

AGRICULTURAL SCIENCES AND NATURAL RESOURCES

Squash bugs - a gardener's nemesis

With warmer temperatures on the horizon, it won't be long until gardeners can fill their tables with fresh fruits and vegetable. A couple of the most popular summer plants are squash and cucumbers. They're not only a favorite for people, the squash bug is also fond of them.

It's amazing how quickly these pests can take over not only your squash and cucumber plants, but your pumpkins and melons as well. Any type of cucurbit is a favorite of the squash bug, which is the most serious of garden pests.

In the southern region of the United States, the squash bug seems to be particularly troublesome because it produces multiple generations per year. Their feeding behavior causes plants to wilt, yellow and often die back, as they transmit viral infections from plant to plant. Squash bugs are by far the insect Oklahoma State University horticulture specialists receive the most questions about. And, unfortunately, it is one of the most difficult to control.

Squash bugs feed on all cucurbit varieties. However, some cultivars are more susceptible than others to squash bug feeding and damage. So, what is a gardener's first line of defense? Pest resistance! Selecting varieties that are resistant to common pests can go a long way in growing a healthy crop. Remember, resistance does not mean immunity, but there are varieties that have lower susceptibility or relative resistance compared to other varieties.

For example, yellow straightneck and yellow crookneck summer squash are highly susceptible to squash bug damage. Instead, try substituting zucchini for the yellow squash, as it has demonstrated higher tolerance to squash bugs in numerous studies.

Keep in mind, however, there is one zucchini cultivar called Cocozelle that has shown considerable susceptibility to squash bugs and should be avoided. Other varieties that have shown good resistance include butternut, royal acorn, pink banana and black zucchini, while sweet cheese and green striped cushaw are moderately resistant. Experiment with different cultivars of squash listed as resistant to determine which works best in your garden.

Squash bugs aren't the only enemy of cucumbers – cucumber beetles can be equally a problem. Again, many cultivars are resistant or tolerant of cucumber beetle damage. Cucumber beetles are stimulated to feed by the chemical cucurbitacin, which is the chemical that gives some cultivars a bitter taste and causes gas in some people. Varieties listed as burpless or non-bitter contain little to none of the chemical compound, making them less attractive to cucumber beetles.

Selecting resistant cultivars is just one line of defense against squash bugs and cucumber beetles. These garden pests often require gardeners to implement multiple management strategies. Covering planted rows with floating row covers excludes both squash bugs and cucumber beetles from the plants, which in turn prevents these pests from laying eggs. The row covers must be tightly secured to the ground to exclude pests; bags of sand tend to be gentler on row covers than rocks, bricks or boards.

Cucumber and squash plants are insect pollinated crops, so the row covers must be removed once plants begin flowering. At that time, hand picking insects and smashing egg masses provides additional control. Another option is placing wooden boards near the plants. This provides a place where the squash bugs will congregate overnight. In the morning, simply lift the boards and easily remove the insects.

Taking an extra precautionary step or two can help ensure a gardener's hard work pays off with a bountiful garden.