Type Pest: chewing insect (Cydia caryana Fitch)
Type Metamorphous: complete (egg, larva, pupa, adult stages)
Period of Primary Occurrence: early June until harvest
  • Adults are most active at night and because of size are difficult to find
  • Larvae feed on young developing nut

Plants Affected
  • Pecan and hickory

Identifying Characteristics of Insect Pest

**LARVAE / EGG STAGE**
  • Larvae stage white with brown heads about ½” long (Fig. 1)
  • Larvae make tunnels in the shuck (before shell hardens), interrupting flow of nutrients and water necessary for normal kernel development (Fig. 2 & 3)

**ADULT STAGE**
  • Adult stage small, gray to smoky-black colored moth
  • Dimensions ⅛” long with wing span of ½” wide

Description / Symptoms
  • Primary insect pest of pecans in the Galveston Country area and the most economically damaging pecan insect pest in southwest Texas
  • Premature nut drop...before shell hardens (Fig. 7 & 8)
  • Poor kernel development, shuck sticking, scarring and discoloring of the shell and delayed nut maturity occur from shuck mining activity of larvae after shell hardening (Fig. 4)
  • Except for premature nut drop, early stages of shuckworm damage goes unnoticed unless the shuck is cut open to reveal larvae tunneling
  • Shuckworms do not impact the health of pecan trees (just the quality of the nut crop)
Best Management Practices (BMP)

NON-CHEMICAL CONTROL
- Good sanitation, keep ground free of pecan shucks and shells. Remove shucks to reduce overwintering population of shuckworm
- Beneficial predators include bats, green lacewings, trichogramma wasps and other wasps. Beneficial nematode soil treatment
- Shucks should be discarded in trash or buried 2 – 3” as larvae are unable to mature in decaying shucks and adults cannot emerge from the soil (Fig. 5 & 6)

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas AgriLife Extension Service is implied.

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”