

Squash Vine Borer

Melittia cucurbitae (Harris) (Lepidoptera: Sesiidae)

(Origin: Native)



Adult Squash Vine Borer

Primary Host: Squash, zucchini, pumpkins and gourds. Butternut squash is less susceptible to damage.

Damage: Larvae bore into the vine, causing a sudden wilting of a vine or an entire plant.

Management: One of the 1st signs of infestation is yellow pellets of frass on the soil surface near the plant base.

Biocontrols: No commercially effective ones are available.

Cultural Controls: Rotate crops and till to destroy overwintering insects. Vines should always be destroyed following harvest to prevent late caterpillars from completing their development.

Physical Controls: Protect plants with row covers when vines begin to run. Cut open borer entry holes in the stem with a knife; then remove the larva and pack moist earth around the stem.

Chemical Controls: Contact your local Penn State County Extension Agent for more information. <http://www.extension.psu.edu/extmap.html>

Insect Description:

Adults: A clear-winged moth that looks like a wasp with metallic olive-brown wings and a red-orange body. Wing spread is 1¼”.

Pupae: Cocoons are formed in the soil for overwintering.

Larvae: 1” long white grub-like caterpillar that enters the vine and feeds, pushing out masses of greenish-brown sawdust-like frass.

Eggs: Reddish-brown eggs are laid on the vines when the vines begin to run.

Life History: Overwinter as pupae inside tough silk-lined cocoons in the soil. Adult moths emerge in late June. Moths fly during the warm part of the day and lay eggs on the stems near the soil surface. Eggs hatch in about 10 days and the tiny borers enter the stems, hollowing out the stems. Toward the end of the season when vines become woody and less succulent, the borers may attack the fruit. Borers leave the plant in August and September, when mature and enter the soil to form their overwintering cocoons.



Squash Vine Borer Larva