



Effect of Almond Fertilizer Programs on Leaf Tissue

Bisabri Ag Research and Consulting. Westly, CA - 2018

Experiment Info:

Planted:	06/06/20
Harvest:	
Yield Goal:	
Target Fert.	180-150
Variety:	Nonpariel
Population:	?
Row Width:	21 ft
Prev. Crop:	almonds
Plot Size:	1470 sq
Replications:	6

Soil Test Values (ppm):

pH:

CEC:

%OM:

Bray P1:

Bicarb P:

K:

S:

%K:

%Mg:

%Ca:

%H:

Zn:

Mn:

B:

Objective:

Determine effects of lower P and K application volumes with AgroLiquid on leaf tissue nutrient levels compared to those from conventional treatments.

In the yield report of the 2018 almond experiment in Westly, CA, it was shown that applications of PrG and Kalibrate produced almond yields that were statistically significantly higher than yield from a conventional nutrient program containing 10-34-0 and potassium thiosulfate. Additionally, it was shown that using PrG as the phosphorus source produced yield similar to that with Structure fertilizer which is a more premium product compared to 10-34-0. However, the application volumes of the AgroLiquid products were much lower than those the conventional and premium product. In fact, the Structure/potassium thiosulfate in-season application volume was 16% lower than the 10-34-0/KTS volume, but the PrG/potassium thiosulfate volume was 29% less.

Almond leaf samples collected on May 7 (after 2 applications on March 6 and April 2). Composite sample from 6 replicatons.

trt	%N	%P	%K	%Ca	%Mg	%S	ppm						
							B	Cu	Fe	Mn	Zn	%Na	%Cl
1 10-34-0, Potassium Thiosulfate, Zn	2.99	0.21	2.44	3.09	0.70	0.23	44	8	92	116	35	0.01	0.07
2 Structure, Potassium Thiosulfate, Zn	3.01	0.21	2.42	3.16	0.71	0.23	44	8	97	118	35	0.01	0.07
3 PrG, Potassium Thiosulfate, Zn	3.01	0.20	2.48	3.13	0.71	0.22	44	8	86	121	35	0.01	0.06
4 PrG, Kalibrate, Zn	3.00	0.21	2.43	3.15	0.73	0.23	44	8	96	125	35	0.01	0.06
5 PrG, Kalibrate, M500	3.04	0.20	2.47	3.13	0.73	0.22	43	8	90	126	36	0.01	0.06

Analysis by Dellavalle Laboratory, Inc. Fresno, CA

Note: 1-4 have 9% Zinc solution

Conclusions:

- Note: see the yield report for description of treatments and application dates.
- There were no differences in leaf tissue nutrient levels following two applications of the fertilizer treatments.
- Based on this data, the lower application volumes of the AgroLiquid nutrients were able to meet the nutrient demands similar to those of the higher volumes of the other treatments, as well as the ultimate yield produced.
- Additional samples for tissue testing were not collected in 2018, but further testing will be collected in 2019.