Effects of Different Nutrient Programs on Yield on Celery in Michigan. Experiment 15 – 1206A

Experiment Info:	
Planted:	5-1-2015
Harvest:	9-22-14
Yield Goal:	27.5 tons / acre
Target Fert.:	
Variety:	"Tango"
Population:	60 heads
Row Width:	5' beds
Prev. Crop:	Onions
Plot Size:	30' beds
Replications:	4

Soil Test Values (ppm):	
pH:	7.9
CEC:	22.6
%OM:	11
Bray P1:	15
Bicarb P:	-
K:	111 ppm
S:	11 ppm
%K:	
%Mg:	
%Ca:	
%H:	
Zn:	2.6 ppm
Mn:	2 ppm
B:	0.8 ppm

Objective:

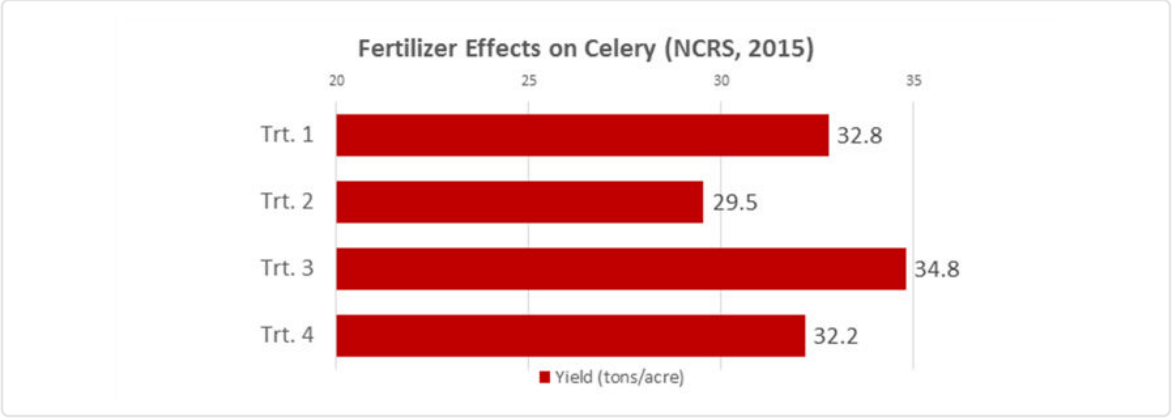
Compare soil fertility programs for impact on the yield of celery in Central Michigan.

Material & Methods:

In the spring Celery was transplanted in 5 foot wide raised beds with two rows of plants at a spacing of 30" for a total of 50 plants per plot. Each of these plots were replicated four times in the field. The following rates of fertilizer were used at various times during the growing season. A transplant solution was used at the time of planting which consisted of 1 gallon of Pro-Germinator + 1 gallon of Sure-K + 1 gallon of Micro 500 per acre for all of the Agroliquid plots. At the time of first side dress all of the Agroliquid plots had 18.7 gallons of Pro-Germinator per acre added to the mixture.

- Trt. 1 = Conventional: 0-0-60 at 695 lbs. per acre + 18-46-0 at 200 lbs. per acre + 5 lbs. of micro nutrient blend were applied and incorporated into the raised beds before planting. On June 5th, first side dressed of the plants occurred with an application of 10-34-0 at 24 gallons per acre + 28% UAN at 12 gallons per acre was applied.
- Trt. 2 = Agroliquid:On June 5th, first side dressed of the plants occurred with 20 gallons of High NRG-N + 20 gallons of Sure-K. On July 27th, a second side dress application was made with 28% UAN + eNhance at 13 gallons + 20 gallons of Sure-K per acre.
- Trt. 3 = Agroliquid: On June 5th, first side dressed of the plants occurred with 20 gallons of High NRG-N + 20 gallons of Kalibrate. On July 27th, a second side dress application was made with 28% UAN + eNhance at 13 gallons + 20 gallons of Kalibrate per acre.
- Trt. 4 = Agroliquid (eNhance + 28%UAN) On June 5th, first side dressed of the plants occurred with 20 gallons of High Nrg-N + 20 gallons of Sure-K. On July 27th, a second side dress application was made with 28% UAN + eNhance at 13 gallons only per acre.

Results:



Conclusions:

- The Agroliquid program using Kalibrate produced a higher yield than the program using Sure-K.
- Overall best yields was obtained from the use of the Agroliquid products with the use of the second side dress applications of eNhance + 28%UAN.
- All treatments that used the Agroliquid Products had larger overall average celery head weight (Data not shown).