



I ILLINOIS
Extension

COLLEGE OF AGRICULTURAL, CONSUMER
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The Cucurbitaceae family contains more than 100 genera and over 700 species of plants. Several commonly grown garden crops belong to this family including cucumbers, melons, squash, and pumpkins; collectively known as cucurbits. Because these crops are related they are commonly attacked by the same pests. Some of the most commonly encountered insect pests on cucurbit crops include:

Cucumber Beetles

There are two species of cucumber beetles found in Illinois, striped (1) and spotted (2). Cucumber beetles will attack cucumbers, squash, and melons. As larvae, they eat roots and burrow into the stems of young plants causing wilting and even death of the plant. Adults will feed on seedlings as well as on stems, leaves, flowers, and fruit (3). In addition to the feeding damage, they cause they also transmit bacterial wilt, which is a serious disease problem in cucurbit crops.

Management: Cover plants with polyester row covers until blooming. Apply insecticides as soon as beetles appear. When plants are blooming apply insecticides late in the day.

Squash Vine Borer

These moths will feed both summer and winter squash as well as pumpkins. The adults are a colorful clearwing moth that are 5/8" long (4). They will emerge in late June and early July and lay eggs, primarily near the base of stems. When the eggs hatch the larvae will bore into the stems and begin to feed (5), causing the vines to wilt and eventually die beyond that point. The larvae will grow to be about 1" and will have a whitish body and brown head (5). After feeding for 4-6 weeks they will emerge and pupate in the ground.

Management: Cover plants with polyester row covers until blooming; Plant a second crop in early July. Weekly applications of insecticides to crowns and runners when plants begin to vine; apply late in the day.

Squash Bug

Squash bugs feed primarily on squash and pumpkins but may also feed on other cucurbit crops. Adults are brownish-black and about 5/8" long (6). Adults will emerge from overwintering areas in spring and will begin to feed and lay eggs. Eggs are copper colored and laid in clusters on the undersides of leaves and stems (7). Newly hatched nymphs will have black heads and legs with light green bodies (7) which will darken as they age (8). Both adults and nymphs use their straw-like mouthparts to suck out sap from leaves, stems, and fruits of plants. Feeding can cause yellow spots to appear on plants which will eventually turn brown. Feeding by large numbers of bugs can cause vines to die.

Management: Handpick egg masses; remove plant debris in fall; lay down boards in garden and check under boards for hiding bugs. Apply insecticides when bugs are present; not very effective against older nymphs and adults.

Whiteflies

Whiteflies are small insects (1/16" long) with white, powdery wings (9). They are generally found on the undersides of leaves and will fly off of infested foliage when disturbed. Nymphs are oval and clear to yellow in color and can also be found on the undersides of leaves. They have sucking mouthparts and will remove sap from plants causing mottling, yellowing, and distortion of leaves. They also produce honeydew which can make leaves glossy and sticky and can lead to the development of sooty mold, which grows on honeydew.

Management: Forceful water spray to knock off plants; yellow sticky traps near infested foliage; conserve natural enemies. Apply insecticides when populations are high.

Aphids

Depending on the species aphids can be green, black, brown, red, pink, or some other color. They are small, pear-shaped, soft-bodied insects that are slow-moving and range in size from 1/16 to 1/8 inch long (10). Aphids prefer succulent new growth and are commonly found on the undersides of leaves and on stems. Feeding damage includes reduced plant vigor, stunting and deformed leaves and stems. Like whiteflies, aphids also produce honeydew which can make leaves glossy and sticky and can lead to the development of sooty mold. Aphids can also transmit several plant viruses that infect cucurbits.

Management: Forceful water spray to knock off plants; conserve and encourage natural enemies. Apply insecticides to foliage to manage populations.

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