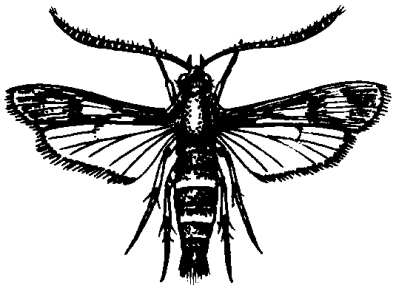
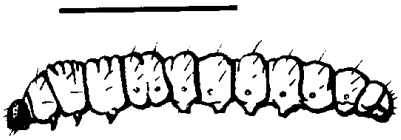
STRAWBERRY CROWN MOTH **Lepidoptera: Sesiidae** *Synanthedon biblionipennis*

DESCRIPTION

Adults are clear winged moths, with a wingspan of about 20 mm. The forewings are nearly opaque with the edges dark bronze to almost black. The hindwings are transparent with dark veins and dark fringe. The abdomen is black, and banded with yellow on the second, fifth, and sixth segments. Mature **larvae** are about 20 mm long, white, with a dark brown head.





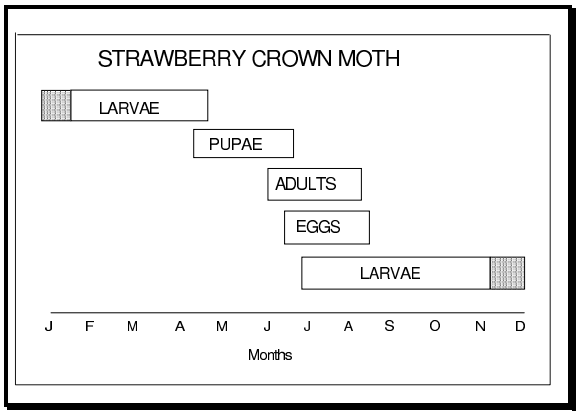
(after OR Agric. Exp. Stn. Bull. 296)

ECONOMIC IMPORTANCE

Larvae feed on the inside and outside of strawberry crowns causing stunting of plants and severe thinning of plant stands. Fields infested with a high population are completely destroyed within a year. This pest also attacks raspberries, black raspberries, and blackberries.

DISTRIBUTION AND LIFE HISTORY

This insect occurs throughout the western United States and British Columbia wherever strawberries are grown. This pest overwinters as a nearly mature larva in the crown of strawberry plants. They become active in April and May and feed for a short time before pupating in the crowns in May and June. Adults emerge in late June and July, mate, and lay eggs on dead leaves or green leaves around the base of the plants. Eggs hatch in about two weeks and the young larvae begin feeding on the outside of the crown at the base of small roots. As the larvae mature, they bore deeper into crowns and are found in the center of the crown after about one month of feeding. Larvae feed in the crowns until early October, then spin a cocoon to overwinter. There is one generation each year.



MANAGEMENT AND CONTROL

Few parasites and predators attack the strawberry crown moth, and only one Diptera parasite, *Leskia gilensis*, has been found effective in reducing the population. Topping or mowing the plants immediately after harvest, leaving a few rows untopped, can reduce infestations. Emerging moths concentrate most of their eggs on the untopped plants that can then be destroyed after mid-August. Adult emergence can be monitored with pheromone traps to time applications of insecticides, if necessary. Applications are usually made about 10 to 14 days after the peak adult emergence has occurred.