

Squash Bugs and Vine Borer

By: Kelly Feehan, Extension Educator

Release: Week of July 24, 2023

Two harmful pests of squash and pumpkins are squash bugs and squash vine borer. Both will kill plants and are difficult to control.

Adult squash bugs are a mottled charcoal gray color. They are five-eighths inch long and one-third inch wide with a flat back. If crushed, they release an odor. Adults lay reddish eggs in the angles between leaf veins on leaf undersides. Nymphs are light gray with black legs.

While there is only one generation per year, adult females have an extended egg laying period and all life stages are found throughout the summer. These insects hide on leaf undersides, near plant crowns, beneath dirt clods or other protective cover. They often feed in groups and move quickly when disturbed.

Squash bugs prefer winter squash and pumpkins but will feed on gourds, summer squash, melons and sometimes cucumbers. Adults and nymphs feed by sucking sap from leaves and stems. While feeding, they inject a toxin that causes leaf yellowing, wilting, and death referred to as Anasa wilt.

Squash bug control is difficult and a combination of practices is needed. Fall clean up and controlling weeds near the garden is important to reduce overwintering sites for adults. Monitor plants early in the season for egg masses and nymphs. Squish eggs and handpick adults and nymphs when found.

Boards or folded newspaper can be placed on the ground underneath plants for insects to congregate under. In the morning, quickly squish the bugs or spray congregated insects.

Adults are difficult to kill with insecticides. Products are best targeted at young nymphs. Insecticides labeled for use on vegetables like Sevin or Eight can be used. Treat leaf undersides as well as surfaces and reapply according to label directions. Begin applications as soon as squash bugs are found early in the season.

When squash plants like zucchini, summer squash and acorn squash suddenly collapse and the base of the stem is mushy with holes, this is the work of squash vine borer. Adults are one-half inch long clear winged moths that resemble a wasp. They have an orangish-red abdomen with black dots and are day fliers, unlike most moths who fly at night.

Moths lay eggs from mid-June into July. After hatching, cream colored caterpillars with brown heads bore into stems where their feeding causes plant wilting and eventual death. Once caterpillars are inside the stem, insecticides will not work.

During egg laying, synthetic pyrethroids insecticides can be applied to the base of stems. Just prior to egg laying, a physical barrier such as steel wool or tin foil can be placed around plant bases to deter egg laying or plants can be covered with row covers. These need to be removed once blooming begins.

At this time of year, if plants look good but holes are found in stems, gardeners could use a knife to cut the stem with the grain of the stalk to find the borers. Use the point of the knife to pierce and remove them. Once removed, cover the cut area with soil to encourage new roots to form.

If plants are completely destroyed, remove and destroy the dead material which will remove any caterpillars actively feeding. Because caterpillars pupate in the soil where they emerge as adults the following year, rotate new plantings to a different area the next season.