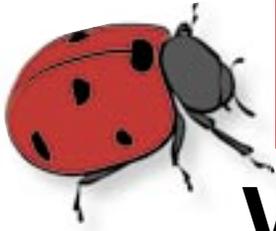


NATURALLY MANAGING

PESTS



...WITH A HEALTHY GARDEN

A healthy garden filled with a wide variety of flowering plants will be more resistant to significant pest damage. A healthy, diverse garden will also attract beneficial creatures, such as dragonflies, ladybugs, lacewings, syrphid flies, and tiny, non-stinging wasps, which feed on pests.

ATTRACTING AND KEEPING BENEFICIAL INSECTS

- Reduce or eliminate the use of broad-spectrum pesticides in your garden. Birds, pollinators, and other beneficial insects are often far more sensitive to pesticides than the pests you might be trying to kill.

Once pesticides eliminate the beneficial insects, pests are free to multiply without a natural check. As pest populations rise, you may be tempted to spray more frequently, but some pesticides leave genetically resistant strains of pests to breed, creating an increasingly resistant pest population.

The harder it becomes to kill the pest, the more you'll need to spray and the fewer natural enemies you'll have to help you out.

- Provide food and water for the adult forms of beneficial insects. Although many beneficial insects perform their pest control services only during an immature stage; the adult stage feeds on nectar and pollen.

You can attract and keep a wide variety of beneficial insects in your garden by including flowering plants that are rich in pollen and nectar.

The Box on the back page lists a number of these "insectary" plants. Some adult beneficial insects also need water from dew, irrigation, or other sources to sustain them during dry periods.

CHOOSING THE RIGHT PLANT

One of the most important preventive steps in the pest management process is selecting appropriate plants for a particular location. Usually we choose plants for their beauty, but to minimize pest problems, consider other plant characteristics and the site where it will grow. **It's easier to plant a compatible species for your site than to try to alter the growing conditions.**

- Understand the soil conditions in your yard. Soil conditions must match the requirements of your plants. For example, some plants are well adapted to salty or compacted soil or soil with poor drainage.
- Know the sun and shade characteristics of your garden. Consider times of day and different seasons.
- Know that watering requirements differ depending upon the soil and plant type.
- **Select pest- and disease-resistant plants.**
- Plant a diversity of species. This ensures that a single pest problem will not devastate your entire landscape.
- To attract and keep beneficial insects, include "insectary" plants in your landscape (see box on back).
- You can get help in choosing the right plants from California Certified Nurserymen, University of California Cooperative Extension Master Gardeners, Horticultural Consultants, ISA Certified Arborists (see the Yellow Page Index), or local gardening clubs. Also, see the books recommended on the backside of this fact sheet.

PLANTING AND CARING FOR YOUR PLANTS

Start your plants out right by choosing healthy specimens and planting them properly. Keep your plants healthy by correctly watering, pruning, and fertilizing (if needed).

- Select plants that fits the container size they are in. Do not buy plants where roots are hanging out of the bottom or if the plant appears to have out-grown the pot. Also check the “root crown,” the region where the roots meet the stem or trunk. Don’t buy the plant if that area is soft, rotten, or deformed.
- Don’t pile soil around the plant any higher than the root crown. Don’t plant in a depression that will allow water to wash soil down around the stem or trunk and cover the root crown. A continually moist root crown can cause rot.
- Since a young plant doesn’t have an extensive root system, it can dry out quickly. Water thoroughly and keep the soil moist, but don’t drown the plant.
- Cover bare soil with mulch. Mulch conserves soil moisture so plants don’t dry out as quickly. A four-inch layer of mulch will prevent most annual weeds from growing, and any weeds that do sprout can be pulled out more easily. Remember the coarser the material, the less weed problems.
- Use a mulch of organic material (leaves, bark, or wood chips) on top of the soil to provide the soil a slow, steady flow of nutrients to plants.

- Use organic fertilizers if soil testing indicates a need.
- Different plants require different kinds of pruning (if they need it at all). Learn how and when to prune your plants, and do so judiciously. Severe pruning can damage the plant and encourage pests and diseases.

INSECTARY PLANTS

These plants attract beneficial insects to your home garden.

ANNUALS

- Baby blue eyes (*Nemophila*)
- Calendula (*Calendula officinalis*)
- Cosmos (*Cosmos*)
- Lupine (*Lupinus spp.*)
- Marigold (*Tagetes*)
- Sunflower (*Helianthus spp.*)
- Sweet alyssum (*Lobularia maritima*)

PERENNIALS

- Calif. poppy (*Eschscholzia californica*)
- Coreopsis (*Coreopsis*)
- Crown-pink (*Lychnis coronaria*)
- Feverfew (*Chrysanthemum parthenium*)
- Monkey flower (*Mimulus*)
- Sage (*Salvia spp.*)
- Tansy (*Taenacetum vulgare*)
- Yarrow (*Achillea spp.*)

SHRUBS AND TREES

- Buckwheat (*Eriogonum spp.*)
- Calif. wild lilac (*Ceanothus spp.*)
- Coyote bush (*Baccharis spp.*)
- Hollyleaf cherry (*Prunus ilicifolia*)
- Lantana (*Lantana spp.*)
- Lavender (*Lavendula spp.*)
- Rosemary (*Rosmarinus officinalis*)
- Toyon (*Heteromeles*)

HERBS

- Coriander/cilantro (*Coriander sativum*)
- Dill (*Anethum graveolens*)
- Mint (*Mentha spp.*)
- Oregano (*Origanum spp.*)
- Parsley (*Petroselinum crispum*)
- Thyme (*Thymus spp.*)

PESTICIDES & WATER POLLUTION

Pesticides can damage our health and kill beneficial insects necessary for a healthy garden. Common household pesticides show up in our waterways, sometimes at levels that can harm sensitive aquatic life.

The County of Ventura Environmental and Energy Resources Department is working with local nurseries and hardware stores to reduce the risks associated with pesticide use. This fact sheet is part of a series of informative publications and store displays designed to educate Ventura County residents about less-toxic pest management.



Look for the “Our Water Our World” logo next to products in participating nurseries and hardware stores throughout Ventura County. For a list of participating stores, call 805/289-3333 or visit <http://www.wasteless.co>

Pest control strategies and methods described in these publications are consistent with Integrated Pest Management (IPM) concepts, and are based on scientific studies and tests in actual home and garden settings. IPM is an environmentally sound approach to pest management combining various methods with good horticultural practices. Follow all label directions on any suggested products. NO endorsement of specific brand name product is intended, nor is criticism implied of similar products not mentioned. Different products with the same active ingredients are equally suitable.

HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAMS

Most cities offer FREE monthly collection events that accept pesticides, fertilizers, latex and oil based paint, motor oil and filters, car and household batteries, pool chemicals, stains, solvents, fluorescent light tubes, automotive fluids, cleaning products, photographic chemicals and more. For more information and collection schedules call 805/289-3333 or visit www.wasteless.co

FOR MORE INFORMATION

Participating stores have been provided books on Integrated Pest Management (IPM) you may use while in the store. The store staff has been extensively trained in IPM to assist you.

The Certified Master Gardener Program operated by the University of California Cooperative Extension provides a free assistance Helpline and offers a variety of workshops and school education programs. Call 805/645-1455.

Check these websites:

<http://www.watoxics.org>

<http://www.ipm.ucdavis.edu>

http://www.pesticide.org/pesticide_factsheets

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RECOMMENDED READING

- *Natural Enemies Handbook* by Mary Louise Flint and Steve H. Dreistadt, published 1998 by University of California Division of Agriculture and Natural Resources, Berkeley, CA.
- *Trees and Shrubs for Temperate Climates*, 3rd ed. by Gordon Courtright, published 1998 by Timber Press, Portland, OR; 503/227-2878.
- *The Best of Fine Gardening: Healthy Soil* by the editors of *Fine Gardening* magazine, published 1995 by Taunton Press, Newtown, CT; 800/888-8286.
- *Sunset Western Garden Book*, by the Editors of Sunset Books and Magazine, published by Lane Publishing Co., Menlo Park, CA.