

Experiment Info:

Experiment: C13-101

Planted: May 29th

Variety: Cal Wonder

Population: 3,650

Plot Size 1m x 6m

Replications: Six

Harvest: Sept 6th

Soil Test Values (ppm):

pH: 7.2

CEC: 27.5

OM: 4.2

NaCO₂-P: 48

K: 485

S: 557

% K: 4.5

% Mg: 24.2

% Ca: 67.6

% H: -

% Na: 3.7

Zn: 1.9

Mn: 7.0

Fe: 5.0

Cu: 1.6

B: 1.2

Objective:

Determine if AgroLiquid fertilizer based programs can compare with local standards for drip irrigation products used for producing quality yields of bell peppers.

Materials & Methods:

- This trial conducted by Holden Research & Consulting, Oxnard, CA
- On May 29th the peppers were planted and watered to establish the plots. All plots were single rows, 6 meters long with plants spaced approximately 30 centimeters (12") apart.
- Three weeks after the plots were established and at several other dates during the pepper development, fertilizers were applied via the drip irrigation according to the rates and timings outlined in Table P1. The appropriate amount of fertilizer was diluted into 2 liters of water and then applied in a total volume of 200 liters per hectare.
- Herbicides, insecticides and fungicides were applied uniformly and as appropriate over the course of this experiment.
- On September 6th the plots were harvested and the peppers weighted and graded according to market standards for red bell peppers. Yields were then adjusted and values calculated to a per acre basis. (Note: 1 box = approximately 25 lb.)

Chart 1: Agro-Culture Liquid on Bell Peppers in Ventura County, California 2013 - Production- Extrapolated Yield per Acre in Boxes

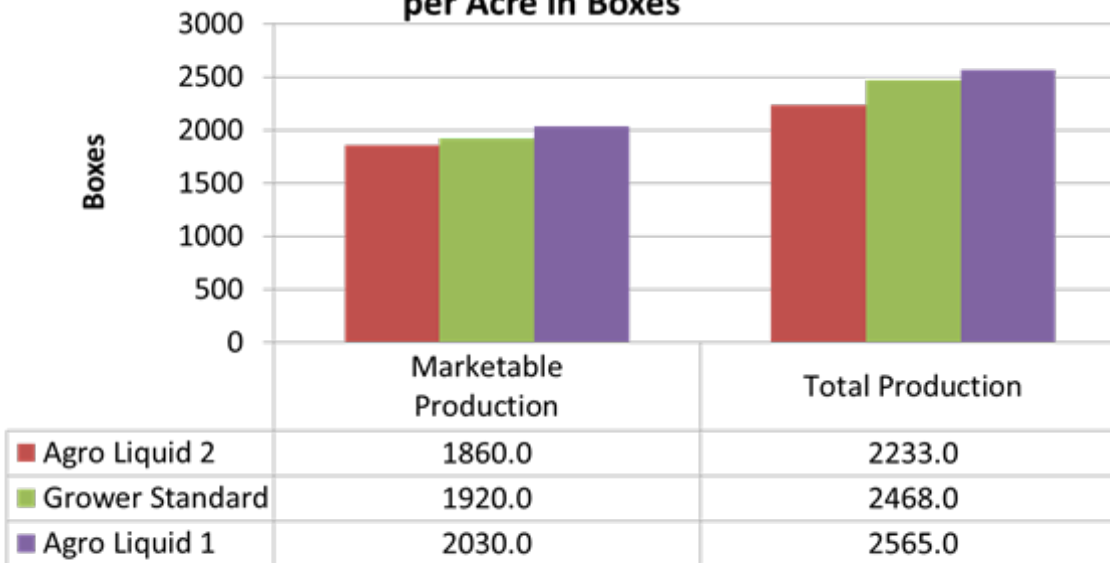


Table BP1. Fertilizer application rate and timing schedule for bell peppers, Oxnard, CA 2013

Product		June 21	July 3	July 9	July 30	Aug 16	Aug 23	Aug 30
1.	Conventional	2-16-16 @5.7 GPA	2-16-16 @5.7 GPA	2-16-16 @5.7 GPA	UAN32% @ 15 GPA	KTS @ 10 GPA	CAN17 @ 11.7 GPA	KTS @ 12.5 GPA
2.	AgroLiquid #1 (with High NRG-N)	Pro-Germ @3 GPA Micro500 @ 2 qt. eNhance @ 2 qt.		High NRG-N @ 12 GPA eNhance @1.25 GPA	High NRG-N @ 10 GPA eNhance @1.25 GPA	Sure-K @ 5 GPA Liberate Ca@1GPA eNhance @1 GPA	Sure-K @ 5 GPA Liberate Ca@1GPA eNhance @1 GPA	Sure-K @ 5 GPA Liberate Ca@1GPA eNhance @1 GPA
3.	AgroLiquid #2 (With 32%UAN & eNhance)	Pro-Germ @3 GPA Micro500 @ 2 qt. eNhance @ 2 qt.		UAN32% @7.5 GPA eNhance @1 GPA	UAN32% @7.5 GPA eNhance @1 GPA	UAN32% @7.5 GPA eNhance @1 GPA Sure-K @ 5 GPA Liberate Ca@1GPA	Sure-K @ 5 GPA Liberate Ca@1GPA eNhance @1 GPA	Sure-K @ 5 GPA Liberate Ca@1GPA eNhance @1 GPA

Conclusions (Selected comments extracted from final report by David Holden):

- Early season shoot, root, and whole plant weights were measured (data not shown here). Significant size differences in whole plant and shoots were not seen between the AgroLiquid treatments over the grower standard program, but they were numerically better. Significant increases in whole root weight were seen between treatments with the AgroLiquid #1 program (treatment 2) showing the largest root mass on average and with similar results from AgroLiquid programs #2 (treatments 3), over the grower standard (treatment 1).
- This data is extrapolated out to production in 25 pound boxes per acre (normal yield for fresh market Bell peppers would be 2000 marketable boxes per acre for Ventura county.)
- It would appear that the timing and rates for the Agro Liquid 1 program performed numerically better (about 6%), but similar, to the grower standard program utilized in this trial. Agro Liquid programs 2 performed numerically less than the grower standard program by 3 percent.
- The data from this trial does seem to indicate the strength of an Agro-Culture Liquid program compared to a grower standard program for at least one of the treatment programs, AgroLiquid #1, for the production of fresh market bell peppers.