

# Pre-Plant Decisions Critical In Managing Fusarium

LEXINGTON, KY.

**F**usarium head blight, also known as “head scab,” was widespread in Kentucky winter wheat fields during the past growing season. University of Kentucky College of Agriculture specialists encourage growers to make pre-planting decisions to ensure good stand establishment this fall and to lessen the risk of Fusarium head blight being a problem next spring.

Fusarium head blight can affect seed quality by lowering the germination percentage, said Chad Lee, UK grains crop specialist. Growers need to have their seeds’ germination tested before fall planting to ensure good stand establishment.

UK Regulatory Services offers seed testing services. Growers can send samples directly to UK or submit them through their county extension agricultural and natural resources agent.

“It is important for producers to test the germination percentage of their seed before planting every year and especially in years like this one where the disease is widespread,” said Cindy Finneseth, UK seed testing coordinator. “Some may also want to have a fungicide-treated germination test done.” Fungicide seed treatments may improve germination.

Samples should include about 2 pounds of seed and represent the entire seed lot. Producers should store seed in a container or bag that is not easily ripped open. The test generally takes about two weeks to complete.

“If the test shows poor germination of seeds, one of the easiest things growers can do is clean the seed lot again to remove scabby seed,” Finneseth said.

Seed fungicide treatments are fairly inexpensive considering the benefits they provide, said Don Hershman, UK extension plant pathologist. Fortunately, most of Kentucky’s wheat seed, with the exception of saved seed, is already

treated with fungicides, which helps not only with disease prevention but with stand establishment, he said.

Standard and treated germination tests at UK Regulatory Services cost \$7 each. If growers want both tests, they should notify the lab when they submit samples. Kentucky residents get one free standard germination test a year, but they must request it. Individuals should send a note along with their samples requesting a free test. Forms to submit samples are available online at <http://www.uky.edu/Ag/RegulatoryServices/>.

With Kentucky’s crop rotation system of wheat following corn, the state’s wheat crop is at risk every year for developing Fusarium head blight, but weather conditions during flowering determine whether the disease will develop and damage the crop, said Dave Van Sanford, UK wheat breeder. Disease development favors wet conditions; if the conditions are dry during flowering, Fusarium head blight will likely not be a factor.

To lower the risks of Fusarium head blight development, growers should consider planting different varieties with at least moderate resistance to the disease and varieties with varying flowering dates. They should avoid planting varieties that are very susceptible to the disease.

“If you plant multiple varieties that flower at different times, you’ll be spreading out your risk, not only for Fusarium Head Blight but for other diseases,” Van Sanford said.

In addition to lowering disease risks, planting varieties with different flowering dates spreads out the harvest and minimizes the potential for crop damage from a spring freeze.

Since Kentucky winter wheat is susceptible to many diseases each year, growers should pay attention to the disease resistance profiles of the varieties and know the complimentary disease management program, Van Sanford said.     Δ