



GARDEN NOTES

SQUASH BUGS BEGIN ANNUAL ATTACK ON ZUKES AND CUKES

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Summer - 49

Squash bugs travel from all over the country just to feed on Utah's renowned zucchini crop. Well, maybe not, but it is sort of a chicken or the egg argument.

The adult bugs emerge from protected over-wintering sites in the spring and seek out host plants in the cucurbit family - squash, pumpkin, cucumber, gourd, watermelon and cantaloupe, says Diane Alston, Utah State University Extension entomologist.

Squash bugs preferentially feed and reproduce best on squash and pumpkins, but they will also feed on cucumber, watermelon and muskmelon, she explains. The insect inserts its stylet-like mouthparts into the plant's vascular system to feed and can cause plants to wilt and eventually die. Recent research has found that densities as low as two squash bug adults per two-leaf stage seedling can kill squash plants. Older plants can tolerate more squash bugs, but even large plants can suddenly wilt from too much squash bug feeding injury.

You can actually use the ubiquitous zucchini as a squash bug decoy, Alston says. A cultural technique that may be effective is to plant zucchini, a preferred squash host, early in the gardening season before the squash bugs are numerous. By the time squash bug numbers increase on the zucchini, you will probably have had your fill of zucchini for the season, and can destroy the plants and squash bugs harbored on them. In this way zucchini can serve as a trap crop and help remove a portion of the population that will attack later maturing cucurbits.

More long term preventive steps should be taken in the fall to minimize overwintering squash bugs, she says. When you are finished with your crop for the season, remove the plants and effectively compost, burn or send them to the landfill. In the fall, rototill your garden to fully remove all plant debris that may harbor overwintering insects. (This is effective for many other insects, such as Mexican bean beetle and Colorado potato beetle, too.) Remove stacks of wood, debris or other protected spots near your garden where insects may try to hideout for the winter.

In the spring and summer, check squash plants regularly for eggs, young and adult squash bugs. Look on the underside of leaves, vines and fruit where the insect congregates, Alston says. Eggs are brownish red and laid in clusters. Young, called nymphs, are light gray while adults are mottled brownish gray and about 5/8 inch long.

An effective non-chemical approach is hand picking or simply squashing the squash bugs, she adds. Wear gloves and manually destroy the insects two to three times per week when

they are most active. Start when eggs and young are first found and if you are diligent, no further controls may be necessary.

Adult squash bugs are fairly resistant to insecticides, so if you choose to use an insecticide, begin when nymphs first begin to hatch from eggs, she says. It is necessary to spray underneath plants where the insects hide and thoroughly cover the underside of vegetation. Malathion, diazinon, carbaryl (Sevin), and rotenone (for nymphs only) are effective insecticides. Apply insecticides in the evening when they will dry slower and are often more effective in killing insects.

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