aesthetic pleasure.

Every effort has been made to provide correct, complete, and up-to-date pest management information for New York State. Changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide. Trade names used herein are for convenience only. No endorsement of products is intended, nor is criticism of unnamed products implied.

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