



At-Planting Nitrogen and Sulfur Applications in Soybeans

Mulford Agronomics, Quantico, MD 2024

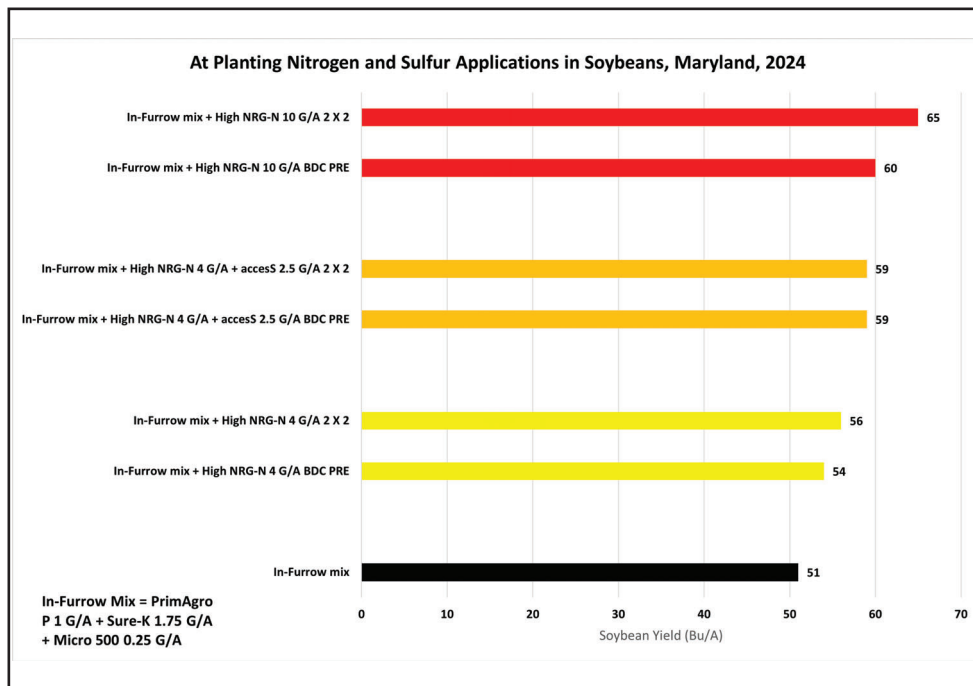
Experiment Info	
Planted:	5-20-24
Harvested:	11-18-24
Yield Goal:	60 bu/a
Variety:	
Pop.:	
Row Width:	15"
Prev. Crop:	soybean
Plot Size:	10' X 30'
Reps:	4

Soil Test (ppm)	
pH:	6.3
CEC:	7.8
%OM:	2.4
Bray P1:	18
Bicarb P:	
K:	75
S:	12
%K:	2
%Mg:	14
%Ca:	69
%H:	10
Zn:	1.4
Mn:	140
B:	0.7

Objective:

Adding supplemental nitrogen has been a management tool for trying to achieve high yields in soybeans. Although soybeans fix nitrogen from the air, some research suggests that supplemental nitrogen may have value in achieving very high yields. However, this must be done carefully so that nitrogen fixation is not negatively affected.

High NRG-N at 4 gallons/acre was applied as a broadcast preemergence (BDC PRE) treatment or as a 2X2 placement through the planter alone or in combination with accesS. A 10 gallon/acre application of High NRG-N was also evaluated in this trial. All plots received an in-furrow application of PrimAgro P at 1 gallon/acre + Sure-K at 1.75 gallon/acre + Micro 500 at 0.25 gallon/acre.



LSD (0.1) = 4.9 bu/A

Conclusions:

- 2 X 2 application of High NRG-N performed better than broadcast application in this trial regardless of the application rate.
- Combinations of High NRG-N at 4 gallons/acre with accesS improved yield by about 3 bu/acre compared to High NRG-N alone.
- This trial does demonstrate the benefit of supplemental nitrogen and sulfur to improve soybean yields.