



Topdress Nitrogen Applications on Winter Wheat: 3 Site Average (18-310, 512, 908)

Experiment Info:

Planted:	10/20/2017
Harvest:	7/9/2018
Yield Goal:	bu/A
Target Fert.:	
Variety:	Sunburst
Population:	
Row Width:	7.5"
Prev. Crop:	
Plot Size:	15 x 210
Replications:	4

Soil Test Values (ppm):

pH:	7.1
CEC:	6.2
%OM:	1.6
Bray P1:	17
Bicarb P:	8
K:	45
S:	14
%K:	1.9
%Mg:	17.1
%Ca:	79.2
%H:	
Zn:	.8
Mn:	4
B:	4

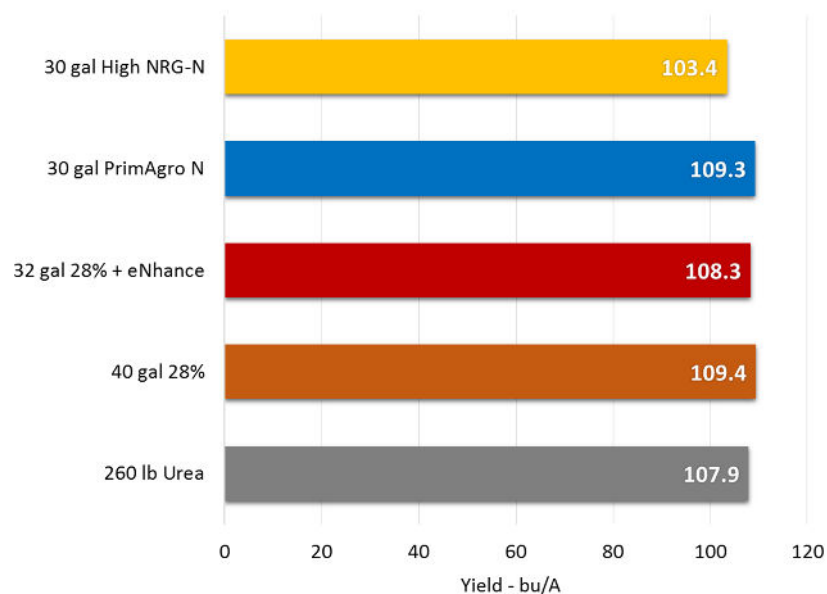
Objective:

To compare topdress Nitrogen sources and rate effects on winter wheat yield across 3 different sites.

AgroLiquid offers two primary Nitrogen sources that are very effective as a topdress nitrogen source for winter wheat. Both High NRG-N and PrimAgro N contain sulfur which is needed in large quantities in a wheat crop and also helps with nitrogen utilization by the plant. Both these products are routinely compared against conventional nitrogen sources used for wheat topdress such as 28% UAN and Urea. In addition to the two conventional N sources, eNhance was used with 28% UAN at a reduced rate. eNhance aids in the stabilization and increased plant utilization of UAN products. The target N rate for these experiments were 120 lb/A.

All treatments were applied at green up on April 26th. Liquid treatments were broadcast using streamer nozzles and urea treatment was spread using an air boom dry spreader.

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North Central Research Station - 2018



All treatments included: 4 gal Pro-Germinator + 2 qt Micro 500 (Feekes 4)

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Conclusions:

- 30 gal PrimAgro N yielded nearly identical to 40 gal 28% UAN across the 3 sites.
- The reduced rate of 28% UAN with the addition of eNhance yielded only 1.1 bu/A less than the full rate of 40 gal 28% UAN.
- PrimAgro N at 4 lb N/gal efficiency continues to be an effective source of Nitrogen at volume rates equal to that of High NRG-N. However in corn, the equivalency is 4.25 lb N/gal. It is likely that this equivalency level will now apply to wheat.