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Leaffooted Bug on pecan kernels

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Type Pest: piercing/sucking insect (Leptoglossus phyllopus)

Type of Metamorphous: simple (egg, nymph, adult stages)

Other Common Names: southern green stink bug (Leptoglossus phyllopus)

Period of Primary Occurrence: from formation of nuts until harvest

Plants Affected: Pecans. seed, fruit, vegetable and nut crops

Identifying Characteristics of Insect Pest

- Southern green stink bug adult is shield-shaped, light green, about $\frac{1}{2}$ " long and has an offensive odor
- Leaffooted bug adult is narrower in body outline than the stink bug, light to dark brown and about ½" long. Leaffooted bugs have a flattened leaf-like segment in the hind legs
- These insects have similar life cycles and may have four or five generations in a single year
- These insects cause black pit and kernel spot on pecan nuts causing crop loss or lowering nut quality
- Detecting and diagnosing these pests is difficult because often they are not seen on the fruit or nut tree. To correctly diagnose this pest, look for the crop damage, and then search for the insect on the host plant or adjacent trees and shrubs

Symptoms / Damage

- Black pit in pecan nut is indicated by a darkening of the insides of the immature nuts which is followed by premature drop
- Kernel spot consists of brown spots from $\frac{1}{16} \frac{3}{16}$ diameter which forms a pithy porous area. Injury cannot be detected until nuts are shelled. Tastes bitter.
- Nuts will drop if bugs attack them before the shell hardening, after shell hardening, spots will form on the kernels
- The bugs can feed through hardened shells
- Severity of black pit and kernel spot depends on the abundance of plant bugs on the native plants and cover crops present





Best Management Practices (BMP)

NON-CHEMICAL CONTROL

- Handpick insect from vegetation
- Use proper cover crops and practice good weed control and sanitation measures
- Destroy wild hosts such as jimsonweed, beggarweed, thistle and maypop
- Keep area around pecan trees well mowed during the summer

CHEMICAL CONROL

- Apply chemical control if insect populations are high
 - Cypermethrin (Ammo®, Cymbush®)
 - esfenvalerate (Asana®)
 - carbaryl (Sevin®) applied for other pests may also control stink bugs and leaffooted bugs.

Sources

http://aggie-horticulture.tamu.edu/fruit/brush/brush07.pdf http://edis.ifas.ufl.edu/IN534

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Use pesticides only according to the directions on the label. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. If the information does not agree with current labeling, follow the label instructions. The label is the law.

Always remember to read and heed six of the most important words on the label: "KEEP OUT OF REACH OF CHILDREN"