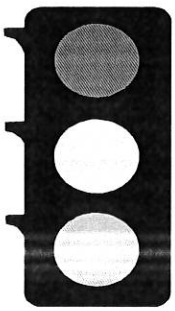
DON'T BE A NOZZLEHEAD!

THINK BEFORE YOU SPRAY

LAWN CARE

USING INTEGRATED PEST MANAGEMENT (IPM)



- ***Do you have flying insects in the back lawn?***
- ***Does your grass seem to be too thin in certain areas?***
- ***Are there some kind of brown spots in the front yard?***

If your first thought is to reach into the back of the closet for the can of insect killer, or get the sprayer out of the garage and fill it with pesticide and wage war against these pests–

STOP!

Maybe you should consider another traffic signal–the common traffic light. **Red–Stop–** don't do anything yet. **Yellow–Caution**–think about the consequences (good and bad) of applying a pesticide. **Green–Proceed**–but in an orderly fashion. What (exactly) are the insects? Monitor the insects and see what they are doing. Are they causing significant damage? Could the brown spots simply be from improper watering? Are there alternatives to applying a pesticide that may be safer for the environment, for you, your children? Could they be just as effective as a spray? Congratulations! You have, in a simple way, just followed the principles of Integrated Pest Management (IPM) to help you make educated, environmentally friendly decisions.

Integrated Pest Management (IPM) may sound like a fancy, hard to understand system. It is not. IPM is a simple, practical and flexible way to help manage pests in home lawns. It involves the use of a blend of pest management tactics to protect the lawn against insects, diseases, nematodes and weeds. People who practice IPM monitor their lawns and integrate cultural, biological, mechanical and chemical techniques to suppress pests. Think about going to the doctor. Your doctor uses a form of IPM on you. Information is gathered about history, signs and symptoms. Tests may be performed. Only after a diagnosis is made are treatment options considered.

Basic IPM Principles

Identification and Diagnosis of the Pest

The first step in pest control is accurate identification. Early, accurate identification and diagnosis are essential to a successful IPM program.

Monitoring

Monitoring is the regular inspection of the lawn to determine the nature of the pest and cultural problems. This information can then be utilized to make decisions about management of the pest.

Action Threshold

It is important to know that all pests don't have to be controlled. The term "action threshold" is used to describe the level of pest presence that requires control. Action thresholds vary considerably from pest to pest.

Pest Management Strategies

IPM uses a combination of compatible control techniques. These include cultural, biological, mechanical, plant selection and chemical techniques. In many cases a combination of these strategies may be necessary.

continued

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- **Cultural controls** are modifications of practices to disrupt or reduce pest populations.

  For example:
  - growing a healthy lawn is one of the best ways to reduce pest populations.
- **Biological control** refers to the use of natural enemies to control pests.
- **Mechanical control** refers to the use of barriers or traps to exclude or catch pests.
- **Plant selection** involves the selection and use of grass varieties that are disease resistant and compatible with the existing conditions.
- **Chemical control** includes the use of pesticides. The least toxic pesticide should be used initially. **Use pesticides as a last resort after other techniques have failed or show little success.** If applied at the correct time and rate, pesticides are usually safe and effective. **READ AND FOLLOW DIRECTIONS ON THE LABEL.**

Using IPM on Home Lawns

The following IPM strategies for home lawn care will greatly enhance the health of the lawn and reduce the need for pesticides. **Maintaining the health of a lawn is the best method for reducing pest problems.**

Cultural

- **Fertilization**–lawns should be fertilized 2-3 times a year. Late spring and late fall and an additional (optional) application in late summer/early fall. Slow release fertilizer products are recommended.
- **Soil pH**–should be maintained in the range of 6.3-6.8. Nutrients are more available in this range and beneficial organisms are more active.
- **Mowing**–should be done at the right height and frequency. Too short encourages weeds, shallow roots systems on the grass which decreases drought tolerance and more potential for injury by insects and diseases. Do not remove more than 1/3 (about 1") of the leaf tissue at each mowing.
- **Watering**–deep watering encourages deeper root systems. The total needed for most lawns (including rainfall) is 1-1½" per week. Early morning watering allows the grass blades to dry more quickly and can discourage diseases.
- **Soil compaction**–can severely inhibit air and water drainage. A heavy thatch layer has the same effect. The best choice for improving compaction and reducing thatch is core aeration.

Plant (Lawn) Selection

Selection of the proper species and/or cultivar is important. Species and even varieties differ in their appearance, adaptation and their ability to tolerate diseases and insects.

- **Kentucky bluegrass**–because it spreads by underground stems, it has the ability to fill areas of the lawn that may be damaged by pests. Certain varieties offer resistance to some diseases.
- **Perennial ryegrass**–many have resistance to "summer patch," a common disease on Long Island. Ryegrass varieties with endophytes have resistance to surface feeding insects- sod webworms and chinch bugs.
- **Fine fescues**–are lower maintenance grasses that do well under low fertility and moisture. Some cultivars also have endophytes to resist surface feeding insects.
- **Tall fescue**–has few diseases and is drought and traffic tolerant when properly maintained.

Chemical Control

IPM is not a pesticide free program. Turfgrass IPM incorporates all of the cultural factors listed above. Practicing IPM should greatly reduce the need for pesticides. However, if diseases or insects reach levels or an action threshold, the use of a pesticide may be necessary. Proper identification of the pest (insect or disease) is critical before any pesticide is applied. Timing of the application and the rate applied depend on proper identification of the problem. **READ AND FOLLOW DIRECTIONS ON THE LABEL.**

Using Integrated Pest Management (IPM) is the best way to safe, long-term pest management with minimal adverse effects on the surrounding environment. Pesticides are just one of the tools used to effectively manage pests. Integrated Pest Management (IPM) practices can help you have an attractive, healthy lawn while minimizing adverse impacts on the environment and others.

OTHER BROCHURES AVAILABLE

- **IPM – Basic IPM Principles**
- **IPM – Home Landscape**
- **IPM – Household Insects**

FOR ADDITIONAL INFORMATION

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