

# Discover the Fauna of Our Campus

## Small flour beetle (*Tribolium confusum*)

Family: Blackbirds (Tenebrionidae)

Genus: *Tribolium*

Species: Small flour beetle (*Tribolium confusum*)



The small flour beetle (*Tribolium confusum*) is a small insect belonging to the family



Tribolidae and is considered one of the most dangerous pests of grain crops worldwide. They are especially common in flour mills, warehouses and kitchen cupboards. They are quite small, only 3–4.5 mm long. They are bright reddish-brown or rust in color. Their body is elongated and flattened. This shape allows them to fit through even the smallest holes

in food packages. When viewed closely, their antennae gradually widen towards the tip (this is the main microscopic feature that distinguishes them from the Red Flour Beetle, which they closely resemble).

The small flour beetle is mainly considered a "secondary pest". This means that it cannot break down whole grains, but feeds on products that have already been ground or damaged by other insects. They like dark, warm and low-humidity places. They are sensitive to light and usually hide deep in food. The damage caused by this insect does not end with just eating food. The insects secrete chemicals called quinones from their special glands. These substances turn the flour pink, give it a sharp bad smell and a bitter taste. Such a product is absolutely not suitable for use. Their secretions and shell residues can cause allergic reactions in some people. Adults are very hardy and can live for 2-3 years under favorable conditions. The small flour beetle reproduces very quickly. One female beetle can lay 400-500 eggs



in her lifetime. Since the eggs are white and sticky, they stick to flour particles and it is almost impossible to clean them (sift). These insects do not tolerate extreme cold and heat. Keeping a suspicious product in the freezer for several days or heating it to temperatures above 60°C destroys them. Always store flour and other cereals in tightly closed glass or hard plastic jars. They can easily pass through paper and thin cellophane packages. Emptying cabinets and wiping them down with vinegar water is effective in keeping them away, both through cleanliness and smell. These insects are so small that they often come home inside the produce we buy from the grocery store (infected during production or packaging).

