

# Flour beetle fact sheet

The confused flour beetle and the red flour beetle are very similar in appearance and can be most easily distinguished by examining the antennae: the antennae of the red flour beetle end abruptly in a three-segmented club, while the confused flour beetle's antennae gradually enlarge towards the tip, ending in a four-segmented club. Adult beetles of these two species have shiny, reddish brown bodies that are about 1/7 inch long, flattened, and oval. These beetles have a very wide food range including cereals, damaged grains, grain products, shelled nuts, dried fruit, chocolate, drugs, and herbarium and museum specimens.



The biology of these two species is very similar; their average lifespan is about one year, but some have been known to live almost four years. The females lay their small, white eggs loosely in flour or other food material. The eggs, which are coated with a sticky secretion, become covered with flour or meal and readily adhere to the sides of sacks, boxes, and other containers. They hatch into small wormlike larvae that are slender, cylindrical, and wiry in appearance. When fully grown, the larva is 3/16-inch long and white, tinged with yellow. At this stage, it transforms into a small pupa. At first white, the pupa gradually changes to yellow and then brown, and shortly afterward transforms into a beetle. In summer, the period from egg to adult averages about six weeks.

## Dealing with the flour beetle

Getting rid of food-infesting moths or beetles takes continuous, persistent effort if the infestation has been present for a while. Some pests are capable of living for many weeks without food, thus the threat of re-infestation exists until they die off or are killed. Follow the guidelines for removing and cleaning up an infestation. It is best, at least for several months after eliminating the infested products, to store any susceptible food in airtight containers or in a refrigerator or freezer. Also, as a general practice, storing infrequently used food items (e.g, pancake flour, grains, spices, etc.) in the freezer prevents infestations from developing.