

# RED FLOUR BEETLE

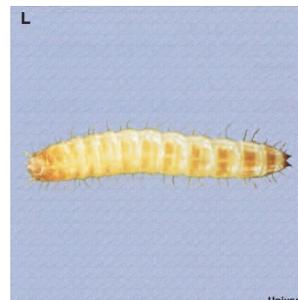
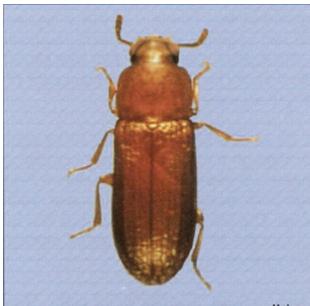
## INTRODUCTION

The red flour beetle gets its common name from its coloration and its habit of infesting flour. It is one of the most important pests of stored products found in the home and in grocery stores. It is of Indo-Australian origin and now occurs worldwide in the warmer climates. In the United States, it is found primarily in the southern states.

## RECOGNITION

Adults **about 1/8"** (3-4 mm) long. Color **reddish brown**. **Antenna with abrupt, 3-segmented club**. **Compound eyes on underneath side of head separated by about ventral width of a compound eye**; in lateral (side) view, **middle of eye at narrowest point 4+ facets wide**. **Sides of thorax rounded**. Wings functional but commonly **flies** only short distances. Except for antennal and thorax differences, almost identical to confused 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 darkened prominent, 2-pronged, non-movable and unsegmented termination of last body segment (=urogomphi); this same distinction is true for confused flour beetles.



## BIOLOGY

The red 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 are attracted to flour of high moisture content.

Adults can fly and are attracted to light.

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