

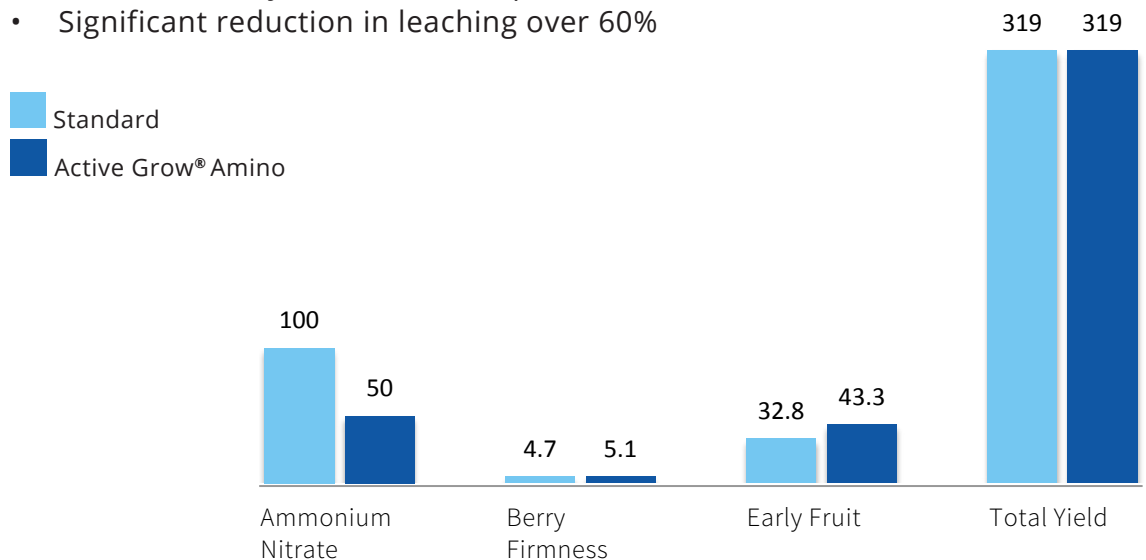
FIELD TRIALS SUMMARY | ACTIVE GROW® AMINO

CAN REDUCTION WINTER STRAWBERRIES

Conducted by Pacific AG Research : Guadalupe, CA

8% ACTIVE GROW® Amino was used to replace 50% reduction CAN

- 30% increase in early fruit yields
- Increased berry sweetness and pressure resistance
- Significant reduction in leaching over 60%



We tested cutting chemical N levels by 50% and replacing it with 8% of our organic Nitrogen.

- ✓ Total nitrogen reduction is 42% which meets state of California reduction guidelines.
- ✓ All key safety parameters such as chlorophyll, canopy development, keeping qualities, disease and phytotoxicity are the same.
- ✓ Early yields from first five harvests are increased by 30% counts and 33% weight. This is important from a commercial point of view since early fruit is more valuable and able to command higher prices than later season fruit.
- ✓ Strawberries treated with *ACTIVE GROW® Amino* were sweeter and firmer than standard grower practice.
- ✓ Overall yield is not different from Control. The early gains in productivity decreased later in the season and at the end the total production came even with standard fertilizer program.

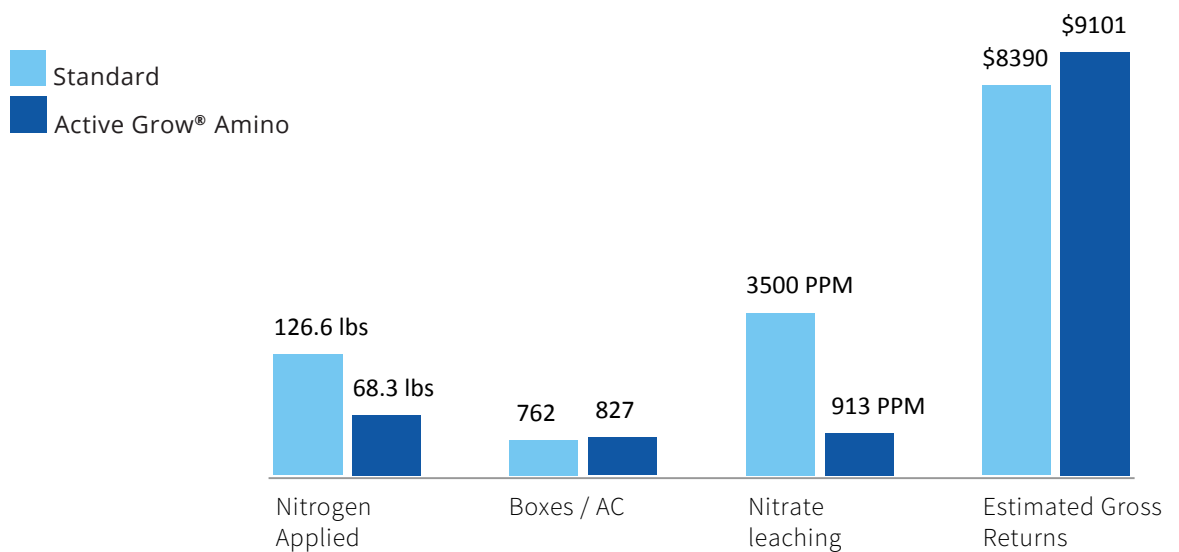
CONCLUSION: using ACTIVE GROW® AMINO allowed reduction of Nitrogen use by 42% without affecting yields.

CAN REPLACEMENT IN CA LETTUCE

Conducted by Pacific AG Research : Salinas, CA

8% ACTIVE GROW® Amino was used to replace 50% reduction CAN

- Significant increase in lettuce size
- 2/3 reduction in Nitrate leaching
- \$700 per AC more revenue



We are cutting total N inputs by over 42% and their chemical fertilizer inputs by 50%.

LETTUCE SIZE AND TOTAL PRODUCTION COUNTS

Industry Standard

Large Lettuces	7.8
Medium Lettuces	24
Small Lettuces	12.8
Total Lettuces	44.6

ACTIVE GROW® Amino Program

Large Lettuces	19
Medium Lettuces	17
Small Lettuces	8.5
Total Lettuces	44.5

- Cumulative leaching of NO₃ (Nitrate).
- Tested by lysimeters.
- Control 423.8 units.
- ACTIVE GROW® Amino treated ranging from 146, 239 and 258.
- Soil leaching reduction of **39% to 65%**.
- Cull counts which reflect non marketable lettuces were reduced by one third of the control.
- The combination of less waste and bigger size provided for increased revenue per hectare of **\$700**.

MINERAL VS. ORGANIC, WITH REDUCED N LEVEL

FIELD TRIAL: MELON

Conducted by LandLab, Italy

Solutions kg	N/ha
Urea	50 urea + 40 urea = 90
Active Grow Amino	50 urea + 40 Active Grow Amino = 90
Active Grow Amino -10%	50 urea + 31 Active Grow Amino = 81

PRODUCTION

	Commercial		Waste		Weight g
	t/ha	%	t/ha	%	
Urea	20.6	63.6	8.80	25.6	1592
Active Grow Amino	24.0	70.6	7.03	19.2	1751
Active Grow Amino -10%	22.4	66.8	7.30	21.9	1670

Organic vs. mineral: higher yield and less wasted fruits

MINERAL VS. ORGANIC, WITH REDUCED N LEVEL

FIELD TRIAL: TOMATO

Conducted by LandLab, Italy

Solutions kg	N/ha
Urea	60 urea + 35 urea + 90 urea = 185.0
Active Grow Amino	60 urea + 35 urea + 90 Active Grow Amino = 185.0
Active Grow Amino -10%	60 urea + 35 urea + 70 Active Grow Amino = 165.0
Active Grow Amino -20%	60 urea + 35 urea + 50 Active Grow Amino = 145.0

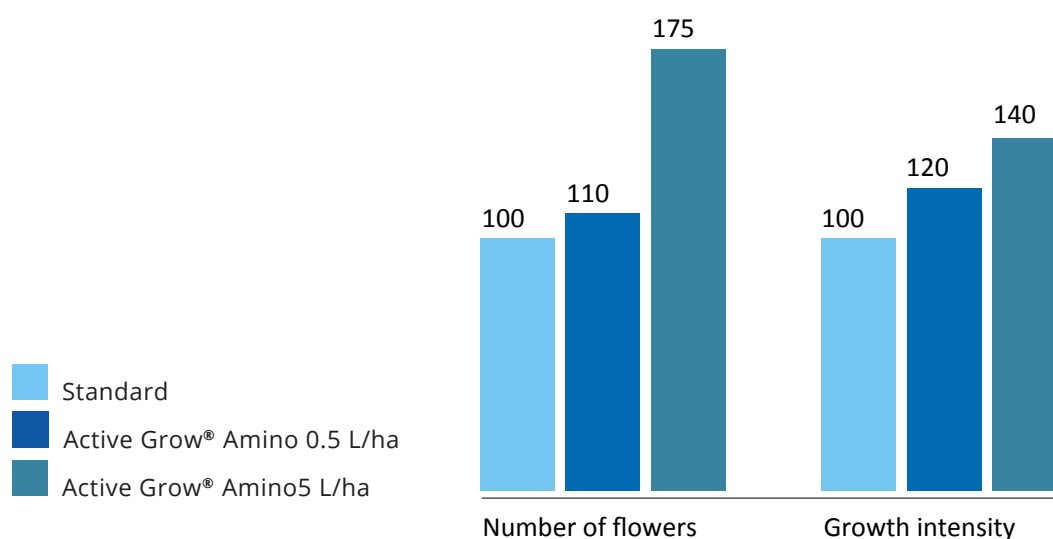
PRODUCTION					
	Commercial		Waste		Weight
	t/ha	%	t/ha	%	g
Urea	97.0	79.4	7.10	5.88	121.7
Active Grow Amino	95.9	77.4	7.34	6.23	123.0
Active Grow Amino -10%	94.8	77.7	8.47	7.15	121.4
Active Grow Amino -20%	91.8	77.0	7.75	6.60	118.5

Organic vs. mineral: similar performances with less N

FIELD TRIAL:

PEACH

Conducted by LandLab, Italy



FIELD TRIAL: STRAWBERRY

Conducted by LandLab, Italy

- Species: Strawberry–Fragaria vesca
- Goal: evaluation of ACTIVE GROW® Amino on strawberry
- Root application
- 2 levels: 1.0 –0.1 ml/plant, in 50 ml water/plant
- 2 kind of application:
- 1 appl. (at transplant)
- 2 appl. (at transplant + after 1 week)
- Parameters: fresh biomass at harvest, mean height of plants, number of flowers, number of fruits
- Control group: without applications

Product	Number of fruits/ 10 plants	
1.0 ml/I I Active Grow Amino	15.0	****
1.0 ml/I II Active Grow Amino	13.7	****
0.1 ml/I II Active Grow Amino	12.7	****
0.1 ml/I I Active Grow Amino	12.3	****
Control	6	****

Biostimulants give significant better results than the control in terms of: health - advanced blossoming period / ripening period.

The root application gave good results: probably, in stress condition (poor growing medium) the biostimulant effect is higher.