Foliar Boron for Improved Soybean Yield (22-705)

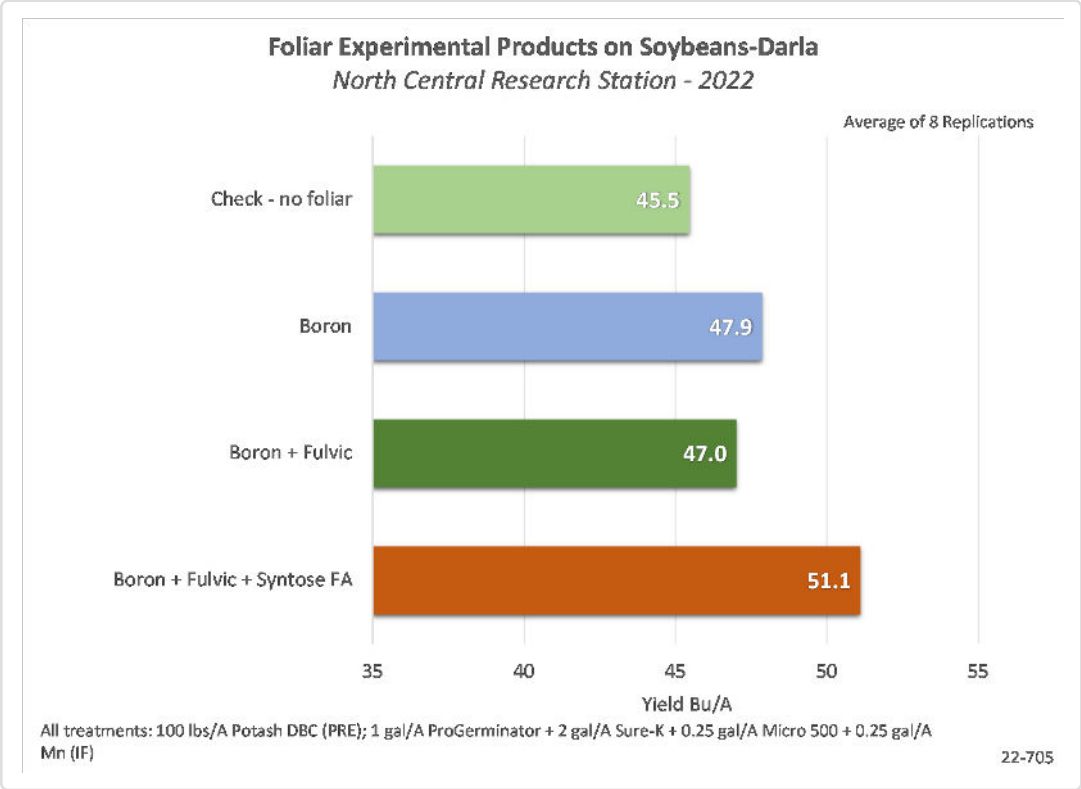
Experiment Info:	
Planted:	5/20/2022
Harvest:	10/23/2022
Yield Goal:	60 bu/A
Target Fert.:	
Variety:	DSR2590E
Population:	133,000
Row Width:	30"
Prev. Crop:	Corn
Plot Size:	15 x 52.6
Replications:	4

Soil Test Values (ppm):	
pH:	6.2
CEC:	10.8
%OM:	2.1
Bray P1:	11
Bicarb P:	0
K:	95
S:	6
%K:	2.3
%Mg:	19.3
%Ca:	66.1
%H:	11.9
Zn:	.8
Mn:	11
B:	.3

Objective:

To evaluate the performance of AgroLiquid MicroLink Boron and Fulvic as foliar applied products on pod retention and yield benefits.

NCRS summer intern, Darla Knuth, proposed and monitored this experiment. Boron is important for pollen grain germination, pollen tube formation, cell wall structure and can increase branching in soybean. The treatments setup included a no foliar check, 1 pt/A Boron, 1 pt/A Boron + 2 qt/A Fulvic and 1 pt/A Boron + 2 qt/A Fulvic + 1 pt/A Syntose FA® (a product containing sugar and used as a source of energy for the plant). This was a basic plus product added to evaluate if the additional product would have an incremental effect. The treatments were applied one time on July 18th at growth stage of R1. Each treatment was injected into a 10 gal/A amount of water for uniform application with a dual flat fan nozzle. Measurements for tissue tests before and after application, pod counts, pod weights and yield were performed at appropriate times. Yield data is shown in the chart below.



Conclusions:

- Not shown - Pod count increased by 25% on average between the check and all Boron applications. This could have been a large contributor to the additional yield above the check.
- The addition of Fulvic did not have a impact on additional yield.
- The addition of a sugar product to the boron showed a non significant yield advantage.