

Planting Date	May 26, 2023
Seeding Rate	25,000
Row Spacing	15"
Variety	AG57XF1
# of Replications	3
Harvest Date	November 8, 2023

Agent Notes - This study looked at the impact of in-furrow starter fertilizer products on the yield of soybeans. The two products were Riser and Challenge Liquid Plant Food. Riser contains 7-17-3, as well as small amounts of copper, iron, manganese, and zinc. Challenge contains 8-32-5, as well as zinc and humic acid. I would like to thank Garrett Whitfield for his time and resources dedicated to this trial, Nutrien Ag Solutions and Triangle Chemical for their sponsorship, and Southern States for the use of their weigh wagon to collect yield data.

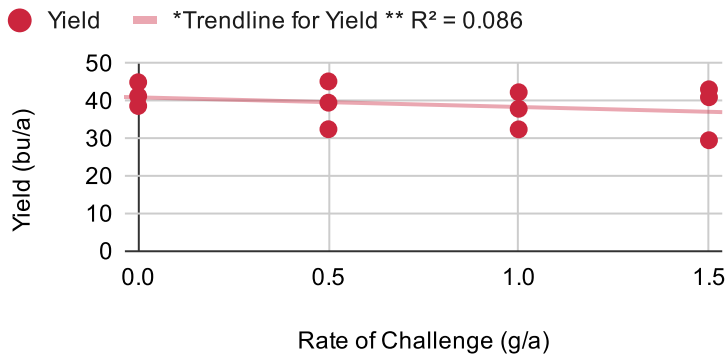
Treatments:



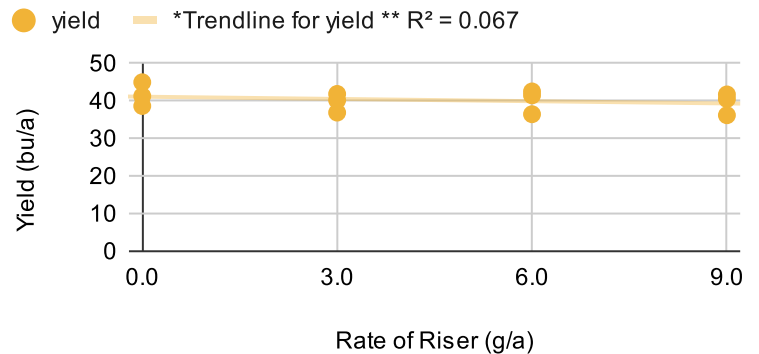
Plots received any of the following 6 treatments:

- Riser @ 3GPA
- Riser @ 6GPA
- Riser @9GPA
- Challenge Liquid Plant Food @0.05GPA
- Challenge Liquid Plant Food @0.10GPA
- Challenge Liquid Plant Food @0.15GPA
- Untreated Check

Yield vs. Rate of Challenge



Yield vs. Rate of Riser



*The data has little to no correlation, meaning there is little to no impact of rate on yield.

**An R-Squared value indicates how well the trendline represents the data. A value of less than 0.5 indicates the line does not represent the data well.

MAIN TAKE AWAYS:

- In-Furrow treatments had little to no impact on yield for soybeans on this field.
- The results from this study support past research by NC State that indicates that the use of starter fertilizers on soybeans has little to no impact on soybean yields.

You can find more information about past in-furrow fertilizer research in "Starter Phosphorus Fertilizer and Additives in North Carolina Soils: Use, Placement, and Plant Response" by Luke Gatiboni, Deanna Osmond, David Hardy, and Steph Kulesza (<https://content.ces.ncsu.edu/starter-phosphorus-fertilizer-and-additives-in-nc-soils-use-placement-and-plant-response>)

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