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PART I

PEST MANAGEMENT

Around the Home

Cultural Methods

Miscellaneous Bulletin S74

ACKNOWLEDGMENTS

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Illustration Credits

Hercules, Inc., C. Komar, Nina Shishkoff, and R. Whittemore: most cover illustrations
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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 guidelines 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.

Table 1. Helpful weights and measures

American Fluid Measure

80 drops = 1 teaspoon (tsp.)
3 teaspoons = 1 tablespoon (Tbsp.)
2 tablespoons = 1 fluid ounce (fl. oz.)
8 fluid ounces = 1 cup (c.)
2 cups = 1 pint (pt.)
2 pints = 1 quart (qt.)
4 quarts = 1 gallon (gal.)

American Dry Measure

3 teaspoons = 1 tablespoon (Tbsp.)
16 tablespoons = 1 cup (c.)
2 cups = 1 pint (pt.)
2 pints = 1 quart (qt.)

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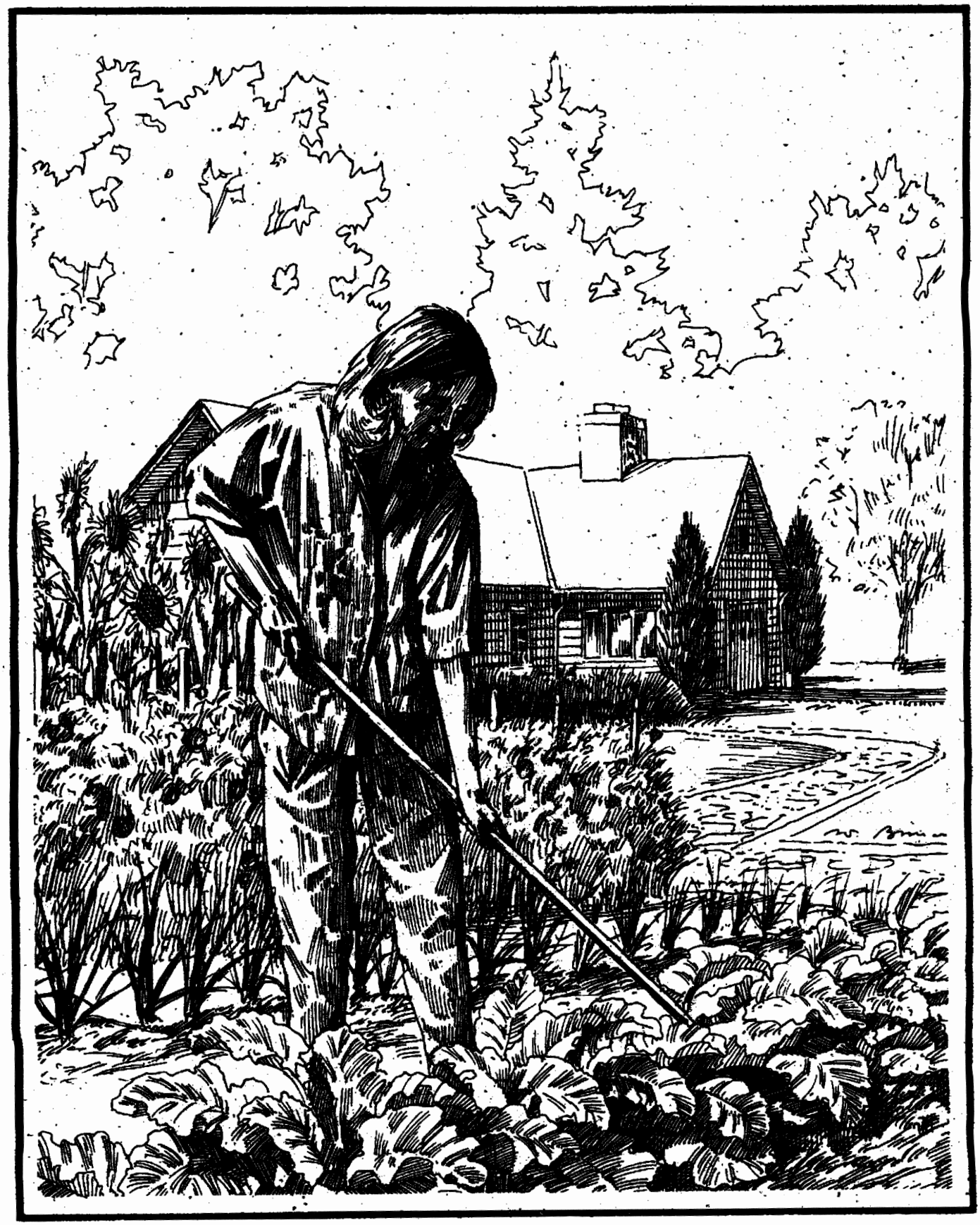

INTRODUCTION

What Is IPM?

Integrated pest management (IPM) is a systematic approach to managing pests that focuses on long-term prevention or suppression with minimal impact on human health, the environment, and nontarget organisms. IPM incorporates all reasonable measures to prevent pest problems by properly identifying pests; monitoring population dynamics; and using cultural, physical, biological, or chemical pest population control methods to reduce pests to acceptable levels.

Although the home environment can contain a huge array of organisms, only a very small percentage of these would be classified as pests. Pollinators, decomposers, natural enemies of pests, and many others whose function is unknown live in harmony. The goal is to manage a pest population without upsetting the natural balance of organisms or harming ourselves or the environment.

The first step in an integrated pest management program is to understand which organisms are pests and what damage they are likely to cause. Once the pest has been identified and the potential damage assessed, a creative, effective, and commonsense management approach can be undertaken. IPM focuses on the prevention of pests and the use of control measures that are most effective and present the least risk to people and the environment when pest problems arise.

This bulletin promotes the use of an integrated approach to managing the pests that infest our food, homes, and surroundings. Whether you do the pest management work yourself or contract to have the service done, it is wise to know the management procedures. An integrated program uses all pest management resources available. It does not necessarily eliminate all pests but attempts to limit the damage to acceptable levels. Practicing pest management does not eliminate the use of all pesticides but promotes their judicious use when and where needed. Using pesticides as a last resort and choosing those that are least toxic makes sense.

When plants are diseased or injured by insects or when pests are found in the house, *avoid panic.* Assess the severity of the problem and identify its cause (a few ants in the kitchen does not constitute an infestation). If you do not know what the pest is, try to have it identified. Once the pest has been identified, attempt to learn more about it. Many sources of information about plant problems, including insects, diseases, and other pests, are available. Your local Cooperative Extension office may have fact sheets about common pests. Local libraries often have a good selection of books about gardening topics, including insects, plant diseases, and other pests. Many gardening and housekeeping books and articles in newspapers, newsletters, and magazines address pest problems.

Important things to learn about the pest problem include the time pest activity occurs, the number of generations occurring each year, and the first symptoms and signs of activity. You should also know how pest populations can be *monitored* and whether certain pest population levels can be tolerated before a damage *threshold* is reached. Doing nothing is one option. Allowing the damage to occur and letting nature take its course may lead to decisions about what plant material you want to grow in the future. Natural enemies may also come in and reduce pest pressure.

A good pest management program includes a record-keeping system. Monitoring or scouting for pest presence and damage is a fundamental practice in IPM. Visual monitoring as well as the use of various types of traps or detection devices are used. The data collected will help you decide what to do. Such a system might be organized according to plants in the yard, the pests appearing on them, or the places that pests occur. Include information on what you did or did not do to manage the pest and what the outcome was. It may prove helpful to draw a map of the yard showing trees, shrubs, garden, and lawn areas. Include other important features and label the plants. Record significant events such as construction, lightning strikes, chemical spills, and occurrences of pests and natural enemies. Such a record, kept over the years, will provide an accurate picture of events that occur in your yard, garden, or house. This information should be valuable in the future if the pest problems recur.

A good pest management program also considers ways to prevent future outbreaks:

Appropriate plant selections. Selection of plants that resist or tolerate pests should be a first choice. Consider whether natural enemies can be conserved or if you can make augmentative releases to keep the pest in check. Cultural sanitation practices such as removing garden debris during and at the end of the growing season may remove harborage for many pests.

Assuring plant health. Keeping plants growing vigorously may enable them to withstand some pest attacks and resist weed problems.

Mechanical methods. Tightening window screens and filling holes into the house with caulk may help prevent a future household pest problem. For example, a troublesome disease on an annual plant could be prevented the following year by planting a resistant variety, or you might consider changing to low-maintenance landscaping. If we change our attitudes and work with our yards rather than fighting them, pest management may become easier.

Benefits of home IPM:

- Reduces the need for pesticides by using several pest management methods
- Balances proper and minimal use of chemical pesticides with the need to manage pests

- Helps protect the environment from excessive and unnecessary pesticide applications
- Fosters sound structures and healthy plants. Well-maintained homes and lawns better withstand damage from insects, weeds, and other pests.

Although we have listed several pest management techniques in Part I, new ones become available regularly. Continue to read about the latest pest management devices.

Part II, Pesticide Guidelines, complements Part I. It offers specific, detailed information on pesticide pest management methods.