

Providing Leadership in Environmental Entomology

Department of Entomology, Soils, and Plant Sciences • 114 Long Hall • Clemson, SC 29634-0315 • Phone: 864-656-3111
email:dpento@clemson.edu

CIGARETTE BEETLES

Processed tobacco and tobacco products, are susceptible to cigarette beetle attack. Cigarette beetles often infest tobacco manufacturing and retail outlets. Besides tobacco, cigarette beetles are also secondary pests of many other produces, such as wheat flour, wheat bran, rice, rice meals, barley, corn meal, soybean meals, sun flower meals, legume seeds, peanuts, ginger, nutmeg, curry powder, figs, raisins, chili powder, cayenne pepper, paprika, dried fish, fish meals, dates, yeast, and even drugs. Many dried plant materials, such as dried flowers and herbarium materials may be infested too. Other non-food items they attack are leather, woolen clothes, glue in book covers, bamboo and furniture with straw stuffing.



Description

Cigarette beetles are 1/8 inch (2.0-3.7 mm) in length and light to dark brown in color. They resemble drugstore beetles, but do not have the lines of pits on their backs (wing covers). The wing covers appear smooth. Antennae are saw-like with the same

thickness from the base to the tip. The head is bent down sharply, nearly at a right angle to the body, giving a humpback appearance when viewed from the side. Eggs are pearly white, and covered by a waxy shell to protect them from drying out, so they are not easily seen with the naked eye. Larvae are creamy-colored or grayish-white and covered with fine light brown hairs.

Life Cycle and Habits

Females lay 30 eggs that hatch in about 10 days. On tobacco, eggs are laid in the folds of bundled leaves in storage and also in open end of cigars. On food items, the females lay their eggs in or on the food. The larval period ranges from 5-10 weeks. Newly hatched larvae move away from light and are extremely active, entering small holes in search of food. The larvae make long cylindrical galleries through tobacco leaves and feed on the edges and center of the leaves. In other types of foods, larvae tunnel into the food and make galleries too. Pupae develop in a cell within the tobacco or other food items, or attach to a surface such as tobacco or food processing equipment. Most adults live about 3 weeks, but some can live up to 70-90 days. There are 5-6 generations per year in warm areas, but usually only one generation per year in colder regions. Adults are strong flier and will fly in the late afternoon and on dull cloudy days at temperature above 65° F. They can fly up to a 2 miles range. Cigarette beetles may overwinter as larvae, or as adults.

Prevention and Control

Non-chemical

Good sanitation is the best prevention and control for cigarette beetle infestations. If you follow a few recommendations you can usually eliminate the problem quickly.

1. Only purchase food packages that are sealed and show no sign of insect damage.
2. Only purchase food in amounts you can use in a short period of time (between 2 to 4 months), especially during the warm summer months.

3. Store all foods in insect-proof containers with tight fitting lids or freeze them in 0° F. Freezing grain products for 3 days after purchase is a good habit.
4. Keep cabinets and the surrounding area clean and free from food spillage. Vacuum all dust and debris from cabinets and floor of the kitchen. Do not clean cabinet with water because this may leave a pasty residue attractive to the pest.
5. Properly ventilate the storage area to discourage these moisture-loving pests.
6. Identify all infested food or other items and discard or treat (by freezing) them. Check decorations that may be in storage. Dried straw flowers can be the source of a cigarette beetle infestation. Infestations can sometimes originate from birdseed or pet food stashed away by mice in an attic or behind a wall.

Chemical

Avoid using insecticides around food. Use them only as a last resort and carefully follow the label directions. If you decide to use insecticides, choose a household insecticide labeled for pantry pests.

Remove all food and clean cabinets. Discard all infested food. Do not treat surfaces used for food storage, preparation or where kitchen appliances or utensils are kept. Give special attention to cracks and crevices in cabinets. Allow the insecticide to dry before returning food to cabinets. Cover the shelves with clean shelf paper. After treatment, good sanitation and proper storage are keys to preventing future infestations.

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Prepared by Idham Harahap, Graduate Assistant, Patricia A. Zungoli, Extension Entomologist/Professor, and Eric P. Benson, Extension Entomologist/Associate Professor, Department of Entomology, Soils, and Plant Sciences, Clemson University.

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