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Starter Effects on Corn Yield

Corn growers put a lot of effort in to getting the right hybrid at the right population on the right farm. As the use of prescription planting practices increases, we've even fine-tuned where the population of a specific hybrid (or in some cases multiple hybrids) is changed in a field. With all that in mind, compromising that prescription doesn't make good economic sense.

Final population could be at risk; however, if you aren't managing your corn starter rates effectively. If you are applying starter fertilizer with the corn seed, you run an increased risk of seed injury when applying more than six to eight pounds per acre of N plus K in direct seed contact on 30-inch row spacing. Work at the NCK Experiment Field underscores that fact.

In the three year trial, varying rates of nitrogen plus potassium (from 10 to 65 pounds per acre) were applied in-furrow, in a two by two placement, dribbled on the surface, or applied in a band over the row. Even at the lowest rates (five pounds of N and five pounds of K), the in-furrow (172 bu/A) and row band (179 bu/A) applications yielded significantly different than the two by two (194 bu/A) and dribble band (190 bu/A) applications. The response was consistent at all fertilizer rates over the three year time period with in-furrow effects the highest. Part of the reason for the yield loss for the in-furrow treatments was due to stand loss. A 32,000 plant population stayed pretty consistently in the 31,000 plants per acre final stand range for the two by two and dribble band treatments, but dropped off significantly (25,000 plants/A at the ten pound rate and 23,000 plants/A at the 20 pound rate) for in-furrow application.

Bottom line: watch your in-furrow fertilizer rates! Pop up starters can be a great thing in our cool soil planting conditions, but do not make economic sense when final stands and yield are compromised. E-mail me for results if you are interested!

Iris Leaf Spot Control Starts Now

If you've fought iris leaf spot in the past, your control efforts start now!

Iris leaf spot is a fungal disease infecting leaves and other plant parts. It is favored by wet periods in spring when emerging leaves show small spots with red borders. As spots enlarge, they grow together, severely inhibiting plant vigor. Over time, this can kill the plant.

The disease overwinters in old leaves, so removal and destruction of dead leaves now will help with control. If last year's infection was small, that may be all you need to do. If plants were more heavily infected, make plans to apply a chlorothalonil or myclobutanil containing fungicide starting when leaves appear in the spring. Repeat sprays every seven to 10 days for four to six sprays. Iris leaves are waxy, so be sure to include a spreader-sticker in your spray to ensure good coverage. Always read and follow label directions.