

March 1, 2019

TWENTY FARMERS NEEDED FOR NEW ON-FARM RESEARCH PROJECT

The Nebraska On-Farm Research Network (NOFRN) is seeking 20 farmers to participate in a study of practices affecting soybean yield gaps in southeast and eastern Nebraska. When we talk about yield gaps it is the difference between current farm yield and potential yield as determined by climate, soil, and genetics. An analysis of survey responses from over 2,000 soybean producers indicated a 20%-30% yield gap for soybean. The analysis also revealed a number of agronomic practices that, for a given soil-climate context, could be fine-tuned to close the gap and improve profit from soybean production.

Based on the study, three practices have been identified as being important for improving yield and producer profit. These practices relate to planting date, seeding rate, and the use of foliar fungicides and insecticides.

The study is seeking 20 growers in eastern Nebraska to test "improved" practices versus "baseline" practices beginning this spring and again in 2020. One study will look at late planted soybean (after May 15) at 160K seeding rate with no foliar fungicide or insecticide treatment versus early planted soybeans (late April/early May) at 130K with foliar fungicide and insecticide treatment around the R3 stage (beginning of pod setting). Four replications are needed in the same field and plots need to be as wide as the widest equipment that is being used. Both baseline and improved treatments need to use the same soybean variety and the same seed treatment. (Both should have seed treatment). The area that is harvested for yield measurements should avoid sprayer tracks OR both the baseline and improved should have sprayer tracks.

Fields can be irrigated or non-irrigated. Preferably, fields should be no-till or reduced till though we are flexible on this requirement.

Laura Thompson, with the UNL Extension On-Farm Research network, can provide detailed analysis and report of the data from your farm, assist with specifics of plot layout and harvesting. I can help with flagging and GPS locating of strips and assist with collecting stand counts of each treatment along with providing a soil test and seed quality results from samples taken from the field. We hope to engage participating farmers in an on-farm network to share ideas on soybean BMPs and aggregate summary reports. Some compensation can be provided to grower participants.

Other studies are also available for the 2019 production season. One of those studies is lowering soybean seeding rates versus the traditional soybean seeding rate such as 120K vs 160K at planting time. We know 120K can produce optimum soybean yields at harvest time but the hypothesis is soybeans that are lower population can withstand damage from decates stem borers better and potentially yield more in years where stem borers are more of an issue with soybean lodging.

To participate in one of these studies or another project that you have in mind, contact Nebraska Educators and Nebraska On-Farm Research Co-coordinators Keith Glewen (402-624-8030, kglewen1@unl.edu) or Laura Thompson (402-245-2224, laura.thompson@unl.edu) or Randy Pryor (402-821-2151, rpryor1@unl.edu)

**Nebraska Soybean Management Field Day**

Of note, the Nebraska Soybean Management Field Day will be held this year near Plymouth with cooperator Ross Boeckner.

Cover Crops Conference at Mead

Dr. Ray Ward gave an excellent presentation on the challenges of farming near Western in Saline County this year and progress over time. It's recorded and can be viewed at:

<https://mediahub.unl.edu/channels/21972>

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