



Manganese Placement and Timing in Wheat (21-719)

Experiment Info:

Planted:	9/26/2020
Harvest:	7/11/2021
Yield Goal:	100 bu/A
Target Fert.:	120-133-97
Variety:	SY-100
Population:	1.75 million
Row Width:	7.5"
Prev. Crop:	Soybeans
Plot Size:	15 x 210
Replications:	4

Soil Test Values (ppm):

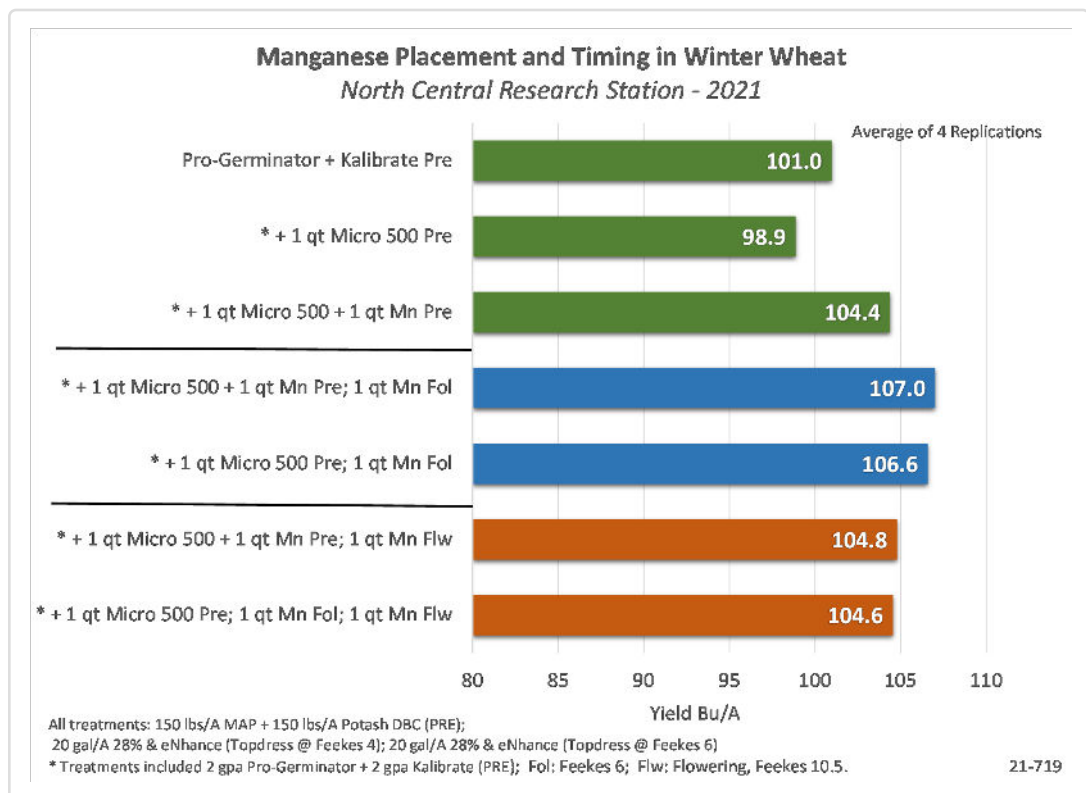
pH:	7.3
CEC:	16.1
%OM:	4.8
Bray P1:	11
Bicarb P:	11
K:	93
S:	6
%K:	1.5
%Mg:	19.9
%Ca:	78.4
%H:	
Zn:	1.2
Mn:	3
B:	.6

Objective:

To determine when the best time is to apply MicroLink Manganese for a yield response in winter wheat.

Application of the key micronutrient manganese has shown a yield response in wheat, particularly when foliar-applied at heading. In this experiment, Manganese was applied at three different stages: Pre-emergence (along with the P and K fertilizer); Feekes 6, at the time of the second topdress application; and at the Flowering stage of wheat.

Previous research at the NCRS has shown that a broadcast application of P and K following planting is as effective as drill-applied application, and is an easier application for growers. Thus, this experiment evaluates Manganese applications with Pre-emergence, Topdress and foliar fungicide. Yield results are in the following chart.



Conclusions:

- The top treatment in the chart is the standard application of Pro-Germinator + Kalibrate with no additives. All of the other treatments have additives of Micro 500 and Manganese at different timing.
- There are numerical yield increases with Manganese, particularly as a foliar at Feekes 6.
- The yield increases with Manganese over no-manganese is constant across treatments, although increases were not statistically significant.