AGRO-CULTURE LIQUID® FERTILIZERS

Spring Strip-Till Programs in Corn (13-712)

Experiment Info:

Planted:	5/8
Variety:	DKC48-12
Population:	4
Row Spacing:	30″
Previous Crop:	Soybeans
Plot Size:	15′ x 255′
Replications:	4
Sidedress:	6/15
Harvested:	10/2

Soil Test Values (ppm):

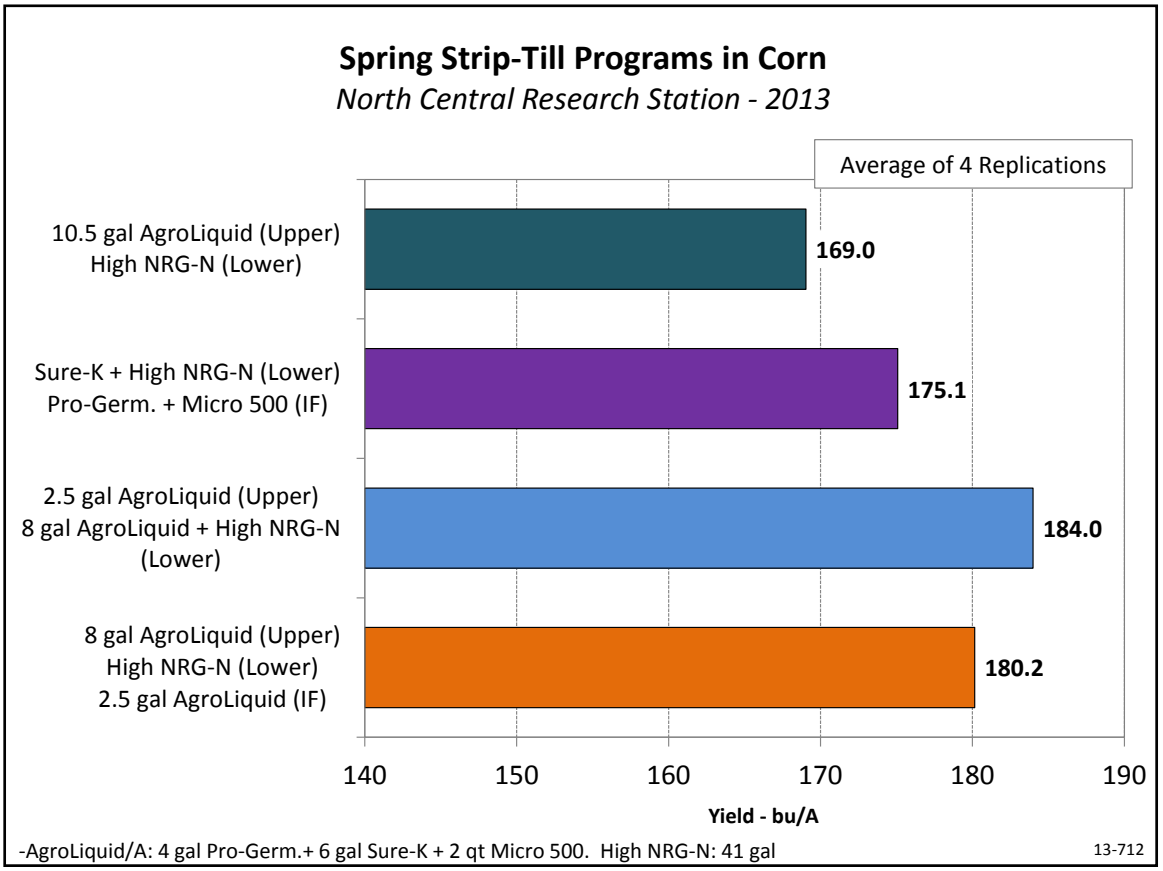
pH:	6.6
CEC:	21.5
% OM:	5.1
Bray P1:	16
K:	108
S:	12
% K:	1.3
% Mg:	17.5
% Ca:	80.9
%H:	0
% Na:	0.3
Zn:	1.1
Mn:	2
B:	0.8

Yield Goal:	175 bu
Target Fertilizer Rate:	195-60-110

Objective:

To compare placement strategies in a corn spring strip-till program.

Strip tillage offers the ability to put nutrients in many different placements within the soil profile and yet very close to where the plant roots are going to make efficient use of them. This experiment compared a total AgroLiquid program of 4 gal/A of Pro-Germinator + 6 gal/A of Sure-K + 2 qt/A Micro 500 in different places of a spring tilled strip. An upper placement is the top 2″ of the tilled strip and a lower placement is a narrow band 6-7″ below the soil surface. The strips were tilled and nutrients applied with the NCRS Nutri-Till unit the same day as planting on May 8th. The AgroLiquid program was sometimes split by nutrient parts or by rates and applied in different placements. High NRG-N at the rate of 41 gal/A was used as the nitrogen source and always placed in the lower position of the strip. Continued testing of strip till nutrient placement will occur with a new Orthman 1tRiPr next year. Yields appear in the chart below.



LSD (0.05): 6.8 CV: 7.6%

Conclusions:

- The largest yield advantage resulted from having ¼ of the AgroLiquid program in the upper strip placement and the remainder in the lower position.
- A lower placement of P and K resulted in a larger yield than all P and K in the upper position.
- In-furrow placement, so that nutrients are close to the seed, provided an advantage over all of the nutrients placed in the upper strip.