Squash Bug



Adult squash bug

Squash bugs (Anasa tristis) are an emerging problem in Wisconsin. In recent years, these insects have become more prevalent, causing damage to vine crops in commercial fields and home gardens alike. The key to management is early detection. Squash bugs feed on all vine crops, but pumpkins and squash are the preferred hosts with gourds and melons favored next.



Squash bug nymphs

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Appearance

Adult squash bugs are dark brown and mottled gray and appear flattened. When crushed, they give off a disagreeable odor. Their eggs are metallic bronze in color and are laid in clusters between leaf veins on the lower leaf surfaces of susceptible plants. Young squash bug nymphs are pale green to whitish in color and are shaped somewhat like aphids. Later instar nymphs (those between molts) are grayish white with black legs.

Symptoms and effects

Squash bugs feed on the sap of the plant. Early symptoms of infestation include yellow spotting on the leaves. As the damage progresses, the spots become brown and dry. When squash bugs feed on the vine, it wilts from the point of feeding outward. This wilting phenomenon is often called "anasa wilt," and results when the squash bugs inject a toxin with their saliva as they feed.



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Large numbers of insects can cause plants to wilt and large numbers of overwintering adults can cause serious loss of transplants and seedlings. Adult or nymph feeding on developing fruit may cause cosmetic damage that makes the fruit unmarketable.

Life cycle

Eggs of the squash bug are laid in clusters on the lower leaf surfaces near leaf veins. The eggs hatch 1-2 weeks later, in late June to early July. Immature squash bugs undergo 5 molts before reaching maturity. Adults appear in late July to early August and enter a resting state, called diapause, in the fall. These overwintering adults become active in the spring and lay the next season's eggs. Warm winter weather favors the survival of overwintering adults, increasing the likelihood of outbreaks the subsequent summer. Squash bugs produce one generation per year in Wisconsin.

Control

Because they are protected by the lower surfaces of leaves, squash bugs may be difficult to control. Although it is unlikely to find large populations of the bugs early in the season, growers should check their transplants or new seedlings for the presence of adults. Destroy crop residues in the fall to reduce the number of overwintering adults. Crop rotation will also reduce the incidence of infestation.

When plants are flowering, a threshold of more than one egg mass per plant is considered the time to implement control. If the bugs not controlled at this time, they will cause plant damage and yield loss. Check the lower leaf surfaces for squash bug eggs. Young nymphs are most susceptible to control, while adults are more difficult to control. Pyrethroid insecticides such as permethrin are recommended; however, these products are less effective when temperatures are above 80°F. In recent years, squash bugs have developed resistance to some insecticides.

For pesticide recommendations, refer to the UW–Extension publication *Commercial Vegetable Production in Wisconsin* (A3422).

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