The Key to High Yields Lies In The Basics

American wheat expert gives IFAO conference attendees ways to hit high British yields.

By: Stefanie Nagelschmitz

To conquer the high wheat yields of Europe, North American growers don't need to look further than the basics according to a world expert. England is known for high wheat yields and Phil Needham works to give North Americans the tools to mimic them.

An Englishman himself, Needham now works as a Kentucky crop expert. He spoke at the Innovative Farmers Association of Ontario (IFAO) conference on February 18th about achieving high wheat yields. He says the key to high yields lies in the number of heads per square yard, spikelets per head, grains per spikelet, grain weight and good planting.

"There's not one thing to improve. There are 10 to 12 things that amount to change," says Needham. "These are huge components in yield that are commonly forgotten."

Europe and England specifically are known for high producing wheat which can yield 212 bushels per acre or eight tones per hectare. In his career he's tried growing English varieties in North America but found that there are too many environmental differences and so varieties were not productive. To Needham, genetics are not the key but rather production practices.

Yields can benefit from tightening practices at all stages of wheat growth. Focusing on uniform planting, even emergence and effective spraying are crucial. Spraying can improve canopy coverage as well as disease protection. The right nozzle and nozzle height will maximize chemical coverage leading to better yields, says Needham.

Needham's grower trips to Europe and own research show American farmers how to reach better wheat yields. Beginning with trips just for growers, he now invites media and University extension workers to see English wheat production firsthand. Needham's strategies and trips have brought real results to Kentucky wheat producers.

"In the past 15 years we've contributed to doubling the state yield," said Needham. "Wherever you go in the world, many of the principles remain."

Chasing high wheat yields by fine tuning production basics is cost effective – and it works. Better planting, spraying and keeping machinery in working condition can all help farmers reach high English wheat yields. Amazingly, minor adjustments like these can have major yield benefits.