Sitophilus granarius (Linnaeus) (Granary weevil)

Fam. Curculionidae

General information: Worldwide primary pest; infestation causes heat and moisture in stored goods which lead to formation of mould and mycotoxins; cold tolerant - infestation already at temperatures of 15° C, but development is prolonged

Infested products: Whole cereal grains, pasta products

Related species: S. oryzae, S. zeamais

Total development: 55 days at 20 °C temperature / 65 - 70 % relative humidity

Egg	Larva	Pupa	Adult (weevil)
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~ 10 days	~ 30 days	~ 19 days	Up to 2.5 years
 0.6 x 0.3 mm in size shiny white oval 200 to 300 eggs per female Females lay eggs into grain kernels 	 up to 3.5 mm long whitish brownish head capsule wrinkled surface eyeless and legless antenna lives in the grain 	 pupation occurs inside the grain whitish proboscis, wings and legs already visible 	 2.5 to 5 mm long uniformly dark brown to dark elongated snout, feeler knelt rough points in rows on chest and abdomen coalesced elytra hatches from the grain unable to fly

Damage:Characteristic feeding damage to grain by erosion of meal body (endosperm) up
to total destruction; round exit holes formed by emerging adults, further
damage by secondary contamination with fungi (risk of mycotoxin formation),
mites, bacteriaPrevention:Pest-tight storage; cooling T < 15 °C</td>Early detection:Cup trap set in the top of a grain cone on the cereal surface; lancing traps,
dome trap; acoustically; float test (infested grains swim up)Control:Sieving, bouncing; heat treatment in empty rooms (warehouses, mills,
bakeries); deep freezing, biological antagonists; use of authorized plant
protection pesticides (see database: www.bvl.bund.de)