

Squash Pests

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Squash Vine Borer

The squash vine borer is a key pest of winter squash, gourds and pumpkins in New Mexico. Unfortunately, it is usually noticed only after it has done its damage. Symptoms appear in mid-summer when a long runner or an entire plant wilts suddenly. Infested vines usually die beyond the point of attack.



Sawdust-like frass near the base of the plant is the best evidence of squash vine borer activity. Careful examination will uncover yellow-brown excrement pushed out through holes in the side of the stem at the point of wilting. If the stem is split open, one to several borers are usually present. The caterpillars reach a length of 1 inch and have a brown head and a cream-colored body. Winter squash, particularly 'Hubbard', are most susceptible to damage while 'Butternut' is somewhat resistant.

The adult squash vine borer is a stout dark gray moth with 'hairy' red hind legs, opaque front wings, and clear hind wings with dark veins. Unlike most moths, they fly about the plants during the daytime, appearing more like a paper wasp than a moth.

This insect overwinters as a full grown larva or a pupa one to two inches below the soil surface. If it has not already done so, the larva pupates in the spring. Adult moths begin to emerge about the time the plants begin to run, and moth flight continues through mid August.

The small brown eggs, laid individually on leaf stalks and vines, hatch in seven to 10 days. The newly hatched larva immediately bores into the stem. A larva feeds for 14 to 30 days before exiting the stem to pupate in the soil.

Management

The key to squash vine borer management is controlling the borers before they enter the stem. Once inside the vine, insecticidal control is ineffective. Poor timing of sprays is the usual cause of inadequate control. Monitor plants weekly from mid-June through August for initial signs of the borer's frass at entrance holes in the stems. Very early signs of larval feeding indicate that other eggs will be hatching soon.

Home gardeners may have some success with deworming the vines. At the first signs of the sawdust-like frass, vines are slit lengthwise near where the damage is found and the borers removed. The stems should be immediately covered with earth. Sanitation is also important. After harvest is complete, vines should be removed from the garden and composted to prevent the

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remaining borers from completing larval development. Burying a few nodes along each vine will encourage rooting at these nodes. This will lessen the impact if squash vine borers girdle the base of the vine.

Squash Bug

The squash bug is another common pest. While all of the cucurbit crops can be attacked, it shows a preference for squashes and pumpkins. This insect can be very difficult to control when populations are allowed to build.



Squash bugs damage plants by removing sap and causing leaves to wilt and collapse. Young plants and infested leaves on older plants may be killed.

Adult squash bugs begin to fly into fields and gardens about the time the plants begin to run. They remove plant sap with their piercing-sucking mouthparts. Soon after beginning to feed, they start laying eggs, primarily on the undersides in the angle between veins. The bronze eggs are football-shaped and lie on their sides in groups of 12 or more. Eggs hatch in one to two weeks. Initially the larvae are dark red with a light green abdomen. Older nymphs are light gray in color with black legs. Young nymphs are gregarious and feed together in groups. Nymphs require five to six weeks to mature into adults. Squash bugs spend most of their time around the base and stems of the plants and on the undersides of leaves.

Management

Mechanical control by physically removing and killing them is one method of control. Also, look for their masses of shiny brown eggs on the underside of the lower leaves. Smash the eggs when you find them. Sabadilla dust and carbaryl insecticides are effective when the squash bugs are very young. As the bugs get older, the insecticides become much less effective and mechanical control becomes the preferred method. If you use insecticides, follow the directions on the label carefully to maximize their effectiveness and safety.

Some people delay planting squash until July to avoid the squash bug. Dr. Charles Ward, a former New Mexico Extension Entomologist, warns that delayed planting will not always be successful.