

The female Saw-toothed grain beetle lays up to 400 eggs, either singly or in small batches, at a rate of 6-10 per day. These are laid in, or adjacent to, a suitable food supply and at a temperature of 20-23°C hatch in 8-17 days to give flattened larvae about 0.9mm long. They are yellowish-white in colour, with brown flecks and a brown head. Typical of coleopterous larvae, they have a well-developed head, biting mouthparts and 3 pairs of legs on the thoracic segments. The larvae are active and feed on damaged grains, so they can be regarded as secondary pests of grain. The larval stage lasts 47 weeks during which the larvae go through 2-5 moults, attaining a length of 3mm. They then construct a cell of food particles and other debris in which to pupate, emerging after 1-3 weeks as adults.

On emergence the adult beetles live for 6-10 months, breeding within a temperature range of 17.5-40°C. At 20 degC the full life-cycle is completed in 12-15 weeks whilst at 32-35°C it takes only 20 days.

Saw-toothed grain beetles are potentially important pests of farm-stored grain. They also infest cereal products, dried fruit, dried meats, oilseeds, nuts, rice and even drugs.

In grain, the mere presence of insects may result in its rejection. The germ may be damaged and when infestations become heavy they cause the grain to heat. This in turn leads to caking, moulding and even sprouting. Both the quality and weight of the grain may be reduced. Mailing barley may be rejected because of poor germination, whilst milling wheat is adversely affected by tainting and discoloration.

The presence of insects in other foodstuffs will render them unpalatable and cause their rejection. Merchant grain beetles mainly infest oilseeds and dried fruit whilst Foreign grain beetles attack cereal products and cocoa as well as these commodities.