



# CAES

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## **CIGARETTE AND DRUGSTORE BEETLE** *(Lasioderma serricorne and Stegobium paniceum)*

Cigarette and drugstore beetles are common stored product pests. They can infest a wide variety of dry stored goods, such as grains, starches, and proteins. Their common names come from their historical association with pharmacies and tobacconists; both places typically stored and sold bulk many of the dry stored goods that the beetles could regularly be discovered infesting.



**Fig. 1: Drugstore beetle adult**

### **Description:**

Cigarette and drugstore beetles have four stages in their life cycle: egg, larva, pupa, and

adult. The adult cigarette beetle is a small, red-brown beetle (Fig. 1). When viewed from above it appears oval, and in profile humpbacked in shape (the head and pronotum are bent forward). It is about 1/10 to 1/8 inches long. The antennae are serrate (the side edge of each antennal segment is pointed like a saw tooth). The wing coverings (elytra) are smooth without longitudinal grooves. The drugstore beetle is identical but has grooves on its elytra. Both species are strong fliers and are attracted to light.



**Fig. 2: Drugstore beetle larva**

The larvae are white and grub-like (Fig. 2). They have a fuzzy appearance due to the long hairs that cover their bodies. When full grown they are about 4mm long.

**Biology:**

Cigarette and drugstore beetle biology is identical. Both adults and larvae are capable of readily penetrating many types of packaging material. Adults lay their eggs on the food material. Adults live 2-4 weeks. Females lay up to 100 eggs; the development time from egg to adult is 6-8 weeks. There are 3-6 generations/year. The minimum development temperature is 65 F.

*Food infested (damaged):* Plant material - Aniseed, areca nuts, atta (a wheat product in India), bamboo, beans, biscuits, cassava, chickpeas, cigars, cigarettes, cocoa beans, coffee beans, copra, coriander, cottonseed (before and after harvest), cottonseed meal, cumin, dates, dogfood, dried banana, dried cabbage, dried carrot, dried fruits, drugs, flax tow, flour, ginger, grain, herbs, herbarium specimens, insecticides containing pyrethrum, juniper seed, licorice root, paprika, peanuts, rhubarb, rice, seeds of various trees and plants, spices, and yeast.

Other food materials include dried insects, dried fish, fishmeal, and meatmeal. The cigarette beetle has also been recorded attacking leather, furniture stuffing, bookbinders paste, and the stored wax of *Cocos coronata*. It has also done incidental damage to cloth upholstery and paper books.

**Control:**

Cigarette and drugstore beetles can be controlled without the use of pesticides. It is important that susceptible food material be stored so that adults and larvae cannot access it. Glass jars and plastic containers with airtight covers effectively keep food insect-free. Infestations observed on food stored in either type of storage container are trapped and unable to spread to other food items. Susceptible food items should be tightly contained, stored in the refrigerator or freezer, or be consumed within two to three weeks of purchase.

**Summary:**

Cigarette and drugstore beetles feed on a variety of stored products such as paprika, chili, and dried dog food. Both adults and larvae are capable of readily penetrating many types of packaging material. The four stages in their life cycle are the egg, larva, pupa, and adult. Adults are strong fliers and are attracted to light at night. Adult beetles flying around lights at night are often the first indication of their presence. Control can be achieved without the use of pesticides.