

Testing Corn For Presence Of Molds

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Questions about mold development in corn continue. Mold can reduce corn test weight, quality of the grain, nutrient content, and increase the risk of mycotoxin formation. Mycotoxins are chemicals produced by fungi or mold under certain conditions and they may be toxic to livestock or humans so detection is very important.

In last week's column, it was noted that in Illinois grain can be tested for mycotoxins at the Department of Agriculture's Centralia Animal Disease Laboratory; www.agr.state.il.us/AnimalHW/labs/centralialab.html The laboratory is located at 9732 Shattuc Road, Centralia, IL 62801, phone 618-532-6701.

It is important to follow general guidelines for collecting and mailing a sample to the Department of Agriculture's laboratory. Due to variation of mold field-to-field and within a field, getting a representative sample for laboratory diagnosis is critical.

The Department of Agriculture suggests using a cup or similar container to periodically sample the grain stream from the combine or grain cart. Continue sampling until one accumulates 15 pounds of shell corn. Mix this amount well and remove a five pound subsample that will be sent to the laboratory.

Mail the five pound sample the same day as it is collected, and early in the week to prevent the sample from sitting over the weekend. Plastic, gallon sized zip-lock bags work well unless the sample is very wet, and in which case paper or cloth packaging should be used.

Contact the above-mentioned laboratory for costs, time required for analysis, and other information.

Mycotoxin concentrations are almost higher in fines and screenings so combines should be adjusted to reduce the amount of fines and small, shriveled or broken kernels. Drying corn grain to 15 percent moisture shortly after harvest and cooling it below 50 degrees F will prevent further mold growth. Δ