

Khapra beetle: *Trogoderma granarium*



Characteristics:

The adult Khapra beetle is oval shaped and light brown. It can range in size from 1.6 mm to 3.0 mm long. The body is covered in fine dense hairs. The Khapra beetle is distinguished from other *Trogoderma* species by its lack of markings on the elytra. The adult is short lived. The mature larva is golden or reddish-brown in colour. It is approximately 6 mm in length and has a tail made up of a number of hairs extending from the last abdominal segment

Diet:

The Khapra beetle infests various stored grains and stored products such as oats, rye, corn, dried milk, fishmeal, nuts, seeds and cereal products. It is a generalist feeder and does not create any distinctive damage. Damage by this insect is mostly caused when the larvae feed. Signs of infestation are cast larval skins in and around infested food stuffs and dust-like debris

Biology:

It is a major pest of cereals in hot and dry conditions. Khapra beetle populations can increase rapidly under optimal conditions. In adverse conditions this insect can enter larval diapause and survive in this state with limited food for several years. The adult is not known to fly. Spread of this pest is mostly through commercial trade. Breeding conditions are temperatures between 30°C and 40°C. The female begins laying eggs at temperatures of 40°C. On average, the female lays 50 to 90 eggs. She lays the eggs loosely on the food source.

The optimal temperature for development is 35°C. The lifecycle is complete in 26 to 220 days depending on temperatures. The Khapra beetle thrives in dry conditions. When temperatures are lower and humidity higher, some larvae will enter diapause until conditions are favorable for development.