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## **STORING DROUGHT DAMAGED CORN TIPS**

Much of the early harvest corn is being taken to regular delivery points this fall, but if you are storing drought damaged corn, the lower yields and test weights demand extra attention and management.

Given the potential for molds and mycotoxins from this year's crop, be sure to extend some extra care when loading the bins this fall and cleaning out bins next summer. Always wear respiratory protection or a mask. Grain mold and dust can trigger Farmer's Lung and it is not worth the risk to never wear a mask. The paper filters with the button in the center allow you to exhale through a diaphragm in the center button and the mask stays sealed tighter on your face.

Many species of fungi cause mold in grain. Most become associated with the grain in the field, but may continue to grow and reproduce if grain is stored under the wrong moisture and temperature conditions in the bin. If there is a chance molds that produce mycotoxins may have contaminated the bin, dry the grain to 14% moisture. If it will be stored for over a month, dry it down to 13% and do not store the grain next summer, move it before then if test weight is below 54.

If the corn is found to have any level of mycotoxin contamination, partially fill the bin — one-fourth full is a good place to start — so the fan will produce higher airflow rates (cfm/bu) and dry the grain quicker. If equipped, run a couple rounds with the stirring system, than run a few rounds each time you add 4 or more feet of corn into the bin to equalize the moisture content and prevent over-drying the bottom of the bin. However, don't over stir as it can cause cracks in the seed coat that can allow fungal organisms to enter the kernels.

In addition to getting the corn dry, you need to cool the grain whenever air temperature allows. This will slow the growth rate of the fungal organisms. Run the fans at every opportunity when the air temperature is 10 degrees below the grain temperature in the bin. This fall continue running fans until the grain is 30° F but there is no need to get it colder than 30° F.

Test weight is a good indicator of corn storability. Corn that is below 54 pounds per bushel after it is dry should not be stored into warm weather next summer. It is more important that the corn be below 15 percent moisture and that regular air fronts keep the grain uniform in moisture. Cut the expected storage life in half for a given moisture level. Lighter corn also will break more in handling.

Low test weight corn should not be put in temporary storages, outdoor piles, or bins without full floor aeration systems. It is also not wise to mix corn of different crop years in the same storage bin; the mix is less stable than each year's crop stored separately. Remove the center core by taking several loads out after filling the bin.

Check your grain at least every two weeks, with some way to take grain temperatures. If a slow rise is noted, aerate and or sell the grain. Hot spots can quickly involve grade changes for the entire bin.

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