

# At Planting Fertilizer Comparisons in Sugarbeets Spreckels Sugar Company. Brawley, CA

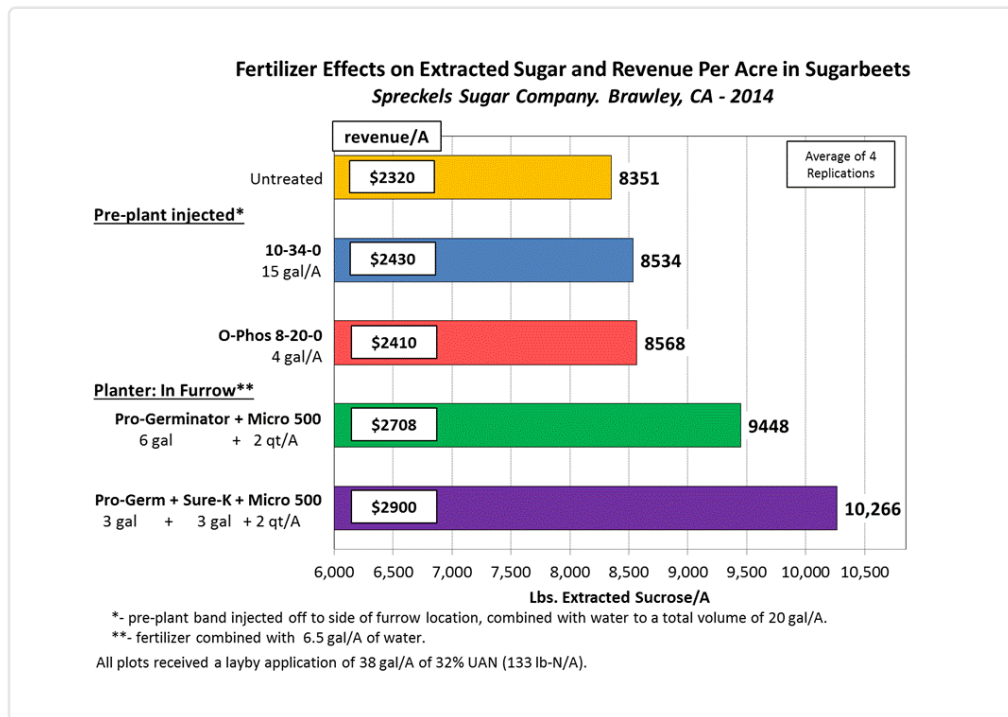
Experiment Info:	
Planted:	11/28/13
Harvest:	05/??/14
Yield Goal:	
Target Fert.:	
Variety:	
Population:	
Row Width:	30"
Prev. Crop:	
Plot Size:	4 row x 25'
Replications:	4

Soil Test Values (ppm):	
pH:	8.4
CEC:	35.3
%OM:	1.9
Bray P1:	
Bicarb P:	14
K:	451
S:	
%K:	3.3
%Mg:	20.8
%Ca:	72
%H:	
Zn:	0.75
Mn:	1.4
B:	1.3

## Objective:

Compare different liquid fertilizers applied at planting time for effects on sugarbeet yield and revenue.

The Imperial Valley of California has a long history of growing sugarbeets. The water availability and long growing season enables high yields. However, unlike other sugarbeet growing areas, harvest does not occur all at once since the mill can only process so much and the warm weather prevents piling due to spoilage. So harvest can stretch over an extended period. But they don't have to worry about the ground freezing up. In this replicated plot experiment, several different fertilizers were evaluated for effects on sugarbeet production. AgroLiquid fertilizers were applied in furrow at planting, but were mixed with water for safety and ease of application. The other fertilizers were also mixed with water, but were injected into the beds in a band ahead of planting several inches to the side of where the furrow would be. After harvest, quality measurements were conducted in order to determine extracted sucrose and revenue to grower.



Statistics for sucrose yield: LSD(0.2): 1463. CV: 22.4%

## Conclusions:

- Highest yields and revenue were obtained with the AgroLiquid treatments. The split application of both Pro-Germinator and Sure-K was by far the best treatment.
- (Note: this was part of a larger fertilizer additive study where each participating company made their own recommendations. AgroLiquid had the only fertilizers placed in the seed furrow at planting which would save time by eliminating the pre-plant application. Additives were generally not effective and none yielded higher than this treatment shown here. I elected to only show the fertilizer results.)
- As indicated by the high CV, there was more variability across replications than desired. However, the numbers for the Pro-Germinator + Sure-K treatment were the highest among all treatments in three of the four replications.