BARLEY 3: PESTS

Evidence of insects or mites indicates poor storage and possible local hot spots.

To check for insects, the whole of a laboratory sample should be visibly inspected and sieved (typically using a 2mm mesh) and the grain passing through the mesh examined. This is especially important for grain going into storage.

For pest identification consult HGCA's *The grain storage guide*, second edition or go to:

www.hgca.com/research/gsap/2nd%20edition/pest%20identification.pdf

Insect damage

This example shows weevil damage. Eggs are laid within the grain and the endosperm eaten by the larvae.

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Severe infestations (as this example) are unacceptable to processors.

Rodent droppings

Rodents directly damage grain and carry infection.

Rodents urinate on grain posing a food safety risk. Contaminated grain is unacceptable.

DAMAGE FROM DISEASES

Mouldy grains

May result from adverse growing, harvest or storage conditions. Quality may be impaired.

Dullness may be due to spores or moulds which are unacceptable to all users due to the risk of mycotoxin forming.

Spores also present possible health hazards and must not be inhaled.

Fusarium

Pink moulds may indicate *Fusarium spp* infection that may lead to the formation of mycotoxins. Legislation normally controls levels of mycotoxins.

May cause gushing of bottled beers.

Ergot

The fruiting body of the fungus *Claviceps purpurea* affects grasses as well as rye, wheat and barley.

The inside of an ergot is grey/white, which distinguishes it from rodent droppings.

Ergot is toxic to both man and animals and so is unnacceptable to any processor.