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## VEGETABLE GARDEN PESTS

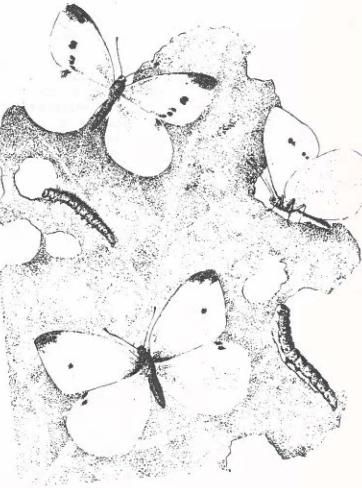
Once again it is time to pay close attention to your garden to make sure you get more to eat out of it than the bugs do. Listed below are some of the common insect pests found on garden crops. Good control of pests begins with proper identification.

Imported Cabbage Worm. The imported cabbage worm is a pest of all crucifers. The caterpillar eats ragged holes in the leaves of plants and often tunnels into the heads of cabbage and cauliflower. The larvae grow to about 1 inch and are bright green. Adults are well known and are found flying throughout the spring, summer and fall. They have 3 or 4 black spots on white or pale yellow wings. Severity of infestation often depends on the weather. Be sure to destroy all remnants and weeds after harvest to help alleviate problems the following year.

Cabbage Looper. The cabbage looper is also a pest on all crucifers. It is a pale-green "measuring worm" that grows to about 1 1/2 inches long. The adult moths are brown with distinct white-colored spots on their wings. About 4 generations occur in Virginia each year. Cabbage loopers are very susceptible to insect diseases and viruses. When infected the loopers hang from the undersides of leaves and later turn







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black and liquify in the heat of the sun. The spores are then dispersed and in turn reinfect other larvae.

Cutworms. Cutworms are among the leaders for the ugliest caterpillar award. They are dark gray to black, very plump, and grow to about 2 inches in length. They do most of their damage at night by cutting their favorite plants off at the soil line. Cutworms will attack most garden crops but major host plants include corn, tomatoes, peppers and beans. During the day they can be found beneath clods of dirt near their host plant. Beware of cutworm problems when turning sod land over to plant your first garden. Only those insecticides that are used before planting will effectively control these pests.

Tomato Hornworm. This ferocious-looking caterpillar is found most often on tomato and eggplant but also eats pepper and potato. The hornworm is light green with white stripes down its sides. A red horn near its hind end gives this insect its name. When full grown it is 3-4 inches long and as big around as a nickel! Hornworms mature into beautiful "hawk" moths. When infestations are light, just pick off the caterpillars and destroy them. Don't kill the ones with little white cocoons on their backs since these are cocoons of parasitic wasps which will emerge and control future infestations.

Corn Earworm. Also known as tomato fruitworm, cotton bollworm and vetchworm, its primary host is sweetcorn but will severely injure tomatoes. Earworm larvae, when full grown, are 1-2 inches long and vary in color, with pink, green and brown forms common. Corn earworm moths prefer to lay their eggs on corn silks. By spraying an appropriate insecticide on the silks, earworm larvae will be killed upon hatching from their eggs. Good results may be obtained by putting mineral oil just inside the tip of each ear. This will stop larvae from entering and feeding in that ear.

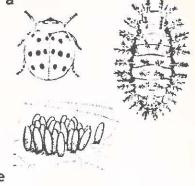
Aphids. While the statement "for every plant there is an aphid" may not be totally correct, it probably is true for garden crops. These 1/16 - 1/4 inch, pear-shaped insects suck sap from plants and secrete a sticky substance called honeydew. A few aphids on a plant are relatively harmless, however they reproduce quickly and should be closely monitored. When controls are necessary be sure to apply chemicals evenly on the entire plant including the stems and undersides of the leaves.

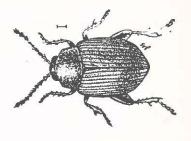
Mexican Bean Beetle. The adult beetle resembles a ladybug beetle but is larger, about 1/4 - 3/8 inches long and has 16 black spots on its back. Adults as well as the yellow, spiny larvae (called spiny-backs) skeletonize the leaves of their favorite hosts, snap and lima beans. If left unchecked they will totally destroy your bean crop. Three to four generations of beetles are common in Virginia, with the adults overwintering. Eggs are laid on the underside of leaves and hatch in about two weeks. Parasites are released each year in eastern Virginia to control Mexican bean beetle. If chemicals are needed, be sure to direct the spray to the undersides of the leaves.

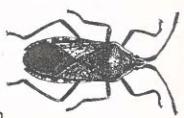
Flea Beetles. Often as early season pest, these small beetles earn their name because they jump like fleas when disturbed. They chew holes on a number of garden crops including beans, peas, corn, eggplant and tomatoes. They are small, usually less than 1/8 inch and often a shiny, blue-black color. Often major flea beetle infestations can be avoided by keeping your garden weed-free.

Squash Bug. The squash bugs and its relative the leaf-footed bug are primary pests of vine crops. They are usually a dingy-brown color and orange or yellow underneath. Many emit a very disagreeable odor when handled. Symptoms of infestation include wilting and/or browning of leaves and vines. Often when the bugs are in high numbers entire plants may be killed. Adults overwinter in moist, well protected areas. When possible eliminate these harborages by good sanitation.

Squash Vine Borer. The squash vine borer is a caterpillar which attacks primarily squash, cucumbers and pumpkins. Sudden wilting of plant parts and a yellow, sawdust-like frass near the base of the stems are signs of the borers presence. These insects mainly show up in the mid to late season. Adults are clearwinged moths that are often mistaken for wasps. The insect overwinters in a black, silken cocoon beneath the soil surface. Plow your garden in late fall to help reduce the incidence of this pest.

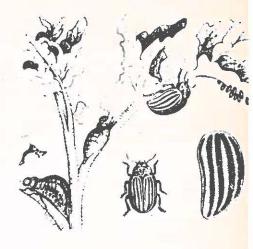








Colorado Potato Beetle. The Colorado potato beetle is an extremely important pest on potatoes and eggplant but will also attack peppers and tomatoes. Both the adult and larval stages defoliate vegetables. The adult beetle is about 3/8 inches long, has spots on the front part of its yellow body and ten lines down its back. The larvae grows to about 1/2 inch, is pinkish-red with black spots along its sides. The insect overwinters as an adult in the soil. Colorado potato beetles are becoming resistant to many insecticides and may be difficult to kill.



Spotted Cucumber Beetle. The 12 spotted cucumber beetle or Southern corn rootworm adult is a slender, greenish-yellow beetle with 12 spots scattered on its back. It is a major pest of cucumber as well as other vine crops. The adults chew on the leaves and new shoots and overwinter on the ground beneath debris. The beetle's larvae tunnel through the roots and cause wilting and yellowing of the plant. The beetles are often vectors of a bacteria that causes cucumber to wilt. Late planting and mulching have been effective in reducing damage by the spotted cucumber beetle. Be ready to take quick control measures if wilting signs appear.



Harlequin Cabbage Bug. These bugs are easily recognized by their shiny black or deep blue, marked with brilliant red or orange color. They are about one-half inch long and flattened. These bugs suck the sap from the leaves of cabbage and other crucifers. Plants attacked by these bugs wilt and die if the insect is not controlled. Kale can be used as a "trap crop" for the harlequin bug; chemical control involves treating the top and underside of the leaves with garden insecticides.

