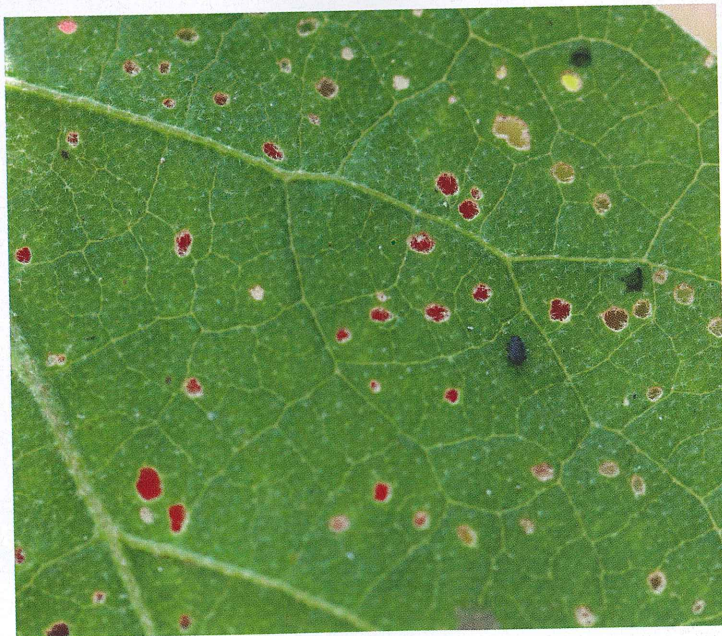




Managing Insects

You took the time to plant, water and weed the vegetable garden, and just when the fruits of your labor were beginning to grow, the insects showed up. Here is quick way to determine what to do with these common edible garden pests.



TOP: A tomato fruitworm eats an unripe tomato. **INSET:** Eggplant is nearly always damaged by flea beetles that riddle the leaves with tiny holes.

TOP PHOTO: FLEX AT ENWIKIPEDIA; BOTTOM PHOTO: DOUGLAS A. SPILKER

Managing insects in the home garden can be challenging, and nothing is more discouraging than having your favorite vegetable devoured by pests. Take your garden back from insect pests! Learn to recognize the more damaging ones, and then choose the most appropriate management action.

Tolerate the Damage

There is a saying: "Plant one for the rabbit, one for the pests and one for you!"

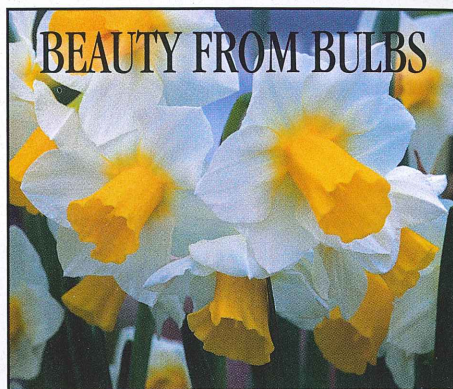
This takes a lot of broad-mindedness, but tolerating the damage can sometimes be a reasonable approach. For example, most of us harvest enough tomatoes that tossing out a few with fruitworm damage is no big deal. Another approach is to plant vegetables with less susceptibility to damage from insects. Carrots, radishes, green onions, lettuce and peas are rarely damaged by insects. Tomatoes and peppers sometimes can be damaged, but plants in the cabbage family, cucumbers, eggplants, potatoes and squash are nearly always damaged by insects or other pests.

Infuriating Cutworms

Cutworms have an infuriating habit of cutting down young plants at the base, usually during the night. They are the caterpillars of moths and overwinter in the soil as larvae. Many vegetables are vulnerable, but cutworms especially damage tomatoes, peppers, eggplants and beans. Young plants will not recover from the cutting damage, so protect transplants with collars pressed into the soil, creating a barrier to cutworms. A wrapping of newspaper or an empty toilet paper roll does the job. Watch for signs of cutworm activity (cut stems or droppings) in the early evening. If seen, search the soil around the affected plant and destroy any discovered cutworms. If you are too late, replanting may be necessary.

Cucumber Beetles and Wilt

There two kinds of cucumber beetles: spotted and striped. They have black heads and yellowish-green bodies with either 12 black spots or black and yellow stripes. When disturbed, they hastily fly away. They feed on all cucurbit family members (such as cucumbers, squash and melons), but occasionally they feed on beans, peas or corn. These beetles may feed on young plants, consuming the



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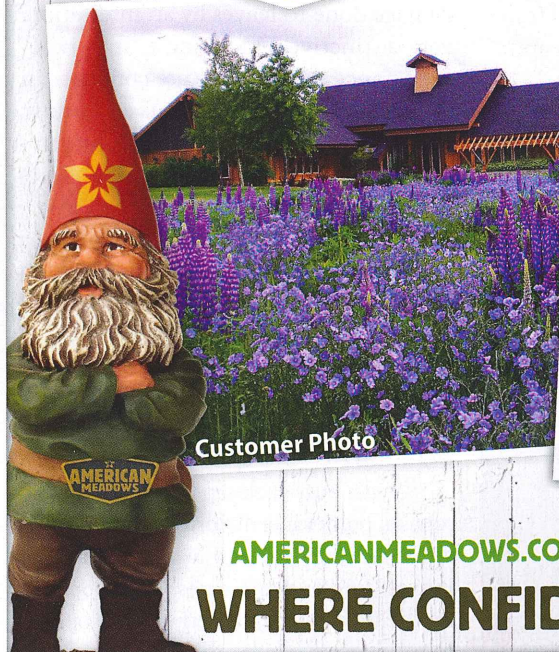
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Bronze-colored squash bug eggs are neatly laid on the undersides of leaves.



Spotted cucumber beetles can transmit bacterial wilt.

stems and cotyledons resulting in dead or stunted plants. Mature vines and fruit may endure chewed holes in leaves and rinds. The worst damage by the beetle is the transmission of bacterial wilt. The infected vines gradually wilt (“flag”) and die. It is important to remove and destroy any wilt-infected plants immediately. Look into planting tolerant varieties, since varieties of cucumbers tolerant to bacterial wilt are available. Insecticidal sprays may be needed if early populations of cucumber beetles are high, but do not wait too long. Treat early in the season before overwintering beetles have a chance to lay eggs.

Shot-Hole Damage by Flea Beetles

The tiny dark-colored flea beetles commonly have a metallic look. They

only take tiny bites, but the collective damage done to leaves by an infestation is very distinctive, producing a “shot-hole” appearance. Flea beetles are common on tomatoes, potatoes, eggplants and beans. Adult flea beetles overwinter in garden debris and emerge as spring temperatures rise. Consider using transplants instead of direct-seeding, since larger plants seem to compensate for leaf damage, and fruits are usually unaffected. Flea beetle control with insecticides may be ineffective since these insects are very mobile, and continually come in from other gardens.

Squash the Squash Bug

Squash bugs suck sap from zucchini, squash, pumpkins, melons and other cucurbits, resulting in yellow leaf spots turning into wilting or dying vines. Their feeding on the fruit causes sunken wounds open to rot. Like true bugs, the adults are flat



Flea beetle damage

with folded wings over their backs. Newly emerged nymphs, which also feed, are greenish with black heads and legs. Bronze-colored eggs are found in clusters on the undersides of foliage. Squash bugs are difficult to control. If caught early, hand-pick and destroy eggs, nymphs and adults. Any sprays need to be started early, applied when eggs are first seen and then again 10 to 14 days later. Be sure to spray the base of plants where the bugs seek shade.



Bean leaves can be devoured by several beetles including bean leaf beetles, Mexican bean beetles and Japanese beetles.

Tomato Fruitworm Loss

The tomato fruitworm is the same caterpillar that feeds on sweet corn (corn earworms). The larvae are about 1½ inches long and vary in color from green, brown, pink, yellow or even black, with tan heads and striped bodies. The evidence of this late-summer pest is usually a large black hole at the base of the fruit stem. When the tomato is cut, there is tunneling and the center may contain frass, decay or even the worm itself. Simply dispose of any infested fruit. Pesticides, including biologicals such as Bt (*Bacillus thuringiensis*), can be used to kill the larvae, but

the pesticides must be applied before the worm enters the tomato.

The Fruits of Your Labor

The “fruits” of home vegetable gardening can be quite enjoyable, but pests can make it infuriating, too. Learn to identify your garden’s problems and be sure to keep records. This will help you develop better pest control strategies. Remember with gardening, there is always next year. ♻️

Douglas A. Spilker, Ph.D., is a consulting ornamental plant pathologist and entomologist, garden writer and lecturer. Dr. Doug can be reached at askdrdoug@gmail.com.

Vegetable Insect Control Tips

1. Dispose of plant debris at the end of the season. Consider the landfill instead the compost bin.
2. Till your garden before planting to disturb overwintering insects.
3. Plant varieties recommended in your area or ask other gardeners.
4. Inspect transplants before buying them to ensure they are free of pests and diseases.
5. Vigorous plants tolerate more damage. Use proper cultural practices for best growth.
6. Routinely inspect plants for signs of insects; you may not always see the pest itself.
7. Commonly only treat with insecticides when pests or damage is seen. Before using any pesticide, check the label to see if it can be used on that crop.



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