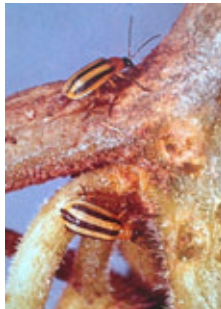


I D E N T I F Y I N G

VEGETABLE INSECT PESTS

I N P E N N S Y L V A N I A



PENNSTATE



College of
Agricultural Sciences



Grasshoppers

Adults are 1 1/2 inch long and have elongated hind legs for jumping. Both the nymphs and the adults eat the leaf margins and chew holes in the leaves of rhubarb, potato, cabbage, broccoli, iris, daisy, sunflower and other vegetables and flowers.



Asparagus Beetle

One of the most common beetles found on asparagus, this pest is the most injurious. The beetle is 1/4 inch long, with a bluish head, reddish neck and dark blue wings with yellow spots. When caught, they produce a characteristic squeaking noise.



Bean Seed Maggots

The bean seed maggot damages the seeds and seedlings of beans, corn, peas and other vegetables. The full-grown maggot is white, 1/4 inch long and lacks a visible head. The adult fly is 1/4 inch long and resembles a housefly in color.



Whiteflies

Whiteflies infest a wide variety of greenhouse-grown vegetables, particularly tomatoes and also survive outdoors on these crops during the growing season. The adult is a white insect, 1/16 inch long, that resembles a tiny moth.



Mexican Bean Beetle

The Mexican bean beetle is the major defoliation pest of beans. This pest is 1/4 inch long, yellowish-brown with 16 black spots. Feeding of the larvae and adults results in skeletonized foliage.



Root Maggots

Root maggots are small, 1/4 inch, legless and white. They feed on the seed and stem of young bean plants, preventing their emergence and not allowing the plants to grow normally.



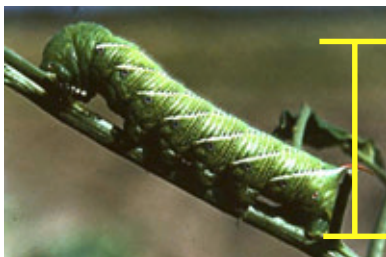
Cabbage Maggot

The cabbage maggot is a common and destructive pest of many vegetables. The fly is about 1/4 inch long, dark gray and thickly covered with black bristles. Among common vegetables frequently and extensively damaged are cauliflower, cabbage, radish and turnip.



Imported Cabbageworm

The green caterpillars are up to 1 inch long and appear velvety. Cabbageworms eat holes in the leaves and heads of cabbage, broccoli, Brussels sprouts, kale, collard and kohlrabi.



Tomato Hornworm

Tomato hornworm caterpillars are green with white, horizontal v-shaped lines on the sides and are up to 3 inches long with a posterior horn. Caterpillars eat tomato leaves, often stripping plants, and may also burrow into tomato fruit.



Black Cutworm

The black cutworm is blackish, fat, and up to 1 inch long. They attack the transplants and seedlings of tomatoes, corn, beans and other vegetables and flowers.



Potato Leafhopper

The potato leafhopper is a pest that causes serious damage to beans and other vegetables as well as forage crops. Adults are highly mobile, spindle-shaped, yellow green and about 1/8 inch long.



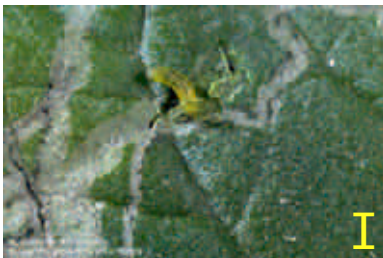
European Corn Borer

The European corn borer is one of the five most important vegetable pests in Pennsylvania. The full-grown borer is 3/4 to 1 inch long, light brown with two conspicuous small round, brown spots on the back of each abdominal segment, and the head is dark brown to black.



Corn Earworm

The corn earworm is a major pest of many field and vegetable crops. Earworms are variable in color but develop distinct longitudinal white or cream-colored bands as they mature.



Leafminer

Columbine leafminer larvae produce snake-like, white trails through the leaves. Beet and spinach leafminers produce white blotches that soon turn brown.



Corn Flea Beetle

The corn flea beetle is a small, 1/4 inch, black jumping leaf beetle with a portion of the hind leg greatly enlarged. During the feeding process, beetles transmit bacteria to corn which causes Stewart's wilt.



Green Peach Aphids on Peppers

The green peach aphid is a common pest of peppers in Pennsylvania. The pest is soft-bodied, 1/16 inch long, and yellowish green. It is characteristically pear-shaped, with fairly long antennae, and a pair of "tailpipes" at the end of the body.



Onion Thrips

Onion thrips feed on a wide variety of vegetable plants, small grains, field crops and insects. Adults can range from a pale yellow to a dark brown and are usually smaller than 1/16 of an inch. They can often be found feeding on the plant juices of cabbage and onions.



Slugs

Slugs feed on flowers, vegetables and ornamentals are especially injurious to seedlings. They are 1/4 to 10 inches long, depending on the species. They vary from cream to gray to black; some species are covered with dark spots.



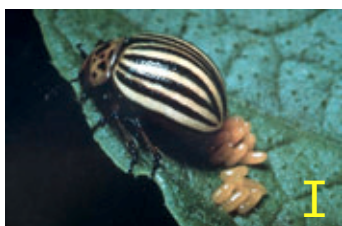
Squash Bug

The squash bug is a serious pest of squash and pumpkin, but melons and cucumbers are sometimes severely injured. The adult is brown, 1/2 inch long, and gives off a distinct odor when handled.



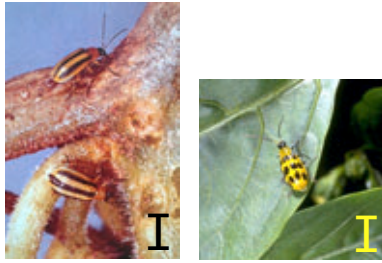
Squash Vine Borer

The adult is a clear winged moth of about 1 1/4 inch long with a metallic olive-green front wing and transparent bluish hind wings. The body is strikingly colored with orange and black markings. The borer is one inch long, and white with a brown head.



Colorado Potato Beetle

The Colorado Potato Beetle is an important pest of tomatoes and eggplants in the mid-Atlantic area. The adult beetle is stout, oval, about 3/8 inch long and has yellow wing covers with black stripes.



Striped and Spotted Cucumber Beetles

Striped and spotted cucumber beetles attack cucumbers, squash and related crops. The striped cucumber beetle is about 1/4 inch long with a black head, yellow thorax and three distinct longitudinal black stripes on its yellow wing covers. The spotted cucumber beetle is similar in size but has a yellowish-green body, black head and 12 black spots on its wing covers.

Pest identification is the first step in following an Integrated Pest Management, or IPM program. The pictures and descriptions in this publication should help the home gardener identify common insects found in the garden and flower beds. For more complete information about the insects, their potential as pests, and how to prevent or control them, consult the 'Pest Problem Solver' section of the Pennsylvania IPM Web site (<http://paipm.cas.psu.edu/problemSolv.html>) or contact your county Extension office. The phone number may be found in the Blue Pages of the phone book. Other information may be found at the Penn State Department of Entomology's Web site at <http://www.ento.psu.edu/>. To learn more about IPM, call 1-800-PENN IPM or visit our web site at <http://www.paipm.cas.psu.edu>.

The Pennsylvania IPM Program is a collaboration between the Pennsylvania State University and the Pennsylvania Department of Agriculture (PDA) aimed at promoting integrated pest management in both agricultural and non-agricultural situations.

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