



Potassium Comparisons on Corn (21-516)

Experiment Info:

Planted:	5/15/2021
Harvest:	10/23/2021
Yield Goal:	225 bu/A
Target Fert.:	248-88-112
Variety:	DKC 51-40 RIB
Population:	36000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 285
Replications:	3

Soil Test Values (ppm):

pH:	6.5
CEC:	6.6
%OM:	1.4
Bray P1:	19
Bicarb P:	0
K:	49
S:	5
%K:	1.9
%Mg:	22.1
%Ca:	67
%H:	7.8
Zn:	0.7
Mn:	5
B:	0.2

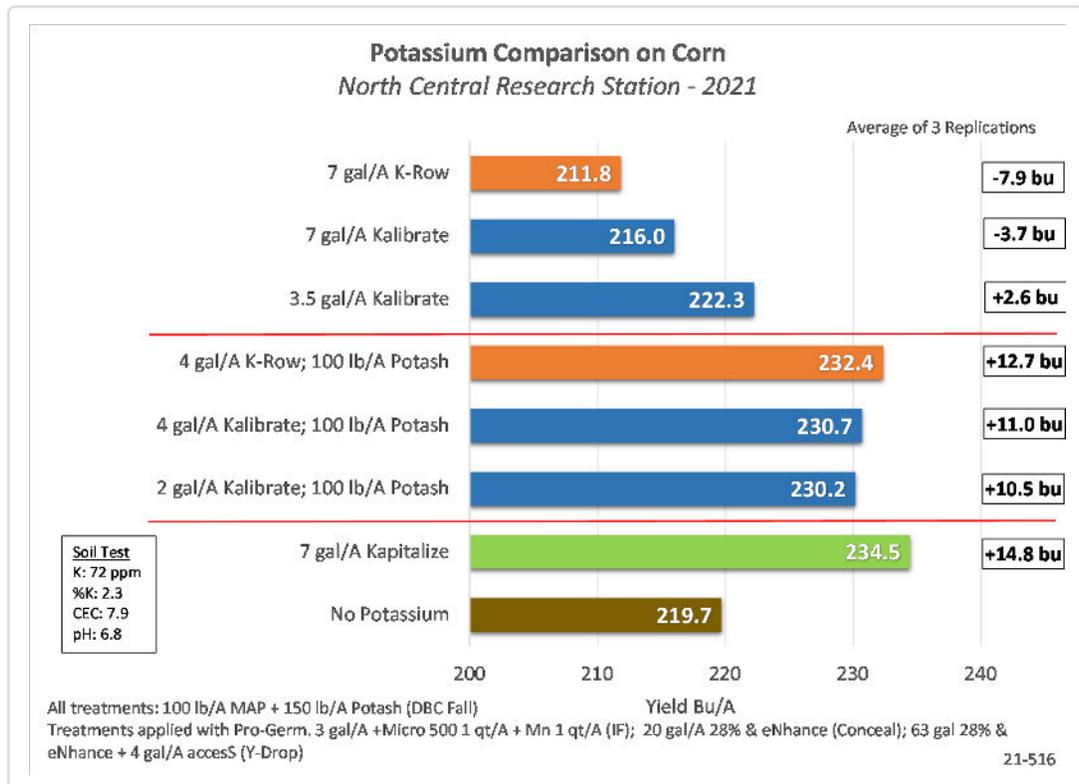
Objective:

Compare planter applications two liquid potassium fertilizers (Kalibrate and K-Row, 0-0-23-8S) both alone and in combination with fall application of broadcast potash for effect on corn yield. Plus evaluation of a new fertilizer (Kapitalize, 3-1-8-0.5Ca-1S) applied at planting for effect on corn yield.

Addition of a liquid potassium fertilizer at planting can be an advantage if there is a yield response. Potassium planter fertilizers were evaluated as the single K source or in a shared K source role along with a fall application of a reduced rate of potash (100 lb/A). The soil at this site has low Soil Test Potassium and calls for potassium fertilizer.

Additionally, a new AgroLiquid fertilizer, Kapitalize was included as a planter application only.

Yield results are shown in the following table, with the red lines separating the planter only and the planter fertilizer in combination with potash.



Conclusions:

- Significant yield increases over no potash only occurred in combination with the fall potash for Kalibrate and K-Row.
- Kapitalize applied alone at 7 gal/A in-furrow did have the highest yield of any treatment. This is the first year for evaluation of a soil-application of this product at the NCRS and these results warrant further testing in the future.
- Note: This is a multi-year experiment with the application of potash, and other results can be found in the research report. There should have been a potash only treatment for comparison and sorry for that omission.