

Partnership Perk



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2006 Aflatoxin talking points – in case you are asked

Aflatoxin is a contaminant of corn grain that occasionally is a problem in Iowa. Aflatoxin is most prevalent in drought-stressed corn and when August night temperatures are warm. East central and southeast Iowa had locally severe aflatoxin issues in 2005. Although favorable conditions did occur in scattered Iowa locations in 2006, massive aflatoxin problems are not expected this year. That said, questions are still being asked to agronomists. Here are some discussion points:

- 1) Aflatoxin is a chemical produced by the fungi *Aspergillus flavus* and *A. parasitica* that is highly toxic to livestock. These fungi grow as ear rots that develop characteristic patches of yellow-green to gray-green spores on ear surfaces and are often associated with insect damage. *Aspergillus* fungi are often present, yet no appreciable toxin is produced. Therefore, testing for the toxin, not the fungus, is important.
- 2) If crop insurance claims for aflatoxin contamination are planned, fields must be either sampled PRIOR to harvest or representative check strips must be left for inspection by an approved adjuster. Grain samples must be sent to specific, approved labs for aflatoxin tests. If check strips are left, they must be done in an appropriate pattern.
- 3) Improperly stored grain (with marginally high moisture content) with the *Aspergillus* fungus present can continue to develop aflatoxin. Therefore, *Aspergillus*-contaminated grain entering storage must be cleaned on binning, and dried to appropriate moisture (~13-14%) and cooled (<45F) as quickly as possible to limit fungal growth, and maintained at these conditions during storage.
- 4) Information sources:
 - to find approved labs for aflatoxin tests:
http://www.gipsa.usda.gov/GIPSA/documents/GIPSA_Documents/map-oa.pdf
 - For information on required check strip patterns (go to page 107):
http://www.rma.usda.gov/FTP/Publications/directives/25000/PDF/00_25010-3.pdf

Long Story Short: Aflatoxin and other mycotoxins should not be a significant problem in Iowa in 2006, but localized contamination may be found.

For more information: The ISU publication *Aflatoxins in Corn*, Pm-1800 is available online at <http://www.extension.iastate.edu/Publications/PM1800.pdf>.

Source:

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