

# Insects commonly found in grains, oilseeds, legume seeds and their products

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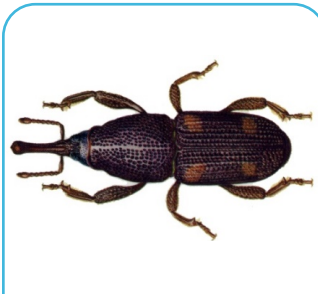
In the industry there is a misconception that a consignment can be rejected if it contains any living insect. This is, however, not true. The key to understanding the standards for a consignment of grain, oilseeds, legume seeds and their product lies in the definitions in the grading regulations of that specific commodity.

'Insect' is defined as any live grain insect that is injurious to stored grain, irrespective of the stage of development. The insects that are commonly found in grain and grain handling facilities that are injurious to stored grain, are divided into two groups (note that this list is by no means complete or published in any Government Gazette).

## Group 1: The non-adult stage develops inside a single grain kernel, and most of them can infest grain on the field due to their ability to fly.



Granary weevil  
*Sitophilus granarius*



Rice weevil  
*Sitophilus oryzae*



Maize weevil  
*Sitophilus zeamais*



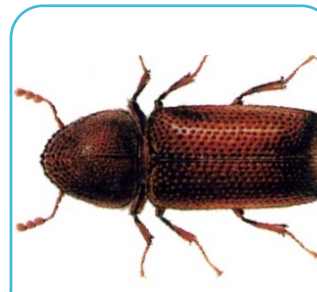
Common bean weevil  
*Acanthoscelides obtectus*



Cow pea weevil  
*Callosobruchus chinensis*



Lesser grain borer  
*Rhyzopertha dominica*



Larger grain borer  
*Prostephanus truncatus*



Angoumois grain moth  
*Plodia interpunctella*

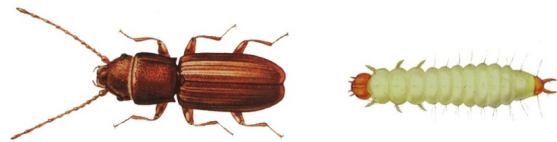
## Group 2: All stages develop freely among the grain or product.



Rust-red grain beetle and larva  
*Tribolium castaneum*



Confused flour beetle and larva  
*Tribolium confusum*



Flat grain beetle and larva  
*Cryptolestes pusillus*



Confused flour beetle and larva  
*Tribolium confusum*



Saw-toothed grain beetle and larva  
*Oryzaephilus surinamensis*



Grain lice  
*Psocids*



Khapra beetle and warehouse beetle  
*Trogoderma Granarium/variable*



Indian meal moth and larva  
*Plodia interpunctella*



Tropical warehouse moth and larva  
*Ephestia cautella*



Foreign grain beetle  
*Ahasverus advena*

### Insects not injurious to stored grain

Insects that are commonly found in grain, but are not injurious to stored grain, mainly feed on fungus and decaying plant material. These insects include various species in the genera *Carpophilus* such as the dried fruit beetle and the corn sap beetle, as well as the foreign grain beetle (*Ahasverus Advena*).

These insects are thriving due the heavy rain and damp conditions, as well as high humidity. No control measure in the grain producing areas is in place to control the numbers of these insects, as they are not injurious to stored grain.

*Carpophilus* spp. are excellent fliers. The female will also lay up to 1 000 eggs over her lifespan of twelve days when the temperature is optimal (32°C) and humidity is high.

### In conclusion

The rejection of a consignment due to any living insect that is present in that consignment, especially the dried fruit beetle or the foreign grain beetle, must be done in accordance with the regulation that clearly stipulates the insect must be injurious to stored grain. <sup>a</sup>



Dried fruit beetle  
*Carpophilus hemipterus*

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