

2021 Throckmorton Plant Sciences Center:: Kansas State University:: Manhattan, KS 66506:: 785.532.6173

Problem: Squash Bugs - *Anasa tristis*





Hosts: Squash and pumpkin

Description: Squash bugs are 'true bugs' which utilize their piercing sucking mouthparts to remove plant juices. Squash bugs generally occur on well-established plants (as opposed to being a pest of seedling plants).

Adult squash bugs move to plants from various adjacent (and sometimes within field) protected overwintering sites. Adult females deposit brownish-red eggs in clusters on a lower leaf surfaces. Newly emerged nymphs are small and greenish with black legs. Studies have shown that (in Kansas) first generation adults deposit eggs for a second generation, the adults of which overwinter. The first generation is prolonged but start looking for eggs in late June to early July. The second generation and remnants of the second generation will hatch in August.

High squash bug populations can literally drain plants causing them to die and wilt. Reduced yields and poor quality fruit may result from squash bug feeding activities.

Recommendations: Squash varieties resistant to squash bugs include Butternut, Royal Acorn, and Sweet Cheese.

Effective control of squash bugs is contingent upon timely insecticide sprays coupled with thorough coverage. Observe plantings for the presence of adult bugs and scout fields for egg masses on the undersides of leaves starting in late June. Eggs get darker in color just before hatching. Treat when most eggs have hatched and when nymphs are still small to medium in size. Placing pieces of board or shingles on the ground near the plants concentrates these insects in a small area that is more easily treated.

Adult squash bugs have a hard, protective shell which is impervious to insecticide treatments.

Use high pressure when applying liquid insecticides to ensure penetration of the dense plant foliage and thorough coverage to the nymphs which often are on the undersides of leaves. Using a duster will also work. Subsequent treatments are usually required due to the continual presence of egg-laying squash bugs.

Effectiveness of treatment varied by the life stage of the insect. Spinosad (Captain Jack's Dead Bug Brew; Monterey Garden Insect Spray; Natural Guard Spinosad) is very effective on nymphs but ineffective on adults. Products with permethrin (Eight Vegetable, Fruit & Flower Concentrate; Hi-Yield Garden & Farm Insect Control, Green Thumb Multipurpose Garden and Pet Dust) were moderately effective on nymphs but ineffective on adults. The most effective products for adults were cyhalothrin (Spectracide Triazicide) and cyfluthrin (Tomato and Vegetable Insect Killer).

It is especially critical to reduce the overwintering population of squash bugs by working the soil and/or removing foliage and fruit immediately after harvest. This deprives nymphs of the necessary food source to complete their development. Also, recently formed adults are denied a food source with which to build up the sufficient amounts of body food reserves required to see them through winter.

References:

- 1. Ortho Problem Solver, Second Edition, Ortho Information Services, pg 717
- 2. <u>Squash Bug</u>, University of Minnesota Extension

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