

Colorado Insect of Interest

Achemon Sphinx

Scientific Name: *Eumorpha achemon* (Drury)

Order: Lepidoptera (Butterflies, Moths, Skippers)

Family: Sphingidae (Sphinx moths/Hawk moths, Hornworms)



Figure 1. A full-grown larva of the Achemon sphinx, brown form. Photograph courtesy of Harold Larsen.

Description and Distinctive Features: The achemon sphinx is a large, heavy-bodied moth with a wing span of about 3.5 inches. The forewing is pinkish brown with a squarish dark spot along the edge. The hindwing is mostly pink, with brownish markings along the edge.



Figure 2. Adult of the Achemon sphinx

Most commonly observed are the full-grown larvae. These are large, cylindrical-bodied caterpillars without noticeable hairs and when full-grown may be over 3 inches long. Color of the caterpillars is variable with pale brown, dark green, and purple-brown forms present, the latter being particularly common. Light colored oblique bars occur along the sides of the body, each of which surrounds a dark spiracle.

These caterpillars are in the “hornworm family” (Sphingidae) and younger caterpillars possess a long, flexible spine on the tip of the abdomen. However, at the last larval molt this “horn” is lost. A prominent dark spot occurs at the spot when these become a “hornless hornworm”.

Distribution in Colorado: Statewide where host plants are present.

Life History and Habits: Achemon sphinx winter as a pupa, within small earthen cells constructed a few inches below ground. These occur in the general vicinity of previously



Figure 3. Full grown larva of the Achemon sphinx, green form



Figure 4. Pupa of the Achemon sphinx

infested plantings of grape or Virginia creeper, the common host plants of the caterpillar. Adults may emerge in June, but are most common during July at which time eggs are laid on host plants. The developing caterpillars chew leaves of their host plants but, although individual larvae may feed on a lot of foliage, they are almost never abundant enough to cause any significant plant injury.

The young larvae are green or brown with very long horn-like projection from the tip of the abdomen. The larvae continue to grow through summer, losing the horn during the last molt. When full grown in late August or September, they leave the plants, typically wandering several yards away, to find a place where they may dig into the soil and pupate. It is during this time that the insect is most commonly observed. This is one generation produced a year.

Related Species: The Achemon sphinx is one of over two dozen (27-28) sphinx moths that occur in Colorado. The most common species is the whitelined sphinx (*Hyles lineata*), which has larvae that occasionally will feed on grape. Two species of hornworms are also commonly known to vegetable gardeners, the tomato hornworm/fivespotted hawk moth (*Manduca quinquemaculata*) and the tobacco hornworm/ Carolina sphinx (*Manduca sexta*). These species, and others, are covered in Colorado State University Extension Fact Sheet 5.517, *Hornworms and Hummingbird Moths* (<http://www.ext.colostate.edu/pubs/insect/05517.html>).