

# PRINCIPAL TYPES OF WHEAT DAMAGE

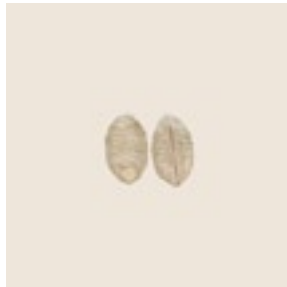
Wheat is considered damaged for inspection purposes only when the damage is distinctly apparent and of such character as to be recognized as damaged for commercial purposes.



W-1.0 Black Tip Fungus



W-2.0 Scab Damage



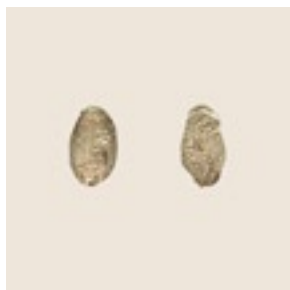
W-3.0 Frost (Blistered)



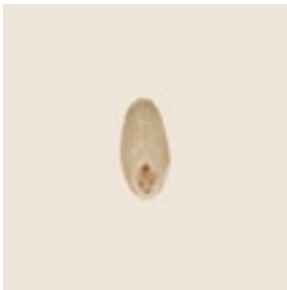
W-3.1 Frost (Candied)



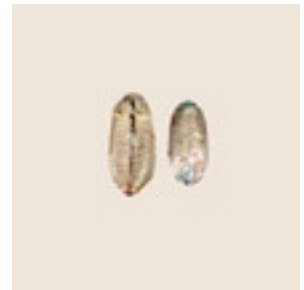
W-3.2 Frost  
(Black or Brown)



W-3.3 Frost (Flaked)



W-4.0 Germ Damage



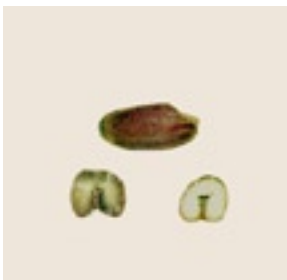
W-4.1 Mold Damage



W-5.0 Green Damage  
(Immature)



W-6.0 Heat Damage  
(Durum)



W-6.1 Heat Damage  
(Other Than Durum)



W-7.0 Other Damage



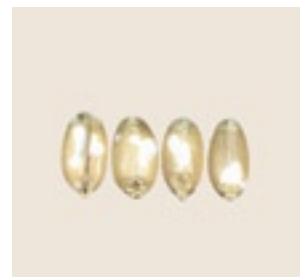
W-8.0 Sprout Damage



W-8.1 A-Insect Chewed  
(not damage) B- Sprout  
Sockets (damaged)



W-9.0 Insect Bored



W-9.1 Insect Chewed  
(not damage)

## Wheat Damage Definitions

A kernel of wheat is considered damaged for inspection and grading purposes when the damage is distinctly apparent and of such character as to be recognized as damaged for commercial purposes.

**Black Tip Fungus.** Kernels affected by black tip fungus to the extent that the fungus growth is on the germ and extends into the crease of the kernel. (Reference: Interpretive Line Slide No. W-1.0.)

**Blight or Scab.** Kernels with a dull, lifeless, and chalky appearance resulting from disease. The germ and crease may also have a moldy appearance. (Reference: Interpretive Line Slide No. W-2.0.)

**Frost-Damaged Kernels (Blistered).** Kernels with distinct frost blisters extending around the back of the kernel and into the crease. (Reference: Interpretive Line Slide No. W-3.0.)

**Frost-Damaged Kernels (Candied).** Kernels that have a distinctly wax-like or candied appearance. Frost-damaged (candied) kernels can be greenish, greenish yellow, brownish, or blackish in color. (Reference: Interpretive Line Slide No. W-3.1.)

**Frost-Damaged Kernels (Discolored Black or Brown).** Kernels which are discolored black or brown and/or have a bleached or blistered appearance with dark lines showing through both sides. (Reference: Interpretive Line Slide No. W-3.2.)

**Frost-Damaged Kernels (Flaked).** Kernels that have a slightly flaked-off bran coat due to frost. Do not confuse flaked-by-frost with kernels which have had the bran coat rubbed off due to handling. (Reference: Interpretive Line Slide No. W-3.3.)

**Germ-Damaged Kernels (Sick).** Kernels damaged as a result of heat but are not materially discolored. (Reference: Interpretive Line Slide No. W-4.0)

**Germ-Damaged Kernels (Mold).** Kernels which have mold in the germ. (Reference: Interpretive Line Slide No. W-4.1.)

**Green Damage (Immature).** Kernels which are intense green (immature) and without any yellow appearance. (Reference: Interpretive Line Slide No. W-5.0.)

**Heat-Damaged Kernels.** Kernels materially discolored and damaged by heat. It is necessary, in most cases, to cut the kernels and make a cross-section analysis to determine if the color is reddish-brown, mahogany, or creamy. (Reference: Interpretive Line Slide Nos. W-6.0 for heat-damaged (Durum) and W-6.1 for heat-damaged (other than Durum).)

**Other Damage.** Kernels with cracks, breaks, or chews and which contain mold or fungus. (Reference: Interpretive Line Slide No. W-7.0.)

**Sprout-Damaged Kernels.** Kernels with the germ end broken open from germination exhibiting sprout or from which the sprouts have been broken off. (Reference: Interpretive Line Slide Nos. W-8.0 and W-8.1.)

**Insect-Bored Kernels.** Kernels that have been bored or tunneled by insects. (Reference: Interpretive Line Slide No. W-9.0.)