

BARLEY I: PHYSICAL DAMAGE

Broken grains

Exposed endosperm, usually due to aggressive handling, provides potential sites for mould infections.

Can cause processing problems. These include excessive water uptake and mushy steep with starch leaching into steep water.



Splitting

Cracks through outer grain tissues may arise from excessive expansion or mechanical weakness. Splits often occur along the ventral crease, but also the side (lateral) and back (dorsal). Exposed endosperm is susceptible to mould attack.

Processing problems include excessive water uptake and mushy steep with starch leaching into steep water.



Burnt grains/heat damage

Heat damage arises from localised 'hot spots' or excessive temperatures during drying.

Grains can range in colour from bronze to dark brown (charred).

Over-dried grains are unlikely to germinate and may affect beer or malt flavour.



Skinning

A separation and loss of lemma and palea (husk). Causes include developmental factors, weather conditions, rough harvest and post harvest handling. May lead to filtration problems due to loss of husk and hence malt production efficiency is likely to be reduced. Dust problems during handling may arise. More prevalent in spring varieties.



Gape

A gap between husk tissues (lemma and palea) due to poor development and/or excessive expansion. Endosperm remains intact. Gape – a function of variety and environment – is not necessarily a defect unless associated with lateral splitting.



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