



## Squash Bug in Virginia Home Gardens

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### Introduction

Squash bug, *Anasa tristis*, is a common pest of squash and other cucurbits in the home garden. They strongly prefer summer squashes and pumpkins, and damage plants by removing plant sap from the leaves and developing fruits. Squash bug belongs to the Family Coreidae in the Order Hemiptera.

### Description

Adult squash bugs are brownish-black and mottled with dull orange markings on the back and along the lateral edges (Fig. 1). Their somewhat flattened bodies typically measure about 15 mm (0.6 inch) long and 8 mm (0.3 inch) wide. The legs and antennae are dark and the underside is often lighter in color.



Figure 1. Adult squash bug (Whitney Cranshaw, Colorado State University, Bugwood.org).

Squash bug eggs are football shaped and measure about 1.5 mm (0.06 inch) long (Fig. 2). They change from yellow brown to a copper color when mature. The newly emerged nymphs have bright green abdomens with black legs and antennae (Fig. 3) and could be mistaken for tiny spiders. Older nymphs have a teardrop-shaped body and appear dusty gray to brownish black (Fig. 4). They possess dark wing pads when mature.



Figure 2. Squash bug eggs on the underside of a leaf (Whitney Cranshaw, Colorado State University, Bugwood.org).



Fig. 3 Young squash bug nymphs (Jennifer Carr, University of Florida, Bugwood.org).



Figure 4. Squash bug nymphs clustered on a pumpkin (Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org).

## Host Plants

Squash bugs feed on all squashes, including summer squash (yellow squash and zucchini), winter squash, and pumpkin. They sometimes feed on melon or cucumber, but strongly prefer squashes and pumpkin.

## Life History

The squash bug life cycle includes the egg, nymphal, and adult stages. Females lay batches brown, oval eggs usually on the underside of the host plant leaves beside the veins (Fig. 2) but occasionally on the upper surface or leaf petioles. The eggs may be clustered together or placed in a regular arrangement.

Female squash bugs have an extended egg-laying period, so eggs, nymphs, and adults can be found at the same time during the summer. Both nymphs and adults are often seen clustered together on leaves, especially the underside, and at the base of plants or on developing fruits (Figs. 4 & 5). Depending on location in Virginia, there can be 1-2 generations a year. Adults overwinter in ground litter or in sheltered places inside and outside the garden. They emerge in the spring to feed, mate, and lay eggs.



Figure 5. Clustering adult squash bugs (Whitney Cranshaw, Colorado State University, Bugwood.org).

## Damage

Squash bugs use their mouthparts to pierce and suck plant sap from squash leaves and the fruit. Affected leaves develop yellow spots that turn brown and dry out (Fig. 6). Heavy feeding pressure by numerous squash bugs may cause leaves to wilt and die completely, but no toxins have been identified in squash bug saliva (reviewed in Doughty et al. 2016). Squash bugs feeding on young fruits may prevent

the fruit from maturing. Feeding damage on larger, maturing fruit may leave soft depressions susceptible to soft rot in addition to cosmetic blemishes.



Fig. 6. Pumpkin leaf with damage by squash bug (Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org).

Squash bugs vector curcubit yellow vine disease, a bacterial infection (*Serratia marcescens*). Symptoms include stunting, yellowing, and wilting of the leaves before plant death. Squash bug management early in the season is crucial to avoiding yellow vine disease.

## Control Recommendations

Cultural control methods are helpful in managing squash bugs. Clean up the garden by removing old leaves, dead vegetation, or clutter where squash bugs like to hide. Keep weeds under control.

Squash bugs hide in thick layers of mulch or straw at the base of plants. They also hide under sheets of cardboard or plastic used as weed barriers. Exploit this behavior and place flat boards among squash plants to attract squash bugs seeking shelter. Flip the boards daily and kill any squash bugs found hiding underneath.

Monitor for egg clusters on squash leaves every few days and manually crush them between your fingers when seen to reduce emerging nymphs. Pick squash bugs off plants and crush them or drown in a container of soapy water. Removing squash bugs early in the season will reduce the amount of potential damage to the crop.

Plant squash in mid-June to avoid when adult squash bugs are laying eggs in early summer. Use varieties that mature quickly if planting late. Transplanted squash will reach maturity faster than seeds planted

in the ground, which is an advantage as young plants are more susceptible to damage by squash bug. Consider planting butternut squash, cushaw, and other winter squash varieties classified as *Curcubita moschata* that are less favored host plants or less susceptible to squash bugs.

Use floating row covers from planting to flowering, but remove the covers to allow pollinators to visit the blooms when the plants flower. Row covers should have sufficient excess material pooled on the sides of the row to prevent squash bugs from reaching the plants. If only a few squash plants are grown, hand pollinate the blooms and leave row covers in place, but monitor the plants for heat stress and use hoops to provide sufficient room under the covers for expanding growth.

Treat squash bug nymphs and adults with a registered insecticide when found, repeating as needed. Adults are often seen climbing to the top of infested plants after watering or rain. Scout often, as young nymphs tend to be more susceptible to chemical control than older nymphs and adults. Spot spray clusters of squash bugs when seen. Foliar sprays should be directed to the underside of the foliage where squash bugs hide. For chemical control recommendations for squash bugs, see the current VCE [Pest Management Guide for Home Grounds and Animals](#). As with all pesticides, follow the label instructions carefully with regards to rates, precautions, and interval before harvest.

Pick fruits regularly and remove them from the garden. Squash bugs will continue feeding on overgrown, surplus squash left on the plant (Fig. 5) or thrown to the side. Pumpkins should not be left in the garden after the vines have died (Fig. 4).

In the fall, remove dead plant debris, sheets of plastic mulch and row covers, and any plastic pots or other objects that offer squash bugs a place to overwinter. Remove weeds near the garden as well. Dead crop matter and old natural mulch can be burned on site or tilled into the soil to reduce overwintering adult populations.

## Notes

Squash bug damage can be confused with damage from squash vine borer (*Melittia curcurbitae*), another common pest of squash in Virginia whose damage results in plant wilt. For more information

about this pest, see VCE Publication 3104-1566, [Squash Vine Borer](#).

Cucumber beetles (*Diabrotica* spp.) vector bacterial wilt (*Erwinia tracheiphila*) to cucumbers, melons, and squashes. Symptoms of this disease include yellowing, wilting, and death of the plant, which could be confused with damage from squash bug feeding. For more information about cucumber beetles, see VCE Publication 2808-1009, [Cucumber Beetles](#).

## Reference Cited

Doughty HB, Wilson JM, Schultz PB, and Kuhar TP. 2016. Squash Bug (Hemiptera: Coreidae): Biology and Management in Cucurbitaceous Crops. *J. Integr. Pest Manag.* 7:1. <https://doi.org/10.1093/jipm/pmV024>

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2023

ENTO-578NP