PLANT INFORMATION FACT SHEET

SQUASH VINE BORER

Squash Vine Borer (Melitta cucurbitae)

The squash vine borer is a fairly common pest in the Midwest. This insect attacks members of the *cucubitaceae* family including summer and winter squash, pumpkins, and occasionally melons, cucumbers, and gourds. Winter squash, particularly Blue Hubbard, are especially susceptible. Butternut is one of the few squash exhibiting some resistance to squash vine borer.

Life Cycle

Squash vine borers overwinter in soil as pupae. In early to mid summer, adults emerge from the soil and begin to lay eggs on stems, usually within 3 feet of the soil surface. Adult moths are 1 to 1½ inches long and very colorful. They are orange with black spots on the abdomen, and have black and white legs, deep green colored forewings, and black antennae. Adults are usually active and very noticeable during the day and may occasionally be mistaken for wasps.

Eggs are brownish, flat, oval, and deposited individually. Larvae immediately bore into the stem upon hatching and begin feeding on plant tissues. Larvae are 1 inch long, chubby, whitish caterpillars with dark heads. Larvae exit the vine approximately four to five weeks later and move into the soil to pupate. There are one or two generations each growing season.

Damage

The squash vine borer causes plants to suddenly wilt. Small holes on lower stems may be evident, as well as greenish-yellow, granular frass (pest feces) near the holes. The feeding larvae damage vascular tissues, preventing water and nutrients from moving through the vine and causing leaves and stems to wilt. Plants may eventually collapse and die.

Control

Begin monitoring for adult moths as soon as vines begin to run. Lightweight floating row covers may deter adults. Place covers over plants when the vines begin to run, securing them to the ground so that moths do not enter underneath. Remove covers as soon as plants begin blooming. Once larvae hatch and enter the stem, controls are generally ineffective. However, borers may be removed by hand, using a sterilized, sharp knife to cut open plant stems and remove the larvae. Cover the damaged stems with moist soil; stems may produce new roots and recover. Good sanitation is important for any pest-control effort. If vines have wilted or died, destroy them to prevent the larvae from overwintering and possibly causing problems the next year. If possible, rotate crops the following growing season.

Chemical controls are only effective if applied when eggs are hatching. If chemicals are used, they should be applied late in the day to avoid killing bees.

Please contact Plant Information Service at 847.835.0972 or plantinfo@chicagobotanic.org for current recommendations.

