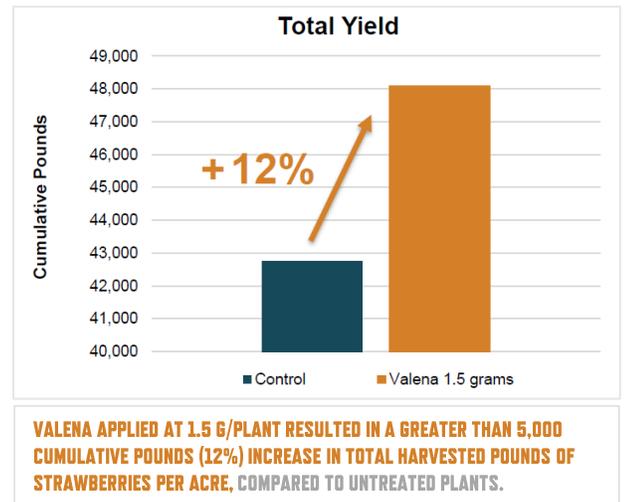




# HIGHER STRAWBERRIES YIELD WITH VALENA™

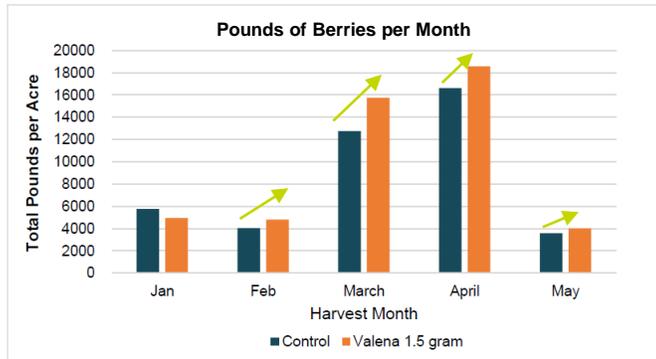
## BENEFITS OF VALENA

- Valena, when applied to the soil, improves the water and nutrient uptake that leads to an increase in fruit yields and total harvested pounds.
- Valena helps commercial strawberry growers to achieve an increase in total income greater than ~\$3,000.
- Valena helps farmers grow healthier crops and minimize exposure to the ever-increasing volatility of environmental stresses and changing market conditions.



## VALENA™ HAS A POSITIVE IMPACT ON STRAWBERRY PRODUCTION

**THIRD PARTY FIELD TRIAL - Crop:** Commercial strawberry (var. *fontersas*). **Traditional growing practice:** Controlled release fertilizer (CRF) at 500 lbs./acre. placed under the planting depth of the plants. Pre-punched holes into the beds prior to planting at 8-9" depth. **Valena treatment rate:** 1.5 g/plant in the bed hole prior planting. **Harvest:** Strawberries picked twice per calendar week on average from January 8, 2019 to May 6, 2019.

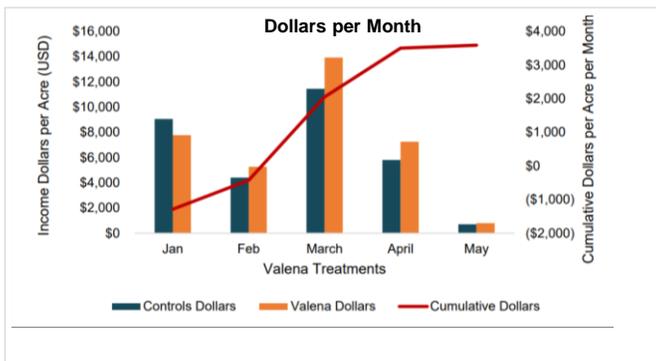


INCREASE IN FRUIT POUNDS PER ACRE STARTING IN THE SECOND MONTH AND CONTINUED THROUGHOUT THE HARVEST WHEN STRAWBERRIES ARE TREATED WITH VALENA IN THE GROWING MEDIA.

Total pounds per acre of strawberries by harvest month for Valena treated and control plants.

## VALENA HELPS INCREASE INCOME \$/ACRE OF PLANTS

The strawberry price averages were obtained weekly for the duration of the trial from the published USDA Shipping Point Market Price Reports and weekly income was calculated<sup>1</sup>.



THE INCOME DOLLARS PER ACRE OF PLANTS TREATED WITH VALENA WERE HIGHER THAN THE CONTROL WITH A RETURN GREATER THAN \$3,425 OF ADDITIONAL INCOME STARTING IN THE SECOND MONTH AND CONTINUED THROUGH HARVEST!

Total revenue dollars per acre by month with the respective strawberry price per pound throughout the season for Valena treated and control plants.

	Control		Valena		Cumulative Increase Over Control	
	Total Pounds per Acre	Total Income per Acre (\$)	Total Pounds per Acre	Total Income per Acre (\$)	Total Pounds per Acre	Total Income per Acre (\$)
Jan	5,760	9,217	4,955	7,769	(805)	(1447)
Feb	4,038	4,405	4,810	5,266	(34)	(586)
March	12,751	11,445	15,738	13,919	2,953	1,888
April	16,621	5,805	18,568	17,255	4,899	3,338
May	3,579	716	4,016	803	5,335	3,425
<b>Total</b>	<b>42,749</b>	<b>31,587</b>	<b>48,087</b>	<b>35,012</b>	<b>5,335</b>	<b>3,425</b>

Comparison of total pounds and income per acre by month between Valena treated and Control plants. *Increased income = (cost of harvesting) - (total income for the respective week).*

## ABOUT VALENA

- Dry granular fertilizer
- Derived from Kemin proprietary strain of whole dried cell *Euglena gracilis* unicellular algae rich in paramylon (50%)
- Paramylon: Large carbohydrate storage molecule made up of linear chains of unique 1,3-β-glucan favorable for plant growth.

## GUARANTEED ANALYSIS

- Beta-glucan ≥50%
- Total Nitrogen (N) ≥2%
- Total Phosphorus (P<sub>2</sub>O<sub>5</sub>) ≥1%
- Total Potassium (K<sub>2</sub>O) ≥0.2%

## SMART MODE OF ACTION

Valena primes the soil by breaking down and releasing 1,3-β-glucan viewed as a Pathogen-Associated Molecular Patterns (PAMPs) by the plant's cells. Consequently, the plant elicits its defense responses and increases nutrient uptake to fight off potential pathogens. However, with no real threat, this leads to thriving growth.

## DIRECTIONS FOR USE

- **Sites:** Tomato transplant beds or field.
- **Recommended rates:**
  - **Bed treatment:** 1.5 g/plant (hole)
- **Recommended application methods:**
  - **Bed treatment:** Incorporate the desired amount into the bottom of the bed prior to planting
- **Recommended timing:** One application/season
  - **Transplant bed treatment:** At field transplanting

Acknowledgments David Holden, Holden Research and Consulting, Oxnard, CA.

Source: shutterstock\_1259514916, TL-19-17749, 1-USDA Marketing Service Custom Report <https://www.marketnews.usda.gov/mnp/lv-report-config-step1?type=shipPrice>; 2-University of California Agriculture and Natural Resources Cooperative Extension and Agricultural Issues Center UC Davis Department of Agricultural and Resource Economics 2016 Sample Costs To Produce And Harvest Strawberries

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