

# Hickory Shuckworm

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FIG. 1

**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 ¾" 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)



FIG. 2



FIG. 3



FIG. 4

## 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)



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

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