

Stored product pest - cigarette beetle

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Background and distribution

The cigarette beetle or tobacco beetle, *Lasioderma serricorne*, is a common stored product pest and has been given its name as it also infests tobacco products. The beetles occur throughout the tropical and subtropical regions of the world, and even in warm buildings in temperate regions.



Cigarette beetle adults



Cigarette beetle larvae

Description

The adults are small oval, globular beetles, measuring about 2 to 3.5 mm, and reddish brown in colour. They have long antennae which are waved rapidly when walking. Adults are able to fly and they often curl up and lay motionless when disturbed. The beetles are attracted to light and may be drawn to warehouses or homes which are lighted at night. The larval stage which causes the most damage, are white, scarab-like, and hairy measuring about 3 mm.

Life history and biology

There are six stages in the life history of the cigarette beetle. The female beetles deposit eggs loosely on the commodity. Each female can lay up to 100 eggs. In Territory weather conditions, the eggs probably hatch in about six days. The hatched larvae burrow into the food source, damaging the products by eating and contaminating them. After passing through four immature stages, the larvae pupate within a cell made from food and waste material. The emerged adults are capable of flying and can live for 2-6 weeks but do not feed during the adult stage. The shortest development period (in optimum conditions) to complete their life cycle from egg to adult, takes 26 days at 30°C, 70% r.h. (relative humidity).

Damage

The cigarette beetle is one of the most common household insect pests. The larvae can cause damage by feeding on a variety of stored products, such as dried material of animal and vegetable origin, nuts, herbs and spices, grain and grain products. They also may chew through furniture fabric, books, manuscripts, and similar materials. Infested products are also contaminated by the presence of beetles, larvae, pupae, cocoons, frass and insect parts. Larvae will sometimes bore through cardboard boxes and other packaging in search of a place to pupate. Cocoons are often

attached to a solid substrate and in severe infestations they can form large clusters. The adult does not feed on the commodity, but chews holes in the commodity's packaging when it emerges.



Adult in an emergence hole on a damaged mat



Damage to a dried mushroom (preserved food)

Monitoring and control

It is important to inspect individual products brought home from shops or other places. The presence of adult insects or holes in packages generally indicates that the product is infested. All dried foods including pet food should be inspected regularly to prevent or reduce infestations building up in the house. If dried food is stored in clear containers, this makes it easier to check for infestations. If adult cigarette beetles are found along window sills and interior walls, this may be an indication that there is an infestation in the house and the kitchen cupboards or pantry should be checked.

Once the source of infestation is found, the infested items should be wrapped in heavy plastic for disposal. Items can also be placed in the freezer at -4°C for a week to kill adults, larvae, and eggs. After removing the infested item, all cabinets and drawers where the contaminated item was stored should be cleaned. Chemical treatment is usually not necessary.

REFERENCES:

Rees, D. (2004). *Insects of Stored Products* CSIRO Publishing.

Cabrera, B. J. (2001-2007). Cigarette beetle, *Lasioderma serricorne* (F.) (Insecta: Coleoptera: Anobiidae), University of Florida. (http://creatures.ifas.ufl.edu/urban/stored/cigarette_beetle.htm)

For further information on this leaflet contact Entomology at insectinfo.dpifm@nt.gov.au. Agnotes or factsheets on other pests are available from www.dpir.nt.gov.au

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