Pre-Planting Decisions Critical To A Successful Wheat Growing Season

LEXINGTON, KY.

Wheat prices around $7 a bushel are enticing new producers, and those who haven't grown wheat in a few years, to enter the market. In addition, some current producers are planning on increasing their acreage. Producers need to carefully make pre-planting decisions to ensure a successful growing season, said specialists with the Wheat Science Group in the University of Kentucky College of Agriculture.

"We want to make sure we position ourselves to make high yields and high quality wheat," said Lloyd Murdock, UK extension soils specialist.

The high demand for wheat seed is causing supply shortages. Some producers who haven't purchased seed yet are considering planting saved seed. When doing this, it's important for producers to know if the seed they plan to use came from fields that had symptoms of Fusarium head blight, also known as "head scab." Seed harvested from fields with a moderate occurrence of Fusarium head blight often carry the disease-causing fungus Fusarium graminearium, said Don Hershman, UK extension plant pathologist. While the fungus' presence on the seeds will not cause Fusarium head blight to develop or be widespread in fields next spring, using these seeds can result in poor germination and stands. Producers who have questionable seed can have its germination percentage tested for a minimal fee at the UK Seed Testing Laboratory.

Like seeds, some varieties are also limited in supply. Since Fusarium head blight can devastate a crop, producers should try and select a variety with some resistance to the disease. Those who can't should be prepared to apply a fungicide treatment next spring if conditions are favorable for the disease. Producers still making variety decisions may want to consult the results from the latest UK wheat variety trials. The trials include grain yield, test weights, disease ratings and forage and straw yield potential.

Others may want to reduce seeding rates to stretch their seed. Seed rates are typically 30 to 35 seeds per square foot. But under the right conditions, producers may be able to reduce their seeding rates some and still get good stand establishment and yield. Normally a final stand of 30 to 35 plants per square foot allows producers to obtain maximum yield, but stands as low as 20 plants per square foot may also yield well in the right conditions.

"Getting a successful stand from reduced seeding rates requires several things, including timely seeding, an accurate seeding rate, correct seed depth, adequate soil moisture and no seedling diseases," said Chad Lee, UK grain crops specialist.

In Kentucky, wheat is usually planted between Oct. 10 and 30. For wheat planted after Oct. 30, seeding rates should be increased rather than reduced.

Some producers are considering using a 15-inch-row soybean planter to plant wheat rather than purchasing or contracting a no-till drill which produces 7.5-inch rows. During the past two growing seasons, UK grain crops specialists conducted research trials in Princeton and Lexington to determine whether there was any yield difference between the two row widths. In two of the four trials, the 15-inch rows yielded about 8.5 percent less than the 7.5 inch rows. With prices at $7 a bushel, some producers may want to consider contracting with someone who has a drill rather than trying to convert their soybean planter.

Getting optimum seeding rates can help producers obtain maximum yield and save on input costs. Producers can get these rates by making sure their drill is calibrated for each variety and field conditions. While calibrating drills, producers should collect seed from three to five drop tubes across the length of the drill to obtain an accurate value of average seeding rate, said Sam McNeill, UK agricultural engineer. He developed a spreadsheet to help famers calibrate drills, determine the amount of seed needed and easily keep yearly records. It is accessible on the UK Department of Biosystems and Agricultural Engineering website at http://www.bae.uky.edu/ext/Grain_Storage/calculators.htm.

Additional planting information is available in the August 2010 issue of UK's Wheat Science News, UK publication ID-125: Wheat Management in Kentucky or at the local office of the UK Cooperative Extension Service. Producers may also want to plan to attend the UK Wheat Science Group's 2011 Winter Wheat Meeting where specialists will discuss these topics and others. The meeting is set for Jan. 11 at the Christian County Cooperative Extension office. Δ