

Squash Bugs in the Home Garden

HANDOUT

If you are not already inspecting the squash plants in your home garden, then you should really think about starting now. Squash bugs, *Anasa tristis* (DeGeer), will feed on all cucurbits, but squash (especially yellow squash) and pumpkins are preferred. This insect pest is also a vector of the cucurbit yellow vine disease bacterium.

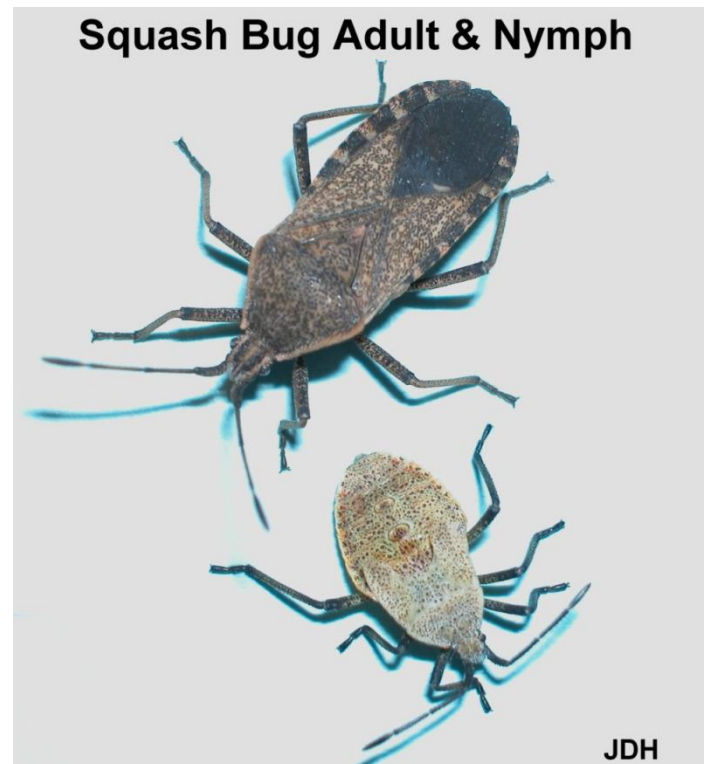
Squash bugs overwinter as adults in plant debris or in protected areas in woods or other sheltered areas near the garden site. Only one generation of squash bugs occur each year, but because of the extended egg-laying period, adults and nymphs are present throughout the summer.

Adult squash bugs are about 5/8 inch long, flat backed, and brownish in color. Over-wintered females will begin laying eggs in the garden in early summer. The female squash bug lays groups of 7 to 20 shiny bronze to brick red colored eggs in rows on the undersides of leaves usually at leaf vein junctions. Nymphs hatch from eggs after about 7 to 10 days. Young nymphs continue to remain together in a group and begin to feed on the underside of leaves. The immature nymph stage lasts 5 to 6 weeks during which nymphs develop through 5 instars. Nymph coloration is variable ranging from greenish with a red head and legs to dark greenish gray with a dark head and legs. The last two nymphal instars have visible wing pads. Overall, it takes 5 to 8 weeks for squash bugs to develop from egg to adult.

Colonies of feeding adults and nymphs suck plant juices through piercing sucking mouthparts. However, plant damage results from the injection of a toxic substance that causes vines to wilt and die. These bugs will also feed on fruit if present.

Cultural control methods for the homeowner include hand picking adults and egg masses in small gardens. Squash bugs also have a tendency to aggregate in sheltered locations and this behavior may be turned to your advantage. Bugs will congregate under boards or shingles placed on the soil around plants and can be crushed or otherwise destroyed each morning. Other things that will help lessen damage include maintaining healthy vigorously growing plants through proper watering and fertilization and destruction and removal of crop debris.

Honeybees and other pollinators are very important in cucurbit production, and insecticide application can interfere with pollination by killing honeybees. If insecticides are to be applied when blossoms are present, it is advisable to use insecticides with little residual activity, and to apply insecticides late in the day, when honeybees are less active.



If chemical control is desired, be observant and do not let the squash bug population get out of hand. Home gardeners should be aware that adult squash bugs are difficult to kill. Control measures should be targeted against young nymphs as they are more susceptible to insecticides. Control materials available to home gardeners for squash bug management in cucurbits include various formulations of acetamiprid (Ortho Bug B Gon Systemic Insect Killer - 0.5% acetamiprid; Ortho Flower, Fruit & Vegetable Insect Killer Concentrate - 0.5% acetamiprid), bifenthrin (Ortho® Bug-B-Gon MAX Lawn & Garden Insect Killer Concentrate - 0.3% bifenthrin), carbaryl (Garden Tech Sevin Bug Killer Concentrate - 22.5% carbaryl; Garden Tech Sevin-5 Ready to Use 5% Dust Bug Killer - 5% carbaryl; Hi-Yield Garden Dust for Outdoor Homeowner Use - 5% carbaryl), and, permethrin (Bayer Advanced Complete Brand Insect Dust for Gardens Ready to Use - 0.25% permethrin). Various botanical insecticides may also provide some control.

All chemical information provided is given with the understanding that no endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned. Individuals who use pesticides are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Before purchasing or using any pesticide, always read and carefully follow the label directions.

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