



# Planter Fertilizer Comparisons in Corn. Real Farm Research. Mitchell, SD

## Experiment Info:

Planted:	05/21/15
Harvest:	11/05/15
Yield Goal:	140 bu/A
Target Fert.:	110-50-15
Variety:	Curry 732-99
Population:	25,000
Row Width:	30"
Prev. Crop:	sunflowers
Plot Size:	4 row x 157'
Replications:	2

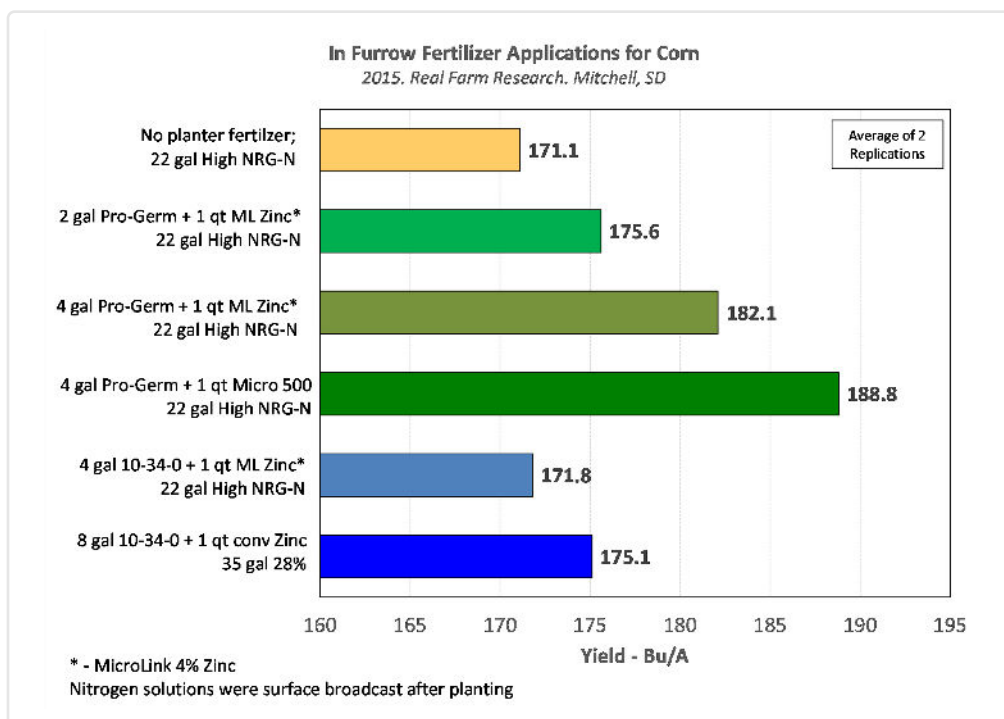
## Soil Test Values (ppm):

pH:	5.5
CEC:	18.8
%OM:	4.3
Bray P1:	13 (M3)
Bicarb P:	
K:	313
S:	113
%K:	4
%Mg:	23
%Ca:	52
%H:	19
Zn:	1.47
Mn:	56.5
B:	

## Objective:

Determine effectiveness of different planter-applied fertilizer programs in corn, according to soil test.

There are a number of options when selecting a fertilizer program for a crop such as corn. Growers are advised to apply according to soil test so as not to either over- or under apply needed nutrients. In this experiment, two different phosphorus sources, Pro-Germinator and 10-34-0 were applied at two different rates. Additionally, different micronutrient additives were compared: MicroLink Zinc and Micro 500. The soil test suggests that only zinc is needed vs a micronutrient additive containing five micronutrients which is more expensive. Yield results are in the following graph.



LSD(0.05): 7.6; LSD(0.1): 6.1; CV: 4.6%

## Conclusions:

- The 4 gal/A rate of Pro-Germinator produced a significantly higher yield than did the 2 gal/A rate, as well as both the 4 - and 8 gal/A rate of 10-34-0. It may be tempting to choose either lower rates or other fertilizers to save money, but Pro-Germinator at the prescribed rate of 4 gal/A was best overall.
- Adding Micro 500 resulted in a higher yield than did that of MicroLink Zinc, even though zinc is the nutrient in short supply according to soil test.