

# Pistachio: Soltellus™ Generates a \$26:1 ROI for Growers

## California Pistachio Case Study



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

## Performance Proven on California Pistachios

### Enhanced Yield, ROI and Profit

Trial conducted by Sawtooth Ag Research, Inc. (Steve Deitz)

Near Famoso, CA, Soltellus was tested vs. an untreated check on an established twenty-year-old drip-irrigated orchard of 'Kerman' pistachios. Normal fertility and crop protection programs and cultural and agronomic practices were followed to ensure the health of the plants and integrity of the entire study.

The trial had two treatments: 1) Untreated Control and 2) Soltellus at 2 qt/acre (x 3 applications) applied in-Season at Petal Fall, Early Nut Fill and Late Nut Fill (5/5/25, 6/17/25 and 7/22/25 respectively). Soltellus treatments were applied as a soil drench during an irrigation event to move the Soltellus into the root zone. Each treatment consisted of 4 trees (20' wide x 18' Long) for a total plot area of 1440 ft<sup>2</sup> and each treatment was replicated 6 times in a randomized complete block design.

Yield data was taken by treatment and replication by counting clusters per plot replication and multiplying by average cluster weight in pounds. A 200 nut sample was collected from each plot, dried in dehydrators, and used to determine crackout and nut meat weights. Gross income was calculated based on \$2.25 per pound of open nuts. Net profit was calculated by subtracting the cost of Soltellus (\$10.00 per application x 3 applications = \$30.00) from the calculated gross return per acre.

The graphs below show the yield and profitability differences in favor of the Soltellus treatment:



The use of Soltellus increased the number of nut clusters produced per acre, enhanced average nut meat weight, gave a \$26:1 Return on Investment to the grower and generated an additional Net Profit of \$755.00 per acre after accounting for the cost of Soltellus for the three in-season applications.