Rate and Timing of Potassium on Potatoes (22-106)

Experiment Info:	
Planted:	5/17/2022
Harvest:	10/3/2022
Yield Goal:	450 ton/A
Target Fert.:	
Variety:	Russet Norkotah
Population:	18,000
Row Width:	34"
Prev. Crop:	Soybeans
Plot Size:	2.8 x 25
Replications:	4

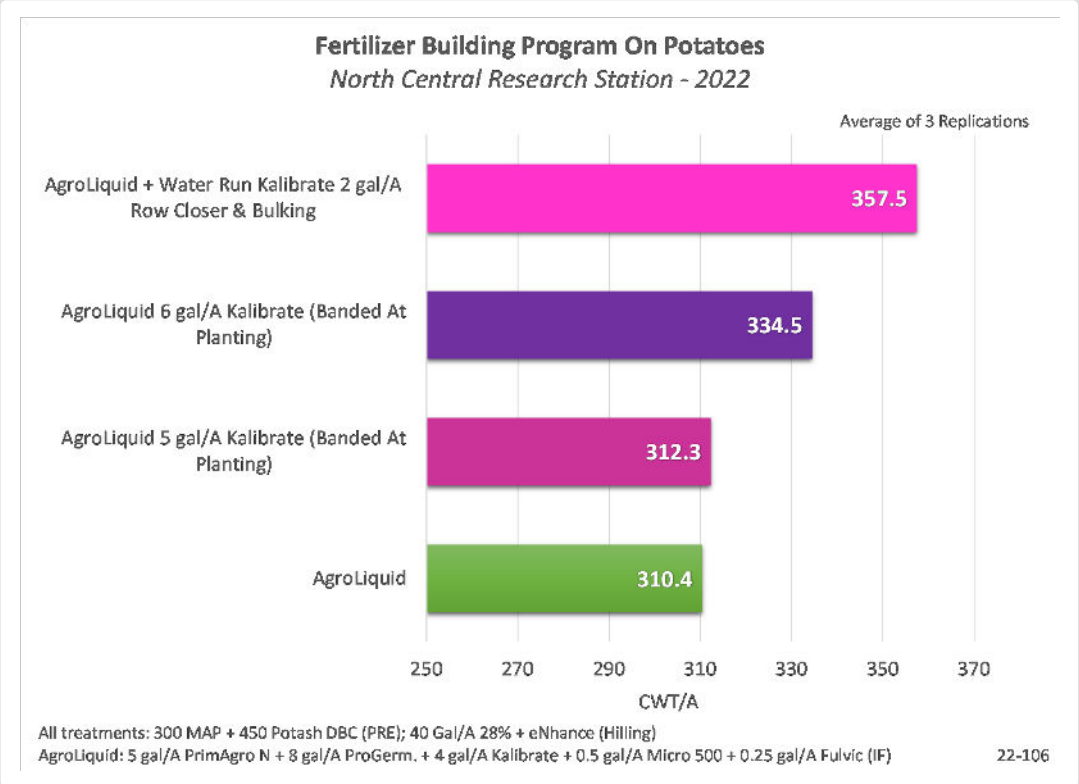
Soil Test Values (ppm):	
pH:	6
CEC:	4.2
%OM:	1.4
Bray P1:	122
Bicarb P:	0
K:	88
S:	5
%K:	5.4
%Mg:	15.1
%Ca:	62.9
%H:	15.3
Zn:	1.5
Mn:	4
B:	.2

Objective:

To compare rates and application timing of Kalibrate on potatoes.

In this experiment we were looking at find the best rate of Kalibrate to apply on the potato crop and when the best timing of the application would be. Potassium is one of the most important nutrients needed in the potato plant. At the peak timing the plant can take up 5 to 14 lbs/A/day. Potassium plays a key role in tuberization and in tuber bulking. It can also lead to higher yield, less defects, and better storability. Peak uptake of potassium starts around 45 to 50 days after emergence.

The treatment setup for this study had different rates of Kalibrate banded at planting. The other treatment took the lower rate of Kalibrate at planting and then added two more gallons water run at key timings. This potassium added with the water run allowed for easy uptake from the plant right as it was increasing the uptake needs throughout the plant.



Conclusions:

- Spoon feeding potassium through water run applications is an excellent way to get the potassium to the plant at key timings.
- No yield difference between 4 or 5 gallons banded at planting.
- Good in yield increase of 22 CWT / A by using 6 gallons banded at planting V.S. 5 gallons.