EXERCISE RESEARCH AND **EXTENSION**

2021 Throckmorton Plant Sciences Center :: Kansas State University :: Manhattan, KS 66506 :: 785.532.6173

Problem: Squash Vine Borer - Melittia satyriniformis



Hosts: Primarily squash, pumpkins and gourds but cucumbers and melons also possible hosts.

Description:

Squash vine borers are the larvae of a clearwinged moth whose size, shape and flying habit are somewhat akin to wasps for which they are often mistaken. Squash vine borers overwinter as larvae or pupae in cocoons buried in the soil. in Kansas, adult moths emerge in the late spring (probably about mid-June) at a time coinciding with the establishment of pumpkins. Eggs are deposited singly on the underside of the vines and are often concentrated at the base of the plants. Larvae bore into the stems where they tunnel and feed. Matured larvae exit stems and then burrow into the soil, where most prepare their overwintering cocoons (there may be a partial second generation in Kansas depending upon current year conditions).

Due to extensive disruption of conducting tissues, plants often wilt and die. The presence of holes in plant stems, and an accompanying ooze, signal the presence of squash vine borers. Large white worms with brown heads can be seen if stems are cut open. Squash vine borer populations vary from location to location, thus being of a major concern in some areas but inconsequential in others. Insecticidal controls must be implemented before larvae bore into plants.

Recommendations:

Preventive treatments are best. Start to apply insecticides when the vines begin to run. Chemicals used for borer control in gardens are rotenone, permethrin (Eight Vegetable, Fruit & Flower Concentrate; Hi-Yield Garden & Farm Insect Control, Green Thumb Multipurpose Garden and Pet Dust) and bifenthrin (Hi-Yield Bug Blaster Bifenthrin). Continue on a 7- to 10-day reapplication schedule for 3 to 5 weeks. If plants wilt, look for the presence of holes and ooze. If the borer is found, the stem

can be slit and the borer removed and destroyed. If the plant is not dead, cover the damaged area with soil and keep the soil moist.

References:

- 1. Ortho Problem Solver, Ortho Information Services, pg 718
- 2. <u>Squash Vine Borer in Home Gardens</u>, University of Minnesota Extension

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