Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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News Corner

NEWS CORNER

Squash Bug

Squash bug, *Anasa tristis*, females are laying eggs and young nymphs are feeding on squash and pumpkin leaves. Squash bug adults are 1/2 to 3/4 of an inch (12.7 to 19.0 millimeters) long. Adults are dark brown and have wings that are brown to black with orange markings along the outer edge of the body (Figure 1). Females lay eggs from June through August, with each female producing up to 250 eggs. Eggs are initially light brown to orange before turning red, and are located on the underside (Figure 2) and topside (Figure 3) of leaves. Nymphs emerge (eclose) from the eggs in seven to 14 days. There are five nymphal instars (stages between each molt) before squash bugs mature into adults. First instar nymphs have a red head and thorax (middle body segment) and pale green abdomen (last body segment) (Figure 4). Second instar nymphs have a black head and thorax and a pale green abdomen (Figure 5). Nymphs gather near eggs after emerging. Older nymphs (3rd to 5th instar) are gray (Figure 6) and are distributed over the entire plant (Figure 7). Nymphs are 3/16 of an inch (4.7 millimeters) long and cannot fly because they do not have fully developed wings.

Figure 1. Squash bug adult (Raymond Cloyd).

Figure 2. Squash bug eggs on leaf underside (Raymond Cloyd).

Figure 3. Squash bug eggs on topside of leaf (Raymond Cloyd).

Figure 4. Young squash bug nymphs (Raymond Cloyd).

Squash bug nymphs and adults use their piercing-sucking mouthparts to withdraw plant fluids from leaves, stems, vines, and fruits. Damage to leaves appears as small, yellow specks that eventually turn brown (Figure 8).

Below are plant protection strategies that can be implemented to mitigate problems with squash bugs and minimize plant damage.

1. Plant later in the growing season to avoid the initial emergence of overwintering adults.
2. Check plants for the presence of eggs, nymphs, and adults on leaf undersides at least once per week during the growing season.
3. Destroy eggs and hand remove nymphs and adults. Place nymphs and adults into a container with a soapy water solution to kill them. Hand remove nymphs and adults every three to four days.
4. Place wooden boards throughout the garden, turning the wooden boards over daily to collect squash bugs hiding underneath. You can kill the squash bugs by placing into a container with a soapy water solution.
5. Apply a contact insecticide when nymphs are present. Young nymphs are easier to kill than the older nymphs. Contact insecticides are less effective against adult squash bugs because adults have a thickened waxy cuticle (skin) that insecticides cannot adhere to and penetrate. Adults are also protected from insecticide sprays by the leafy plant canopy. Weekly applications of contact insecticides may be required and thorough coverage of the leaf undersides is important to manage squash bug populations below plant damaging levels.

Figure 5. Young squash bug nymphs (Raymond Cloyd).

Figure 6. Older squash bug nymphs (Raymond Cloyd).

Figure 7. Older squash bug nymphs on plant stem (Raymond Cloyd).

Figure 8. Feeding damage caused by squash bug (Raymond Cloyd).

For more information on how to manage squash bug populations, refer to the following extension publication:

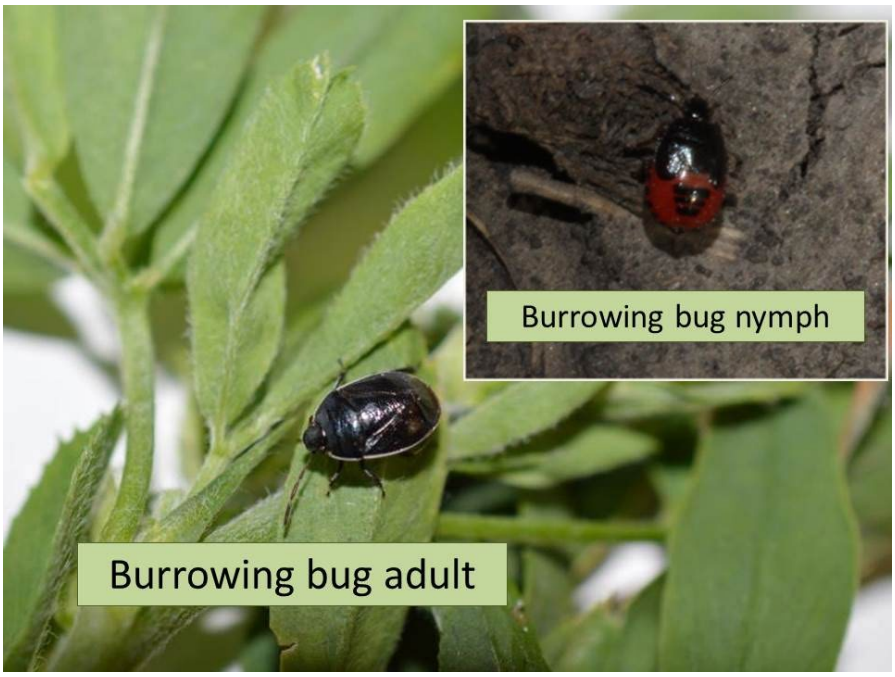
Squash Bug (MF3308 July 2016)

https://www.bookstore.ksre.ksu.edu/pubs/MF3308.pdf

Raymond Cloyd – Horticultural Entomology/Plant Protection

HOME

Burrowing Bugs



Small but common insects in soybean fields are burrowing bugs (see picture). Burrowing bugs are true bugs and, as such, feed by inserting their mouth parts into a host plant and sucking out the liquid. Burrowing bugs may feed on several different types of plants. In agriculture, they are most often noticed, and thus cause concern, after a herbicide (most usually Roundup) application starts killing the weeds in which they have been hiding and feeding in soybean fields.

The weed most commonly associated with burrowing bugs is henbit *(Lamium amplexicaule)*, and as this herbicide causes the henbit to die, the bugs, most often nymphs as this time, move out from under the henbit and often crawl in mass to nearby soybean plants where they may cause concern but very little damage.

For more information, see https://entomology.k-state.edu/doc/extension--crop-pests/burrowing-bug.pdf.

Amie Norton – Nanotechnology Entomology
Jeff Whitworth – Field Crop Entomology

HOME

Japanese Beetles in Crops

Japanese beetle adults are again making their annual appearance in eastern Kansas, according to David Hallauer, Agriculture Extension Agent for the Meadowlark District.

Japanese beetles (see picture) have a wide host range. However, relative to crops, they usually only cause concern in corn if they infest during silking and soybeans, where they may cause some plant defoliation in early vegetative stages.

For management decisions in corn, please refer to the KSU 2024 Corn Insect Management Guide (MF 810) and for soybeans, KSU 2024 Soybean Insect Management Guide (MF 743).

Japanese Beetle

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HOME

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