Fall Growth Important For Successful Wheat Production

SPRINGFIELD, MO.

ood fall growth is important for a successful wheat production system according to Jay Chism, agronomy specialist with University of Missouri Extension in Barton County.

"Management factors that affect fall growth are the planting date and seed placement. Only minimal fertility is needed to promote good fall growth," said Chism.

A small application of nitrogen in the fall may be necessary in some fields.

"Normally, 20 pounds of nitrogen per acre in the fall will support good growth," said Chism.

Tiller development, while strongly influenced by nitrogen availability, is normally supplied by this minimal fall application of nitrogen.

Ideally, the wheat crop should develop two to three strong tillers per plant during the fall. Wheat tiller development also occurs when wheat begins growing again in the spring.

In some situations, where planting may have been delayed, cold fall weather or heavy rainfall, additional nitrogen may needed.

"Typically, nitrogen is applied around March 1 as the wheat crop begins spring growth," said Chism.

Based on research at MU, a good average nitrogen rate of about 90 to 100 pounds per acre provides optimum spring growth. Most of the studies were conducted on wheat that followed a soybean planting.

If wheat follows corn there is more variation in the amount of nitrogen that is needed. For wheat following corn, a tissue test can be used to diagnose whether a high rate or low rate of nitrogen is needed.

"Input costs continue to rise," said Chism. "It continues to be critical to monitor fertility to maximize production." $\ \Delta$