

Molds are a concern because they can reduce grain quality and storability. Under some conditions, certain molds can produce mycotoxins, substances that can be harmful to livestock and humans.

Managing Moldy Grain



Learn More

Purdue Extension: Managing Moldy Corn

www.purdue.edu/cornmold

Financial support for printing and distributing this material was provided by the Indiana Corn Marketing Council.



Contributors:

Bruce Erickson, Extension Specialist,
Cropping Systems Management

Bill Field, Extension Safety Specialist

Ron Lemenager, Extension Beef Specialist

Matt Roberts, Extension Grain Quality
Specialist

Richard Stroshine, Professor of Agricultural
and Biological Engineering

PURDUE AGRICULTURE

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran.

Purdue University is an Affirmative Action institution.

This material may be available in alternative formats.

1-888-EXT-INFO

www.the-education-store.com



Managing Moldy Grain

Mold can be produced in grain during storage or processing, but they often come from fungal infections that occurred before harvest. With the widespread concerns about molds and mycotoxins across much of the Corn Belt in 2009, it's important for storage and handling facilities to avoid potential carry-over contamination of this year's crop.

Prevent Mold

The best way to avoid mycotoxin contamination is to keep mold from growing in grain.

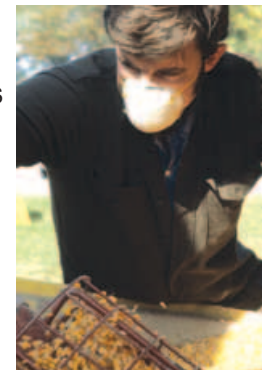
- **Clean equipment inside and out.** Last year's moldy or insect-infested kernels can promote mold or insects in this year's grain. Remember to always thoroughly clean grain dryers, bins, trucks, and other grain-handling equipment before harvest.
- **Dry grain thoroughly.** Uniformly dry your corn to a safe storage moisture. If mycotoxins are a concern, storage moisture should be 0.5 to 1 percent lower than normal.
- **Remove fine material.** Fines interfere with drying and aeration, and often contain higher toxin levels than the grain.
- **Cool stored grain as outside temperatures drop.** Fungal activity is greatly reduced between 35° and 40°F.



Protect Yourself

Take precautions when handling grain, especially grain that may be infected with mold.

- **Wear a respirator capable of filtering fine dust particles.** Even a little spoiled grain can produce millions of spores that can irritate lungs and cause severe reactions that require hospitalization. Respirators are important for all personnel including truckers, scale operators, and those supervising elevator dumping operations.
- **Change your clothes after handling grain.** Don't expose others, including your family, to spores that can stick to clothing. Consider using disposable overalls when handling moldy corn to minimize exposure.
- **See a doctor if you get sick after handling grain and make your physician aware of your activities.**
- **Handle out-of-condition grain carefully.** Be alert for blocked flow, cavities, crusting, and grain avalanches. Out-of-condition corn is the leading cause of suffocation in grain bins.



PURDUE EXTENSION

Monitor Feed

While there are recommended thresholds for mycotoxins, they vary greatly by livestock species, gender, age, stage of production, duration of exposure, stress levels, and immune status.

If mycotoxins are suspected, have the feed tested at an approved laboratory. Livestock producers also need to monitor animal performance. Look for these warning signs of mycotoxin problems in livestock:

1. Reduced feed intake, or feed refusal
2. Change in fecal consistency
3. Unthriftiness, lethargy
4. Increased disease-like symptoms
5. Failure to conceive or abortion

