

Experiment Info:

Planted:	5/10/2014
Harvest:	10/24/2014
Yield Goal:	60 bu/A
Target Fert.:	0-38-140
Variety:	P26T76R
Population:	180,000
Row Width:	7.5"
Prev. Crop:	Corn
Plot Size:	15 x 180/210/130
Replications:	5

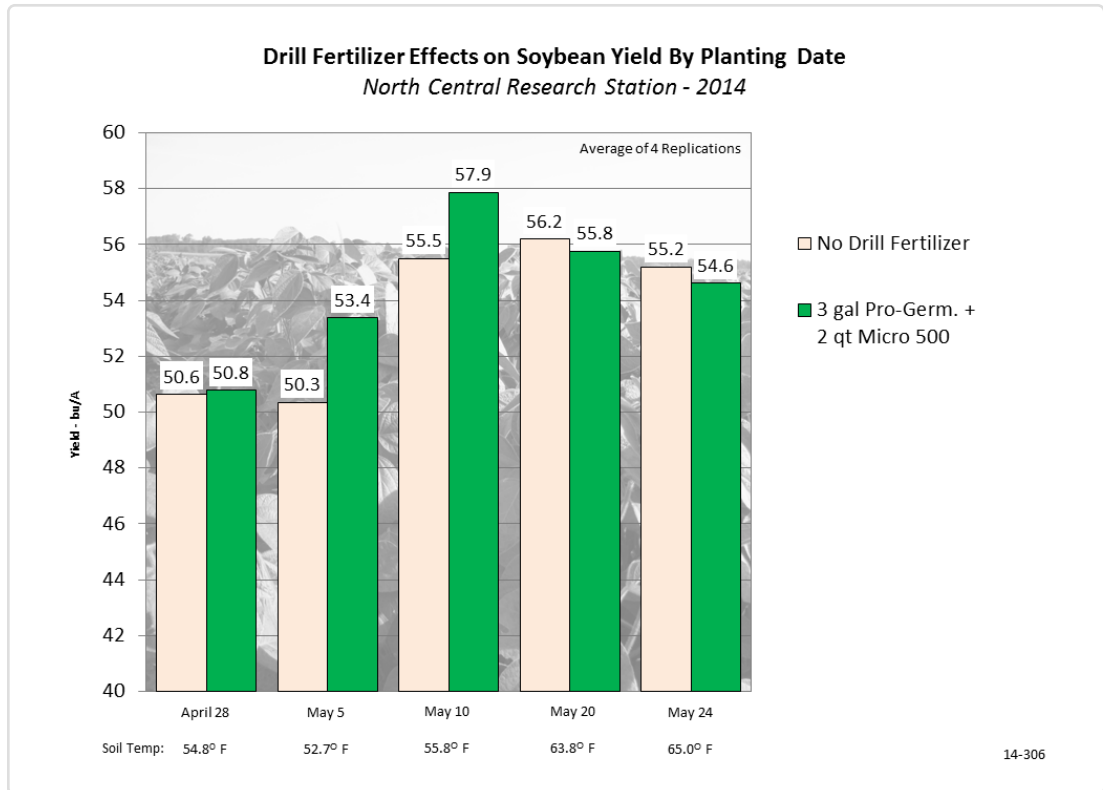
Soil Test Values (ppm):

pH:	7.5
CEC:	5.6
%OM:	1.3
Bray P1:	17
Bicarb P:	12
K:	61
S:	9
%K:	2.8
%Mg:	17.6
%Ca:	78.7
%H:	0
Zn:	0.7
Mn:	3
B:	0.5

Objective:

To evaluate drill-applied fertilizer effects on soybean yield based on planting date.

As soybean varieties have improved over time, planting dates are getting earlier all the time. Historically, there has not been a strong response to phosphorus fertilizer in medium phosphorus soils as seen with corn, because they were being planted into warm soils. However, because growers are planting earlier this thought may change. The NCRS established an experiment to look at the effects of a drill fertilizer program of 3 gal/A Pro-Germinator and 2 qt/A Micro 500 over 5 different planting dates. The first date was April 28th which is on the early side of soybean planting in Michigan and continued weekly through the end of May. It is important to note that the 2014 season got off to a slower start than normal with excess rainfall and below normal temperatures. Soil temperatures were also measured and recorded for each planting date. Yield and soil temperatures appear on the chart below.



Conclusions:

- With the cool wet spring, it was not ideal planting conditions for the first planting date. In fact, planting for most crops began nearly two weeks after this first date.
- The second and third planting dates, when soils were still cool, showed a yield increase from the drill applications of Pro-Germinator and Micro 500, increasing yield by 3 bu/A.
- Soybeans from the first three planting dates all emerged at the same time, due to the cool soils.
- Once soils warmed up in late May, there was no yield benefit to applying phosphorus in these medium phosphorus soils.
- There was an overall yield advantage to waiting until mid-May to plant soybeans in 2014. More testing will be