Meadowlark District Extension News January 24, 2020

David G. Hallauer, District Extension Agent, Crops & Soils/Horticulture

Missouri Nitrogen Studies

Wayne Flanary is a Field Specialist in Agronomy with the University of Missouri. For the past 15 years, he's worked in NW Missouri, doing work out of their Graves-Chapple experiment field. A summary of some of that work in the area of corn nitrogen use sheds a lot of light on the variability we see with N applications.

One study compared average corn yields over 15 years at varying nitrogen rates. The first 60 pounds of N resulted in a 45-bushel yield increase. The next 60 resulted in another 27 bushels. The third 60 (180-pound rate) returned only another 13 bushels. In other words, there is a point of decreasing returns with nitrogen applications. Hitting that point of diminishing returns where that last unit of nitrogen still pays is an important part of making the corn budget work.

A second study showed the effects of nitrogen rate on corn yields over a 15-year period. While most years showed similar responses to rates, weather factors made other years quite variable. Variability differences were even greater degree with above average rainfall in spring.

As one of the most important yield inducing inputs to our corn crop, and a large part of the production budget, nitrogen management is often a focal point for growers from the time fertilizer is applied after harvest until the crop matures the following fall. It's why our annual Atchison County/Meadowlark Extension District crops school this year will focus on N management. We'll attempt to answer the question about what we can expect from fall applied N vs. spring applied vs. in-season while applying the principals of 4R Nutrient Management: Right Source + Right Rate + Right Time + Right Place. Watch next week for information on this program to be held on Tuesday, February 11th at the Knights of Columbus Hall in Nortonville. For details or if you want to RSVP (requested), e-mail me at dhallaue@ksu.edu.

Landscape Design

It snowed again this week. For folks itching for a little sun or warmer temperatures, it likely meant another day (or three...) stuck indoors.

Instead of fretting about the crummy weather, use the time to think over some landscape design ideas. Not sure where to start? K-State's Horticulture Department offers a number of useful landscaping publications with titles such as Residential Landscape Design, Naturalistic Landscaping and even Low-Maintenance Landscaping. Downloads are free at http://hnr.k-state.edu/extension/publications/landscaping.html or upon request from a District Extension Office. A list of recommended plants is available at http://hnr.k-state.edu/extension/info-center/recommended-plants/index.html .

Want more information on horticulture topics? The first of our quarterly horticulture workshops starts at 6:00 p.m. February 3rd at the Delaware Township Library in Valley Falls Workshops are free and open to the public. RSVP by January 31st to the Oskaloosa Office of the Meadowlark Extension District at (785) 863-2212 or by e-mail me: dhallaue@ksu.edu.