



# Effect of eNhance Applied In-Furrow on Soil Test Values: Potassium (20-1219)

## Experiment Info:

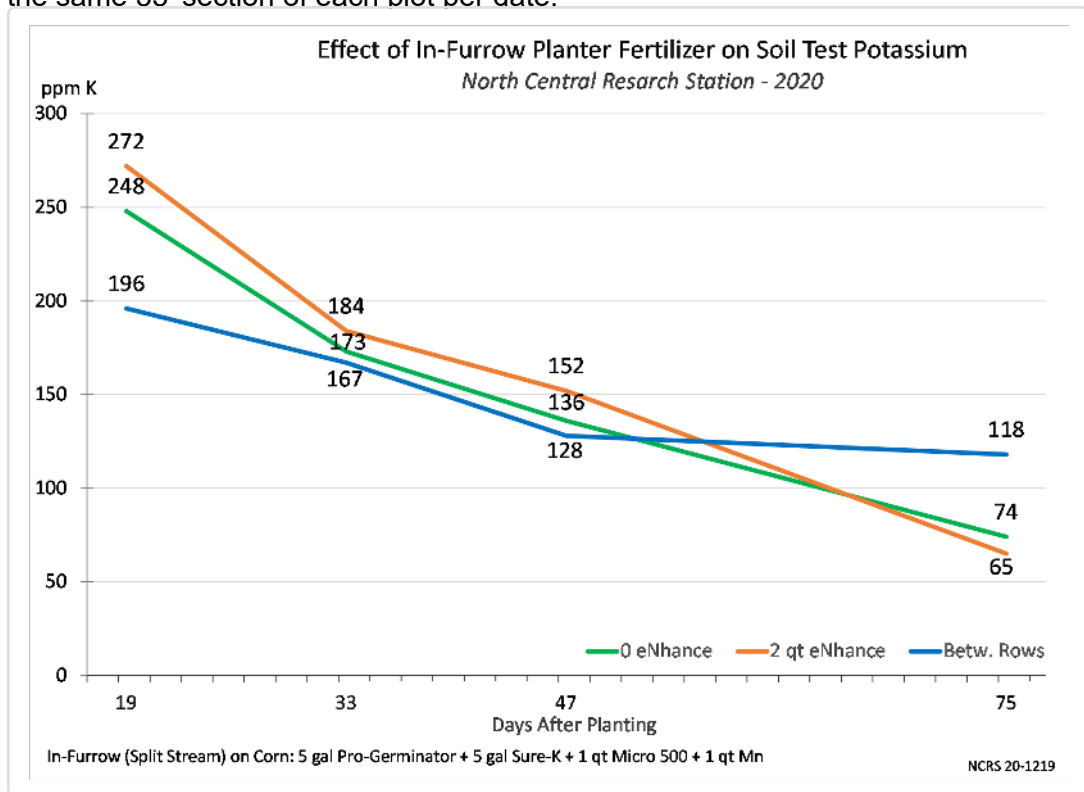
Planted:	5/7/2020
Harvest:	10/29/2020
Yield Goal:	175 bu/A
Target Fert.:	193-55-124
Variety:	P9998 AM
Population:	32,000
Row Width:	30"
Prev. Crop:	Corn
Plot Size:	15 x 172.5
Replications:	3

## Soil Test Values (ppm):

pH:	7.6
CEC:	19.5
%OM:	7.8
Bray P1:	17
Bicarb P:	8
K:	95
S:	6
%K:	1.2
%Mg:	20.2
%Ca:	78.4
%H:	
Zn:	1.9
Mn:	1
B:	.5

## Objective:

The fertilizer product eNhance has been demonstrated to be an effective sulfur additive to In-Furrow applications of planter fertilizers on corn. Even though it contains almost 9% sulfur (from ammonium-, zinc- and manganese sulfate) it is considered to be seed safe at recommended rates. In previous reports on this experiment, it was found that addition of eNhance to In-Furrow fertilizer did not affect soil pH, soil test sulfur or phosphorus levels. However, there were other soil test measurements taken to see if eNhance would have an effect, including soil test potassium. In this experiment, two treatments were applied In-Furrow at planting: 1. Planter fertilizer alone and, 2. Planter fertilizer + 2 qt eNhance. The Planter Fertilizer was 5 gal/A Pro-Germinator + 5 gal/A Sure-K + 1 qt/A Micro 500 + 1 qt/A Manganese. Soil samples (6") were collected in the seed furrow or between the rows. The Between Row samples can serve as a Check. For the graph, the Between Row results from plots were very close, so averages are used. Ten soil samples were collected per plot from the same 35' section of each plot per date.



## Conclusions:

- Application of Sure-K in the furrow resulted in substantial increases in Soil Test K compared to the Between Row check.
- The addition of eNhance to the In-Furrow fertilizer appeared to result in higher K levels, but these treatments were not replicated in separate plots. However the trend difference was consistent and was not seen with phosphorus, suggesting that the rate was accurately applied using flow control on the planter.
- The K levels with Sure-K decreased over time with plant uptake from the root zone. The Between Row zone also showed K decline with plant uptake.