

## Catalpa Sphinx Caterpillar

Lepidoptera: Sphingidae, *Ceratomia catalpae* (Boisduval)

By Eric Day and D. Ames Herbert

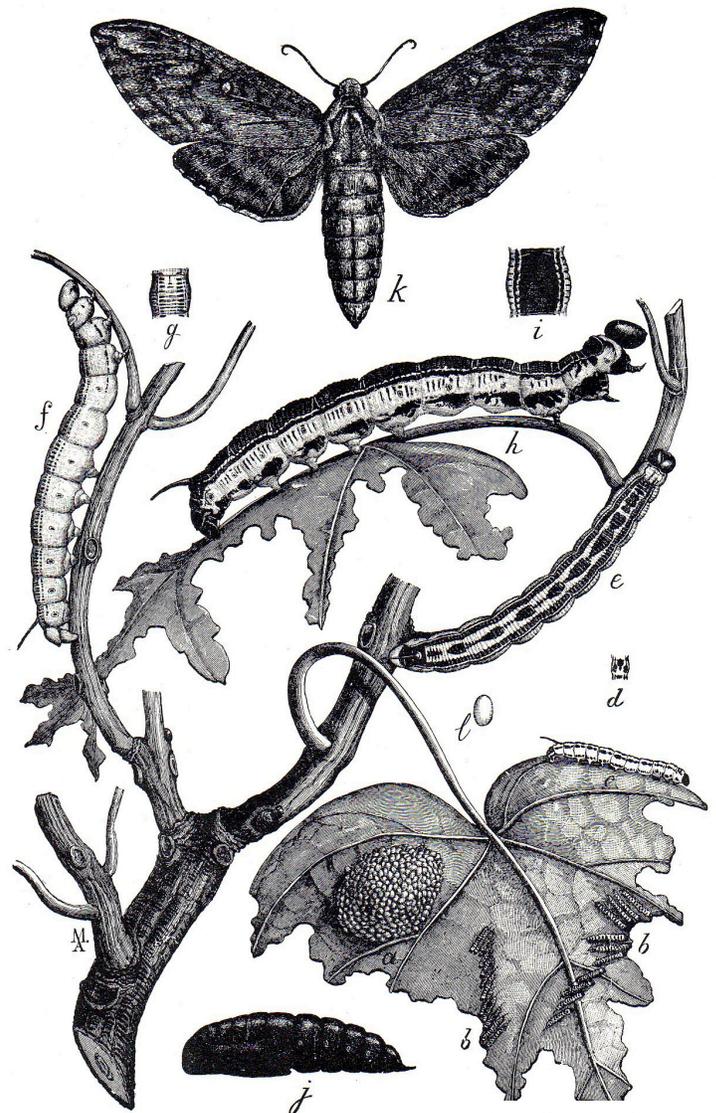
PLANTS ATTACKED: Catalpa only.

**DESCRIPTION OF DAMAGE:** Catalpa sphinx caterpillars, also known as "Catalpa worms", are major defoliators of catalpa. With their chewing mouthparts, they strip away large portions of the leaves. In heavy infestations they can completely defoliate the entire tree. Apparently trees on high ground with poor soil are rarely, if ever, attacked. In some years, depending on the region, many trees will have all their leaves stripped away by the end of the summer. This may be followed by years with no defoliation observed at all. The fluctuation between outbreak and no defoliation is largely due to the activity of parasites.

**IDENTIFICATION:** Catalpa sphinx caterpillars have a distinctive black "horn" on the end of their abdomen. Mature caterpillars have black heads and a broad black stripe running the length of their back. The sides of the caterpillars are white or pale yellow and sometimes have black spots or vertical bands. There are pale forms that are more greenish and in some cases will have a row of black spots down the back or will lack the black stripe. The adult is a brownish-gray sphinx moth. Eggs are laid in clusters of up to 1000 eggs on the underside of the leaves.

**LIFE HISTORY:** Catalpa sphinx overwinter as pupae in the soil and the adults emerge in May and lay eggs on new leaves. Each caterpillar molts five times; the final molt is into a pupa. There are two generations in Virginia, but some years a partial third is seen. The second generation is usually larger and in "good" years the caterpillars can cause defoliation at the end of the summer.

**CONTROL:** Although the caterpillars can cause complete defoliation, in some instances control is usually not warranted because of the sporadic fluctuations in the population from year to year and the ability of the trees to grow new leaves. If control is desired, follow the recommendations in Virginia Cooperative Extension Publication 456-017, The Pest Management Guide for Horticultural and Forest Crops.



USDA line drawing

The Catalpa Sphynx in all stages: *a*, an egg mass; *b,b*, young caterpillars feeding in company; *c*, larva, one-third grown, and *d*, a single segment from above; *e,f,h*, varieties of the larva; *j*, the pupa; *k*, the adult moth; *l*, an egg much enlarged.



Catalpa Sphinx Caterpillar  
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REMARKS: Catalpa sphinx caterpillars, "catalpa worms," make excellent fish bait and at one time catalpas were grown in Florida in order to harvest the worms and sell them to fishermen.

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REPLACES: Publication Number 444-247