

NEWS RELEASE  
October 10, 2001

## PLANT PEST PROBLEMS AND GARDEN SANITATION

### BACKYARD HORTICULTURE

By Gary W. Hickman, Horticulture Advisor  
University of California Cooperative Extension, Mariposa County

When gardeners call to ask how to deal with insect, disease, and weed pests, they usually want to know where the pests came from in the first place. While some pests migrate great distances, most come from your own garden or nearby areas where they've been living on weeds or plant debris. Some pests survive as seeds, spores, eggs or pupae in the soil. You inadvertently bring others into your garden on contaminated seed, transplants, soil or equipment. Sanitation practices can reduce or eliminate many common garden pests.

Most garden sanitation practices are just common sense. Make sure crop seed and organic soil amendments, including manure, are free of weed seeds and pathogens. Use certified seed or stock whenever possible. Check transplants, especially plants that you are moving from another garden, for the presence of insects or diseases. Be sure to check the roots for symptoms of root knot nematodes. Do not move soil into your garden that you suspect may be infested with nematodes, stems of bermudagrass or nutsedge tubers. Nematodes and soil-borne diseases may be transported in soil that adheres to cultivating tools; weed seeds and disease may move around on lawn mowers. Be sure to clean equipment when moving from garden to garden.

Before planting a new crop, be sure that plant debris from the previous crop is removed or completely composted. Important fruit and nut tree pests, like the navel orange worm and the codling moth, survive in old cull fruit and nuts that remain in the trees or on the soil surface. Remove the fruit and nut culls or knock them to the ground where they can be tilled into the soil. Be sure to destroy or remove prunings that may be infested with borers.

Composting is a good way to destroy most crop and weed residues around the garden, and also control pests that may be harbored in the residues. You can then use the compost as an amendment to improve your soil. If done correctly, composting will control all insect pests, nematodes and most disease organisms, with the exception of heat tolerant viruses such as tobacco mosaic virus. Composting also destroys most weed seeds, with the exception of oxalis bulbs, burclover seeds, amaranthus (pigweed) seeds and cheeseweed seeds. For the composting process to work best, it's important that you make the pile the proper size (about 3 ft by 3 ft by 3 ft), turn the pile every 1 to 3 days, maintain a temperature of 160 degrees F, and add nothing to it once the composting process has begun.

Another sanitation method is to keep weeds under control at all times, and be sure to remove weeds in and around your garden before you make new plantings. Not only do weeds produce seeds that may find their way into your garden, they are also likely sources of insect pests. I've found heavy infestations of greenhouse whiteflies, the scourge of home gardeners, on weeds growing in gardens during the middle of winter. Other common pests that move from weeds to your garden include cutworms, grasshoppers, slugs and snails, stink bugs and thrips. Certain weeds also harbor virus

diseases that may be transmitted to your vegetable plants by aphids and leafhoppers. If you wait to remove these weeds, the pests may move onto your vegetables or flowers.

The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized). University Policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California Agriculture and Natural Resources, 1111 Franklin, 6<sup>th</sup> Floor, Oakland, CA 94607-5200, (510) 987-0096.