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Squash Vine Borers are Active in Gardens

Squash vine borers are the most common and can be the most damaging pests of squash. The larvae tunnel into the stems of squash and other plants, including melons and cucumbers. This causes the stems to wilt and die. The adult moths resemble a wasp, with a red abdomen surrounded with black bands at each segment; their front wings are covered with metallic brown scales and their back wings are clear with a brown band. Adult females lay eggs on the leaves and stems of primarily squash. The larvae hatch and begin burrowing into host plant stems. The larvae are white in color with a brown head and they grow to be an inch in length. The larvae will produce sawdust like frass near the base of the plant as they tunnel and then climb from the stem to pupate in the soil.

Some Control Suggestions:

Some Non-Chemical Controls:

Keep natural enemies in the garden such as parasitic wasps that will attack squash vine borer eggs and larvae. Also adult ground beetles (Family Carabidae) will attack squash vine borer larvae.

When wilting is noticed, a sharp knife can be used to cut a slit into the stem so the larva can be removed. New roots may grow along the cut stem, allowing the plant to survive. Split vines should be covered with soil immediately after the larvae have been removed.

Also remove vines soon after harvest to destroy any larvae that still might be inside the stems.

Some Chemical Controls:

Some chemical suggestions include using such active ingredients as pyrethrins, permethrin, or carbaryl. Apply the dusts or sprays to the base of the plant.



Photo of a southwestern squash vine borer, *Melittia calabaza* (Lepidoptera: Sesiidae), larva. Photo by Bart Drees, Professor and Extension Entomologist, Texas A&M University.

Aggregating Lady Beetles

The multi-colored Asian ladybeetle is an introduced insect from Asia which has established itself in many areas of the U.S. This lady beetle is still a good predator of landscape pests, such as aphids and scales but it likes to congregate in large numbers around buildings as they overwinter. This can cause them to move indoors in the cooler months. They will exude a yellowish liquid when disturbed (reflux bleeding), which can stain fabric and can cause skin irritation. They can also bite since they have chewing mouthparts.

Exclusion practices should be used to prevent these ladybeetles from entering into buildings. All cracks and crevices, such as around windows, doors, air conditioners, and utility pipes should be sealed in late summer and fall. Since they are predators of other insects, chemical controls are not needed.



Multi-colored Asian Ladybeetle. Photo by Mike Merchant, Professor and Extension Entomologist, Texas A&M University.



Photo of a multi-colored Asian lady beetle, *Harmonia axyridis* (Pallas) (Coleoptera: Coccinellidae), larva. Photo by Bart Drees, Professor and Extension Entomologist, Texas A&M University.

Are Pecan Weevils Giving You Problems?

Pecan weevils can be the most damaging late-season pecan pest and they are found in more than 130 counties in Texas. Adult weevils, both the males and females, damage pecans by feeding and the females can lay eggs inside the nuts. Pecan weevil adults are brown in color, have long “snout” mouthparts and are about $\frac{3}{8}$ inches in length.

Pecan weevil activity usually begins in early August, when the adults emerge from the soil where they have spent between 2 to 3 years beneath the soil surface. After

the kernel has entered the gel stage, the nut is susceptible to egg laying. The female weevil drills a hole through the shuck and shell with her mouthparts and then turns around to deposit one or more eggs within the developing kernel using her ovipositor. The larvae hatch and then feed in the kernel. The larvae are creamy-white in color with a brown head. When the larvae grow larger in the fall, they will chew a hole through the shuck and shell, in order to drop to the ground. Larvae burrow between 4 to 12 inches into the soil and build a cell, where they remain for 8 to 10 months until pupating. The average life cycle of the pecan weevil from egg to adult is usually completed within 2 years.

Control Options:

The key to managing the pecan weevil is to prevent egg laying, since the larvae, pupae and adults are covered with 4 to 12 inches of soil and pesticides cannot target the larvae inside the nuts. A treatment program for the pecan weevil requires at least two correctly timed insecticide applications. In some cases, three or four applications may be needed. The initial treatment should be made when the earliest maturing nuts of the early varieties are in the gel stage at the distal end of the nut. The initial insecticide application should be effective for at least 5 days. The adult female pecan weevils usually do not begin to lay eggs until at least 5 days after emergence, so the second treatment can be applied 10 or more days after the initial application. In Texas, the recommended insecticide for pecan weevil control is carbaryl, such as Sevin® 80S. For more information regarding control, please review the Texas AgriLife Extension Service publication, "Controlling the Pecan Weevil:"

<http://insects.tamu.edu/extension/bulletins/l-5362.html>



Photo of pecan weevil larvae. Photo by Bill Ree, Program Specialist- Pecan IPM, Texas AgriLife Extension Service.

Tarantulas Helping People Get Over Fears

According to Reuters Life!, scientists are using tarantulas to determine how the human brain responds to fear based on the proximity, direction and preconceived assumptions of a terrifying object. Researchers from the Cognition and Brain Sciences Unit in Cambridge, England used functional magnetic resonance imaging to follow brain activity in 20 volunteers as they watched a video of a tarantula. Scientists found that different parts of the brain control different parts of the “fear network,” so when the spider moves closer, the brain changes from anxiety to panic. Their results could help scientists diagnose and treat patients who suffer from phobias.

For more information, please visit:

<http://www.reuters.com/article/idUSTRE6A74KI20101108>

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