

Sorghum (*Sorghum vulgare*, L.) Insects

Corn earworm [*Helicoverpa zea* (Boddie)]



Specimens of corn earworms on sorghum (left) and heads with severe corn earworm infestation (right).

Corn earworm, *Helicoverpa zea* (Boddie), is one of the most damaging insects for sorghum in southeastern Virginia. This insect has a global distribution, and it is among the most destructive pest in the southern United States. Corn earworms overwinter as pupae at about 2 inches into the soil. In early May, adults (moths) emerge and lay the first generation of eggs on corn seedlings, as corn represents the favorite host for this insect. In warm years, a full life cycle of corn earworm is expected in 30 days in our environment. The second generation of eggs is usually laid on the silk of corn, but some worms from this generation can be found on sorghum seedlings as well. At this stage, usually worms are not likely to cause economic damage for sorghum unless 80% of whorls are infested with one worm per whorl or 40% with two or more worms. Later in the season when corn silk dries up, oviposition or searching for egg-laying sites occurs primarily on sorghum and other hosts including soybean, cotton, and peanut. Each female lays from 450 to 3,000 eggs that will hatch within 2 to 5 days. Larvae feed for 2 to 4 weeks after which they migrate into the soil to pupate. When fully grown, larva is moderately hairy, yellowish-green, brown, or reddish-brown with a tan to orange head. It can be pale-striped or black-spotted. Only larvae produce economic damage as they feed on sorghum grains and flowers. Recognizing the moth is however important to estimating when a new generation of larvae is expected. Moths have from 1 to 1½ wingspan. Wings of the male are light yellow to olive and those of the female are yellowish-brown to pinkish-brown. A distinctive feature is a dark spot near the center of each forewing. Four generations of corn earworms may occur each year.

Injury by worms feeding on the grains favors fungal infection as they provide a ready site for entry of the fungi. This may lead to development of head mold and reduced marketability and feed values of the sorghum. Therefore, rigorous field scouting for worm presence once the heads start emerging and until maturity is critical for keeping under control this insect. Information on economic threshold and resistance management is available on the Virginia AG Pest Advisory web site at <http://www.sripmc.org/Virginia/index.cfm>.

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