

Stink bugs (Order: Heteroptera, Family: Pentatomidae)
Southern green stink bug (*Nezara viridula* (Linnaeus))
Green stink bug (*Acrosternum hilare* (Say))
Brown stink bug (*Euschistus servus* (Say))

Description:

Adult: Stink bugs are generally medium sized shield-shaped insects with broad ‘shoulders’ and have a relatively straight sided, bluntly rounded abdomen. Stink bugs possess a dorsal, triangular shaped, shield on their backs. All stink bugs have piercing-sucking mouthparts. Probably the most common stink bug in vegetables in Georgia is the Southern Green Stink Bug. Adults are a uniform dull light-green, though the ventral surface is paler. They are 13-17 mm long and about 8 mm wide. The green stink bug appears similar to the southern green, but has a pointed spine between the last two legs. In the southern green stink bug, this spine is rounded. The brown stink bug and related species appear similar in shape to the southern green stink bug, but are various shades of brown on the upper surface and tan to yellow on the lower surface.

Immature stages: Stink bug eggs are somewhat barrel-shaped and are deposited on end in closely packed clusters. Egg coloration, cluster size and arrangement of eggs within the cluster varies with species. The southern green stink bug lays clusters of 30-130 eggs. Clusters are deposited in hexagonal clusters with the eggs arranged in straight rows and glued together. Eggs are about 1.3 mm long, yellowish-white to pinkish-yellow, and the top of the egg is clearly indicated by a ring of tiny spines. Eggs darken near hatching. The southern green stink bug has five nymphal instars. Nymphs are shaped similar to the adults but lack wings. Wing pads are apparent and grow longer with each instar. Color varies with instar. First instar nymphs are yellowish-orange to brown. Second and third instar nymphs have a black head and thorax and a reddish-black abdomen. Both the thorax and abdomen are marked with yellowish spots. The fourth instar nymph may appear similar to the second and third instar or may be greenish with the thorax light green with black markings and the abdomen dark green with salmon shading and white markings. Coloration of the fifth instar is also variable. The head, thorax and wing pads range from light green to very dark. The abdomen is colored similar to the thorax and marked with rose and white spots.

Biology: (Southern green stink bug)

Life cycle: Eggs clusters are generally laid on the underside of leaves and hatch in about 5 days. Typically all eggs in a cluster will hatch within 1-1.5 hours of each other. The southern green stink bug develops through five instars in about 32 days. Females begin oviposition about 14-20 days after attaining the adult stage.



Green stink bug adult.



Immature southern green stink bug.



Brown stink bug on tomato fruit.

Seasonal distribution: Stink bugs are rarely of concern in fruiting vegetables prior to flowering. Although they can feed in leaves and stems, reproductive structures, such as corn ears, tomato and pepper fruit, seeds, and pods are preferred feeding sites. Populations can build rapidly once flowering is initiated.

Damage to Crop: Stink bugs have piercing-sucking mouthparts with which they puncture plant tissue and remove sap. The greatest damage results from feeding on fruiting structures. As it heals, the feeding site becomes hard and darkens. Seeds fed upon may be shriveled, deformed and shrunken, or may simply bear a dark spot and depression at the feeding site, depending on the stage of development when attacked. Similarly, damage to ears of corn and fruit varies greatly with the development stage at which the produce is fed upon. Damage early in development can lead to severe deformities and abscission, while damage near harvest may result in small dark spots at the feeding site. Stink bugs can also introduce bacteria and yeast, or simply provide a site of entry for disease organisms as they feed, resulting in fruit decay.

Management: Although sweep net sampling is an effective means of sampling stink bugs in beans and similar crops, in most vegetable crops sampling is conducted with visual examination of plants and fruiting structures. Stink bugs are typically controlled with insecticides used throughout the fruit production period of susceptible crops. Identification of stink bug species involved prior to selection of insecticide is important as different species respond differently to insecticides and there are predatory species of stink bugs found in vegetables.



Discoloration of fruit caused by stink bug feeding.