Kansas Corn Management Publication

Lots of University research gets done annually in Kansas, on sites ranging from experiment fields to on-farm collaborations. Much of that work is included in University publications and research journals, with some also boiled down to a single document.

In the case of corn, its MF3208 – Kansas Corn Management. The 2021 edition will likely arrive after the first of the year, but over the next two weeks, I’m sharing excerpts from last year’s publication for your reference. We’ll start with fertility management, and the importance of soil testing for nitrogen management.

It’s common knowledge that a soil test is a good tool for guiding fertilizer applications. Over/under application can result in multiple problems, from poor yields to environmental concerns. Most soil samples are pulled from a depth of zero to six inches (sampling depth may be split if stratification is suspected) for nutrients like pH/P/K. To best account for residual N in the soil, consider a zero to 24-inch sample depth, instead.

Nitrogen recommendations are strongly improved when a profile soil testing program is used. In fact, it might be the single most important thing a producer can do to reduce N fertilizer cost and increase nitrogen use efficiency in corn. It takes a more time and effort, but deep sampling should be considered on a field or two if fine tuning your N program is your desire.

Labs will account for profile N differently. Research at KSU suggests an N credit of 30 pounds per acre. It’s admittedly conservative – but can only be validated via a deep soil test.

For information on profile N testing, contact any of our District Offices or e-mail me at d hallaue@ksu.edu. Check out MF3208 at: https://bookstore.ksre.ksu.edu/pubs/MF3208.pdf.

Pine Tip Blight

If you read last week’s column, checked your trees, and it wasn’t natural needle drop, what else could it be? Tip Blight should be considered.

Pines in Kansas typically experience two fungal diseases on a regular basis: Dothistroma Needle Blight and Tip Blight. Both affect the newest needles on the outer portion of the tree, versus needle drop that affects interior needles. Dothistroma typically affects only a part of individual needles, with Tip Blight affecting the entire branch tip.

If you see brown tips with shortened needle growth, tip blight is the likely culprit. Because it’s a fungal pathogen, spring fungicide applications may help to a degree. The disease also has a canker phase. Trees that are repeatedly infected not only show a spread of the disease, but may also result in older tissue being affected, resulting in branch dieback. At that point, control can be very difficult.

Beyond fungicide options, keep trees healthy. Water when needed (evergreens take up water all winter...) and implement adequate weed control on young plantings.

For information on tip blight and other pine diseases, request L722 – “Pine Diseases in Kansas” from any of our District Offices or online:https://bookstore.ksre.ksu.edu/pubs/L722.pdf. For a video, see our three-part pine disease series on our Meadowlark Extension District Facebook page or on our website, https://www.meadowlark.k-state.edu/lawn-garden/ under “Informational Videos”.