

Cryptolestes ferrugineus (Stephens)

(Rusty Grain Beetle)

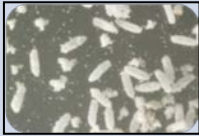



Fam. Laemophloeidae

General information: Worldwide primary pest of grains; relative humidity below 40 % and grain moisture below 12 % restrict development, very cold tolerant

Infested products: Cereal grains and grain products, wheat, maize, rice, barley, rye, oatmeal, dried fruits, oilseed expellers

Related species: *C. pusillus*, *C. pusilloides* and *C. turcicus* (difficult to distinguish - preparation of the genitals required)

Total development: 23 - 27 days (shortest time) at 32 °C and approx. 60 – 90 % relative humidity

Egg	Larva	Pupa	Adult (beetle)
			
4 to 7 days	26 to 34 days	6 to 10 days	Up to 1 year
<ul style="list-style-type: none"> - 0.5 x0.2 mm - white glossy sticky surface that can adhere to the substrate - a female lays up to 500 eggs 	<ul style="list-style-type: none"> - 1 to 4 mm long - white to yellowish with stepped brown head capsule and two brown abdomen appendages - 4 larval stages - can overwinter as larva 	<ul style="list-style-type: none"> - up to 2 mm - light brown - pupation occurs near the substrate in a cocoon 	<ul style="list-style-type: none"> - up to 2 mm - reddish brown - very flat - on the neck plate thin line parallel to the margin - do not fly under 21°C - cannot climb glass walls

Damage: Pitting on cereal grains; larvae and adults feed on germ and endosperm

Prevention: Thorough cleaning and cleanliness in grain stores, cargo ships and warehouses; short storage times; store cool, tight, dry

Early detection: Beetle sieve, insect probe traps (with or without attractants/pheromone lures) placed on grain surface

Control: Use of authorized pesticides (see www.bvl.bund.de : Database and pesticide directory, Part 5, stored product protection), cleaning, heat treatment (rooms), grain drying or freezing, percussion (entoleter mills).