



Pro-Germinator Application Timing in Winter Wheat (17-707)

Experiment Info:

Planted:	10/12/2016
Harvest:	7/14/2017
Yield Goal:	120 bu/A
Target Fert.:	120-131-0
Variety:	P25R77
Population:	2 million
Row Width:	7.5"
Prev. Crop:	Navy Beans
Plot Size:	15 X 265
Replications:	4
LBC (PRE)	10/12/2017
LBC (Fall)	11/2/2017
TD	4/10/2017

Soil Test Values (ppm):

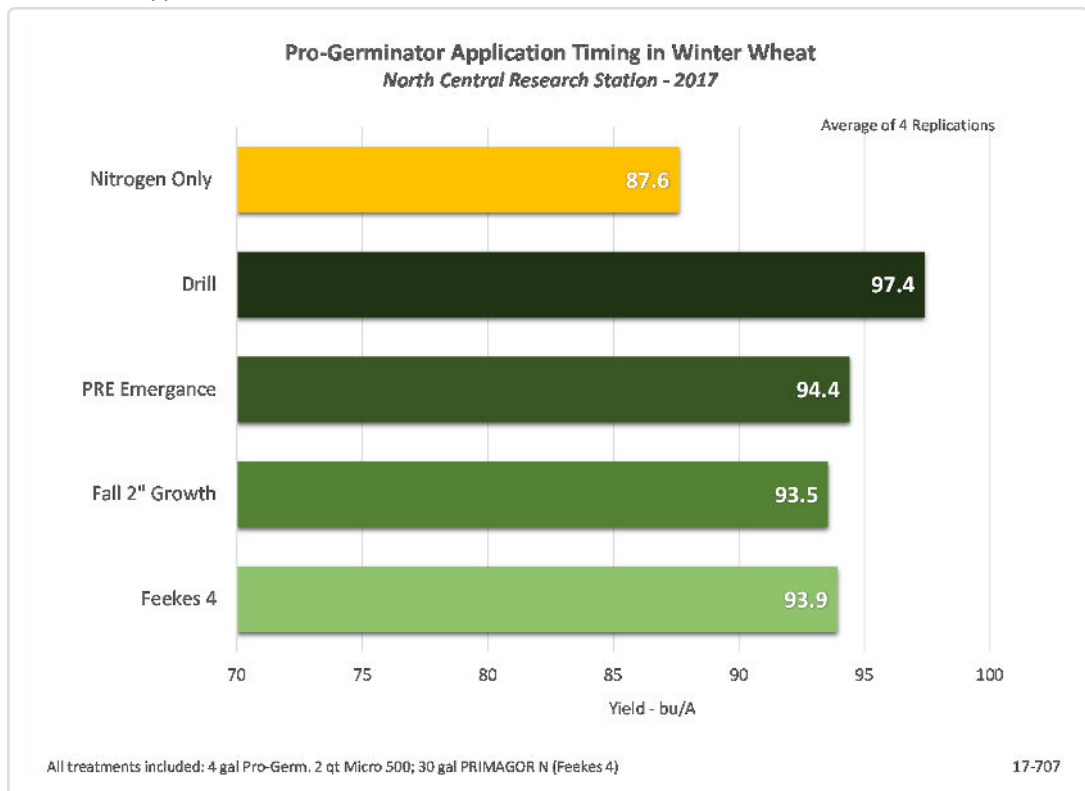
pH:	6.9
CEC:	13.3
%OM:	3.3
Bray P1:	14
Bicarb P:	-
K:	149
S:	18
%K:	2.9
%Mg:	21.7
%Ca:	74.6
%H:	0
Zn:	1.1
Mn:	4
B:	0.5

Objective:

To determine the most ideal time to apply phosphorus and micronutrient fertilizer on winter wheat.

There are several options for timing liquid phosphorus fertilizer application on winter wheat. Most drills are not set up to apply liquid fertilizer. This experiment compares three different timings of a broadcast application of 4 gal/A Pro-Germinator and 2 qt/A Micro 500 compared to a drill application at the same rates. Broadcast applications were made (1) fall pre emergence (2) fall with 2 inches of wheat growth and (3) spring at the Feekes 4 growth stage. All applications were mixed with water and applied at a total spray volume of 10 gal/A. All treatments, including the check, received the same topdress nitrogen application of 30 gal/A PRIMAGRO N at the Feekes 4 growth stage.

Yield results appear on the chart below.



CV: 8.8%, LSD(0.2) 8.2

Conclusions:

- All fertilizer applications increased wheat yield over the nitrogen only check.
- Highest yield was achieved with the drill application, yielding about 4 bu/A higher than any of the broadcast applications.
- There was little differences between the three broadcast applications of Pro-Germinator and Micro 500, which offers growers flexibility in timing their applications. Additionally, these applications could be applied with crop protection applications saving application expenses.