

# CONFUSED FLOUR BEETLE

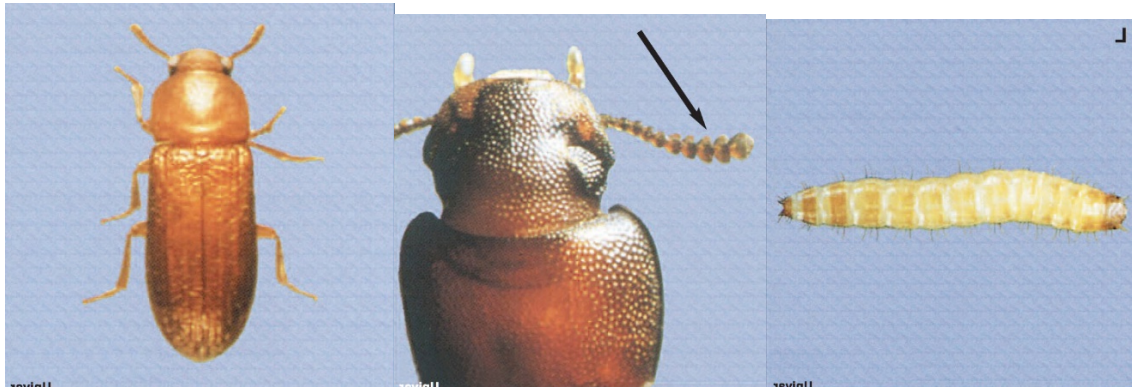
## INTRODUCTION

The confused flour beetle apparently got its common name because of the confusion regarding its identity. It is one of the most important pests of stored products found in the home and in grocery stores. Although of African origin, it now occurs worldwide in cooler climates. In the United States, it is more abundant in the northern states.

## RECOGNITION

Adults **about 1/8"** (3-4 mm) long. Color **reddish brown**. **Antenna gradually clublike, club 4-segmented**. **Compound eyes on underneath side of head separated by much greater than ventral width** of a compound eye; in lateral (side) view, **middle of eye at narrowest point only 1 or 2 facets wide**. **Sides of thorax almost straight**, at least much more so than curved sides of red flour beetle. Adults with wings, but **never observed flying**. Except for antennal and thorax differences, almost identical to red flour beetle.

Full-grown larva about 1/8-1/4" (4-5 mm) long. Hard-bodied, cylindrical, wiry in appearance. Color white but tinged yellowish. Distinguishable from larvae of somewhat similar appearance by the darken prominent, 2-pronged non-movable and unsegmented termination of last body segment (=urogomphi); this same distinction is true for red flour beetles.



## BIOLOGY

The confused flour beetle female deposits about 300-500 clear-white sticky eggs on or among food materials in cracks, in bags, or through the mesh of sacks containing food. The female lays 2-3 eggs per day, but lives for 2-3 years. The eggs hatch in 5-12 days into brownish-white larvae, which go through 5-18 instars (usually 7-8) and reach maturity in about 30 days under optimal conditions. The life cycle (egg to egg) can be completed in only 7 weeks, or it may require 3 months or longer. In heated storage facilities and processing plants, there are 4 or 5 generations annually.

# HABITS

These beetles are unable to feed on whole kernels or undamaged grain. They have been recorded attacking grains and grain products, peas, beans, shelled nuts, dried fruits, spices, milk chocolate, drugs, snuff, cayenne pepper, and herbarium, insect and other museum specimens. They have been found to infest poisoned baits.

They are attracted to light even though they apparently do not fly.

Although humans are not injured by it, confused flour beetles do impart a disagreeable odor and taste to the flour they infest.