



## Drugstore Beetle and Cigarette Beetle

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### Introduction

Drugstore beetle (*Stegobium paniceum*) and cigarette beetle (*Lasioderma serricornes*) both belong in the family Anobiidae in the order Coleoptera. These beetles resemble each other and are common pests of stored products.

### Description

Both of these pests are small reddish-brown beetles. Their heads are tucked downward and backward to the extent that the head is not always visible when viewed from above. Both species measure about 2-3 mm (about 0.1 inch) long. The drugstore beetle is slightly larger, more elongated, and has distinctly grooved wing covers (Fig. 1). The cigarette beetle (Fig. 2) is more rounded with smooth wing covers. The antennae of the drugstore beetle form an elongated, 3-segmented club, whereas the antennae of the cigarette beetle are serrated, like a sawblade, along the entire length.



Figure 1. Drugstore beetle (Pest and Diseases Image Library, Bugwood.org).

Larvae of both drugstore and cigarette beetles are stout, off-white, C-shaped grubs with tan head capsules and three pairs of legs (Fig. 3). They are covered with pale hairs. The larvae are often overlooked in infested products.



Figure 2. Cigarette beetle (Pest and Diseases Image Library, Bugwood.org).



Figure 3. Drugstore beetle larva (Mohammed El Damir, Bugwood.org).

### Habitat

Drugstore and cigarette beetles in houses are typically found in kitchens and pantries, or wherever dried foods and spices are kept. They may be found near birdseed or dry pet food kept in the garage. They can be associated with mice nests in wall voids

or attic spaces if the mice have cached food there. Drugstore and cigarette beetles often go unnoticed until large numbers of adult beetles appear at windows or seen flying around lights.

## Life Cycle

Both drugstore and cigarette beetles have a complete life cycle of egg, larva, pupa, and adult stages. Mated females lay eggs in or on the food source. The larvae tunnel through the food as they feed, then pupate. The time to develop from egg to adult is dependent on the quality of the food, the temperature, and the humidity level. Development is delayed at low moisture levels.

## Distribution

Drugstore and cigarette beetles are cosmopolitan in association with humans.

## Damage

The common name “drugstore beetle” reflects the species’ ability to consume medicinal drugs, while cigarette beetles attacked tobacco products. However, both drugstore and cigarette beetles have a very wide host range and damage many kinds of dried plant and animal materials, including spices, flour, cereals, dog and cat food, tobacco, leather, wool, meal, grains, seeds, and dried fruits. In addition, they will tunnel through non-food material such as paper, fabric, and foil to get to a food source. They are said to feed “upon almost anything except cast iron.”

## Control

Sanitation is key to the control of these pantry pests. Routinely clean cabinets and pantries to monitor for possible infestations. Dispose of any infested food sources. Use a vacuum cleaner to remove any life stages and spilled foods that support beetles hiding in cracks and crevices. Keep all stored products in airtight bags or sealable containers. Foods that are susceptible to infestation can also be stored in the freezer. Infested foods can be heat treated at 120° F for 1 hour to kill these beetles.

## Revised

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