

Tomato: Soltellus™ Increases Processing ROI by 32%

Tomato Case Study



Soltellus™ is a multifunctional, water-soluble, biodegradable polymer designed to enhance nutrient retention, soil health, water quality, and crop performance. Soltellus™ helps retain and release nutrients to growing plants while fostering a thriving soil microbiome. Soltellus™ is a sustainable solution for improving soil health and crop yields.

Performance Proven on Processing Tomatoes

Yield and Quality Gains



A 2025 field trial was conducted in Rolinda, California by Lange Research to evaluate Soltellus™ 2000L on processing tomatoes (HM 5522) under standard drip fertigation practices. The trial used a randomized complete block design with six replications per treatment. An Untreated Control was compared to tomatoes receiving three applications of Soltellus™ 2000L.



Soltellus™ 2000L was applied via drip irrigation at a rate of 2qt/acre alongside standard fertility on three dates (April 8, April 29, May 20). Tomato fruit was harvested by color class (red, breaker, green, total), and yields were converted to lb/acre.

Soltellus™ 2000L increased red by 33.5%, breaker by 14.1%, green by 48.1% and total fruit yield by 34.9%. Yields for red, green and total fruit were statistically significant at the 85% confidence level ($\alpha = 0.15$). No negative effects on tissue nutrient concentrations or plant health were observed in either treatment.

These results suggest that Soltellus™ 2000L enhanced nutrient and water availability during fruit development, contributing to better harvest uniformity, higher marketable yield, and improved crop quality.

Fruit Color	Untreated (lb/ac)	Soltellus™ 2000L (0.5 gal/ac)	Difference (lb/ac)	% Change vs Control
Red	50,228	67,071	+ 16,843	+ 33.5
Breaker	6,300	7,190	+ 890	+ 14.1
Green	15,167	22,465	+ 7,298	+ 48.1
Total (All Colors)	71,694	96,726	+ 25,032	+ 34.9

ESTIMATED RETURN ON INVESTMENT

Based on the increase in readily marketable yield (red + breaker categories) observed in this trial, Soltellus™ 2000L provided an average gain of 17,733 lb/acre (=8.87 tons/acre) of marketable fruit. Using the 2025 California Tomato Growers Association base contract price of \$109 per ton, this corresponds to an added gross return of ~\$967 per acre. Soltellus™ 2000L cost \$10 per acre per application (0.5 gal/ac), or \$30.00 total. This would generate an ROI of \$32:1.

ROI reflects yield response of red and breaker fruit only, and does not include additional income available from sale of gas-ripened green fruit, or include potential irrigation or soil-health benefits.