

PRINCIPAL TYPES OF CORN DAMAGE

A kernel of corn 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.



C-1.0 Blue-Eye Mold Damage (Fungus)



C-2.0 Cob Rot Damage



C-3.0 Drier Damage



C-4.0 Germ Damage



C-5.0 Heat Damage (drier)



C-5.2 Heat Damage (Yellow Corn)



C-6.0 Insect Damage



C-7.0 Mold Damage



C-8.0 Silk Cut



C-9.0 Sprout Damage



C-10.0 Surface Mold Damage (blight)



C-11.0 Surface Mold Damage

Corn Damage Definitions

A kernel of corn 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.

Blue-eye Mold. A germ infected with blue-eye mold, regardless of amount. If the mold is distinct, it is not necessary to open or scrape the kernel. Otherwise, lift the germ cover carefully to avoid destroying the evidence of mold. (Reference: Interpretive Line Slide No. C-1.0.)

Cob Rot. Cob rot is caused by a fungus that attacks weakened plants. It is detected by the presence of a distinct discoloration or rotting. Opening the kernel is not required to detect cob rot but may be necessary to determine the extent of other types of damage. (Reference: Interpretive Line Slide No. C-2.0.)

Drier-Damaged Kernels. Kernels and pieces of kernels which have a discolored, wrinkled, and blistered appearance; or which are puffed or swollen and slightly discolored and which often have damaged germs; or whose seed coats are peeling off or have already peeled off; or which have a fractured or checked appearance resulting from external heat caused by artificial drying methods. Do not confuse drier damage with heat damage (drier). (Reference: Interpretive Line Slide No. C-3.0.)

Germ-Damaged Kernels. Kernels and pieces of kernels damaged by heat but not materially discolored. (Reference: Interpretive Line Slide No. C-4.0.) In most cases, the germ covering will have to be removed, exposing the area around the plumule. The discoloration must extend into the meat of the germ to be considered damaged.

Heat-Damaged Kernels (drier). Kernels and pieces of kernels which are puffed or swollen and materially discolored by external heat caused by artificial drying methods. (Reference: Interpretive Line Slide No. C-5.0.)

Heat-Damaged Kernels. Kernels and pieces of kernels which are materially discolored by heat, with the dark discoloration extending out of the germ through the sides and into the back of the kernel. (Reference: Interpretive Line Slide No. C-5.2.)

Insect-Bored Kernels. Kernels and pieces of kernels with obvious insect-bored holes or which have tunneling, insect webbing, or insect refuse. Do not consider kernels partially eaten but entirely free from refuse, webbing, insects, or other forms of damage as damaged. (Reference: Interpretive Line Slide No. C-6.0.) Do not cut open the kernel when making this determination. If the determination for insect-bored damage cannot be made without cutting the kernel, the kernel is considered damaged.

Mold-Damaged Kernels. Kernels and pieces of kernels infected with mold on exposed endosperm. When a kernel of corn has been broken exposing the starch, it becomes susceptible to mold. Check broken pieces carefully for mold. (Reference: Interpretive Line Slide No. C-7.0.)

Silk-Cut Kernels. Kernels and pieces of kernels with mold in silk cuts. Kernels with clean silk cuts and are otherwise sound are not considered as being damaged. (Reference: Interpretive Line Slide No. C-8.0.)

Sprout-Damaged Kernels. Sprouted kernels or those showing evidence of a sprout. (Reference: Interpretive Line Slide No. C-9.0.)

Surface Mold (blight). Kernels and pieces of kernels which have mold caused by corn leaf blight on them which appears to be only on the surface but actually penetrates the seed coats. (Reference: Interpretive Line Slide No. C-10.0.)

Surface Mold. Kernels and pieces of kernels which contain surface mold in any area or combination of areas equal to or greater than shown on the interpretive line slide. (Reference: Interpretive Line Slide No. C-11.0)