

Squash Vine Borer

By Nebraska Extension Horticulture Educator Kathleen Cue

Nothing is more frustrating than seeing the almost-ready-to-produce zucchini plant collapse. If the base of the plant is mushy and has holes, the most likely reason is the squash vine borer.

The squash vine borer adult is a ½ inch long moth that doesn't look or act like most moths. It has an orange abdomen with black dots and, while most moths are night time fliers, the squash vine borer moth is a day flier. After, the female moth lays her eggs at the base of plants, eggs will hatch and the caterpillars will bore into the stem. Their feeding causes plant wilting and eventually death to the plant.

The borer is a caterpillar and will be white or cream-colored with a brown head. At its biggest, the borer will be 1 inch long. Summer squash (zucchini, yellow crookneck and patty pan) and winter squash (such as acorn) are preferred food sources for the squash vine borer. Butternut squash, cucumbers, watermelons and muskmelons are not preferred, so infestations of these plants is rare.

Trapping the adult moth is a good first step to determine when protective measures should be taken. In mid-June, yellow-colored containers, filled with water, can be set in the garden. The moths will be attracted to the color and drown in the water. Once moths are found in traps, floating row covers can be placed over plants to provide a physical barrier to egg-laying. The cover can be left in place until flowering begins, at which time it can be removed to allow pollinators access to the plants. Another option is to use insecticides (active ingredient carbaryl or permethrin) applied around the base of stems.

If plants look good but holes in the stem indicate infestation, a knife can be used to cut with the grain of the stalk to find the borers. Use the point of the knife to pierce them and don't be surprised if more than one borer is found in a stem. Once the borers are removed, cover the cut area with soil to encourage new roots higher up on the stem. Champion pumpkin growers will place soil over many nodes (the place where leaves emerge from the stem) along the length of vines to encourage lots of rooting. This gives plants greater resiliency if the squash vine borer has destroyed the crown of the plant.

If plants are completely destroyed, removing the dead material from the site will also remove any caterpillars still actively feeding. Because caterpillars pupate in the soil where they emerge as adults the following year, new plantings should be rotated to a different area. Second plantings of summer squash can be done up to mid-July.

More information can be found at <https://extension.umn.edu/yard-and-garden-insects/squash-vine-borers>.

The Extension Master Gardener horticulture helpline and open clinic hours are:

Mondays, 9:00 am to 12:00 noon, Washington County Extension, 402-426-9455

Tuesdays, 1:00 to 3:00 pm, Cuming County Extension, 402-372-6006

Wednesdays and Fridays, 9:00 am to 12:00 noon, Dodge County Extension, 402-727-2775