



CORNELL COOPERATIVE EXTENSION - SUFFOLK COUNTY



INSECT AND PLANT DISEASE DIAGNOSTIC LABORATORY

EDUCATION CENTER
423 GRIFFING AVENUE
RIVERHEAD, NY 11901
HORT INFO LINE 631.727.4126



Cornell University
Cooperative Extension
of Suffolk County

BAYARD CUTTING ARBORETUM
MONTAUK HWY. PO BOX 463
OAKDALE, NY 11769
HORT INFO LINE 631.581.4223

Plant Health Care: A Basis for IPM

We all want a healthy, vibrant garden. Healthy gardens start with healthy plants. Plant Health Care is a concept that was developed as a natural evolution from Integrated Pest Management (IPM). The IPM philosophy developed as an alternative to chemical treatments based on calendar dates, which has been a common practice for pest control for a very long time.

Plant Health Care is using ecologically sound principles to grow a wide range of plants in the landscape or garden at home or in the community. It can be practiced in caring for lawns, vegetable gardens, and flower gardens, in the landscape or in growing fruits or herbs. Keeping in mind the end result of having healthy plants in your garden should motivate and guide you into making important decisions. The rewards of having a healthy garden are well worth it!

Plant Health Care puts a strong emphasis on *preventive measures* and incorporates them into a comprehensive program with a focus on the plants. It does not replace IPM. It also takes into consideration the many perceptions and expectations of the gardener.

Some basic elements of Plant Health Care are:

Preventing the problem

The simple fact is that preventing a problem pays off in the long run. We have to know our sites and plan for preventive measures that will minimize pest problems, such as:

- replacing the plants that are prone to disease, insect and vertebrate pests
- mulching or planting ground covers to reduce weed invasions
- spacing plants for better air circulation, reducing disease potential

Once we know more about preventing pests in our own gardens, we can then make practical decisions about what can be done to alter the site.

To do this we *observe, plan and prepare*. Observe site and soil conditions. Make an assessment about how they might affect plant growth and development by looking at various factors: climate, light, wind, water, soil texture and composition, slope, drainage and physical characteristics. Plan the garden design by choosing plants that match site conditions, anticipating the future maintenance needs of the garden or landscape and arranging for practical site alterations. Prepare the site by making the physical changes, incorporating the hardscape features, and amending the soil, if necessary. We must also recognize and work with those factors that cannot be changed.

Starting with healthy plants

A healthy plant, planted correctly in the right location, is more likely to remain healthy, being less susceptible to attack by disease or insects. Selecting a plant is much more than choosing one that fits your hardiness zone. It means selecting plants that you can maintain well. And it means selecting plants, when possible, with inherent disease resistance, insect resistance, and ability to withstand other stresses that may be present.

Being aware of your values

The results we desire and expect are those that we value most. Most gardeners would agree that appearance is important in our gardens, but they may differ on how they distinguish good from bad appearance. In other words, gardeners' expectations differ. Color and leaf texture preference, presence of thorns or fruit, taste and quality of edible parts, tolerance for the volume of leaves that may drop in the fall -- all vary from gardener to gardener. What they value will also change over time. In addition, gardeners have to distinguish between damage that is harmful to plants and damage that is aesthetically imperfect but may not harm the plant.

Considering options

In times of crisis, gardeners may seek help or try to remedy a problem. Deciding on an appropriate response is not a "recipe." Management can be modifying the environment to prevent future recurrence, mechanically disrupting the stress to alleviate the current problem, using other organisms to manage the problem, or preventing the spread of stresses through remediation.

Plant Health Care is an ongoing process, just as our garden is a living, growing entity. As plants grow and mature, it is essential that we continue to care for them by feeding, pruning, cultivating, mulching and removing unhealthy plants or plant parts. With the best of care, there will still be occasions when the pest problems occur. This is when we move on to the other stages of IPM.

Plant Health Care allows us to avoid problems. Problems that are avoided are problems that we don't have to solve and that leave us more time to enjoy what we have created in our gardens and landscapes.

The principles and practices of Plant Health Care are promoted through Cornell Cooperative Extension's Home-Grounds and Community Horticulture's educational programs and are not associated with any products or series of products with plant health care in their name.

Reprinted from: *Plant Health Care: A Basis for IPM*, by Charles Mazza, Senior Extension Associate, Department of Horticulture, Cornell University and Mark Russo, Program Leader, Environmental Issues, Cornell Cooperative Extension - Rockland County, 3-20-01.

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