AGRO-CULTURE LIQUID FERTILIZERS

Winter Wheat Fertilizer Methods of Application Options (13-707)

Experiment Info:

Planted:	9/24
Variety:	Red Devil
Population:	1.85 million
Row Spacing:	**7.5"**
Previous Crop:	Navy Beans
Plot Size:	15' x 265'
Replications:	4
Topdress:	4/5
Harvested:	7/16

Soil Test Values (ppm):

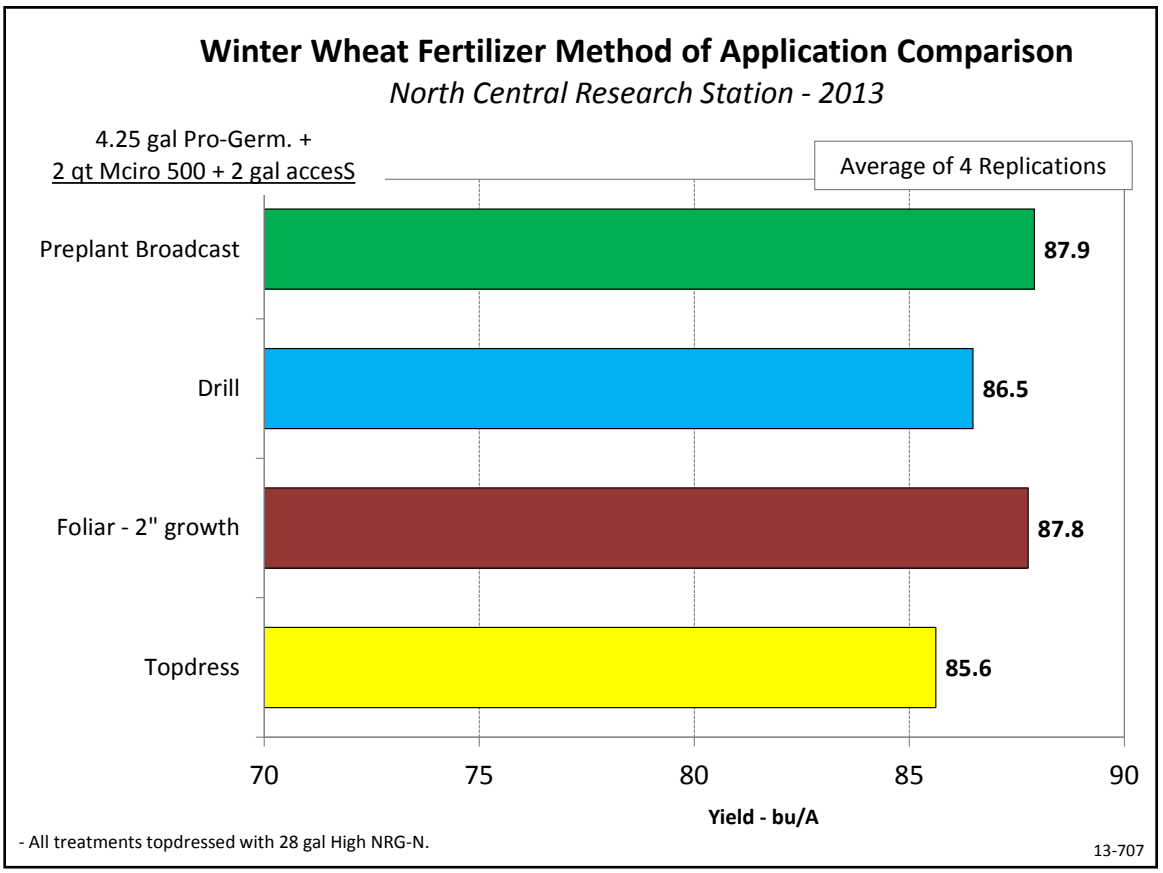
pH:	6.7
CEC:	12.4
% OM:	2.8
Bray P1:	15
K:	132
S:	6
% K:	2.7
% Mg:	21.2
% Ca:	75.9
% H:	0
% Na:	0.2
Zn:	1.2
Mn:	5
B:	0.5

Yield Goal:	100 bu
Target Fertilizer Rate:	120-113-15

Objective:

Comparison of phosphorus fertilizer method of application for effect on winter wheat yield.

How and where you place phosphorus fertilizer for wheat in not as critical as a corn crop. The combination of the seed and row spacing along with the root structure, allows greater flexibility in wheat and other small grains. In the Northern growing conditions of the NCRS there is not a lot of growth that takes place in the fall before the crop goes dormant. This experiment compares a preplant broadcast application, drill-applied, fall foliar application on 2" growth and a spring topdress treatment. The same fertilizer was applied at each timing and included 4.25 gal/A Pro-Germinator, 2 qt/A Micro 500 and 2 gal/A access. All treatments also received a spring topdress application of 28 gal/A High NGR-N. Yield results based on method of application appear on the chart below.



LSD (0.1): 11.4 CV: 12.2%

Conclusions:

- As seen in past testing at the NCRS, there is no statically significant difference between the four methods of application.
- With similar results seen amongst all treatments, growers have options on when they can apply their phosphorus in these northern climates. Areas with known low soil phosphorus levels where risk of deficiencies occur, apply nutrients in the fall in order to prevent stress to the crop.