# A BETTER NUTRIENT BLEND

Innovation has always been at the heart of the J.R. Simplot Company. And with our new high-grade OneUP™ liquid fertilizer, that commitment to constant improvement has been brought to a whole new level.

No other fertilizer on the market combines the same advanced technologies. OneUP™ is both a plant stimulant and soil builder, rich in low-salt liquid and featuring advanced photosynthesis and hormone uptake technologies. The proprietary nutrient blend will help producers boost yields—and profitability.

**Guaranteed analysis:**
4-14-5 with 0.05% Cu and 0.70% Zn

oneUP™ by Simplot

# Trial Data Summary on Citrus, Almonds, and Grapes

## Introduction

Agronomist Stephen S. Deitz of Sawtooth Ag Research ran field trials on citrus (Cara cara navel), sweet almonds (Nonpareil), and table grapes (Vitis vinifera) in the heart of California's Central Valley. The trial evaluated effects of a new fertilizer product, Simplot OneUP™, on yield of orchard and vineyard crops.

## Background

OneUP™ is designed to produce stronger root systems, increased yield, and improved soil health. It can be applied on or near the roots or used as a foliar application midseason. Testing was needed to determine its effectiveness in increasing yields in California's vineyards and orchards.

## Methods

The treatments were delivered to the fields with a combination of foliar and soil applications throughout the season. Each study was a randomized complete block design with multiple replications.

## Results

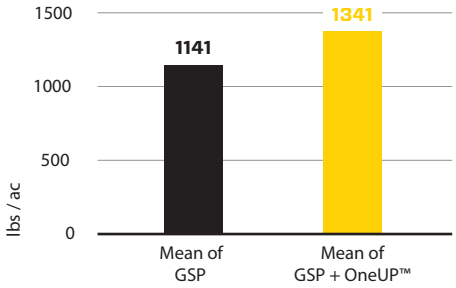
Application of OneUP™ increased mean yields by 7–19 percent. Almonds increased yield by 200 lbs/acre while maintaining nut weight. Citrus increased yield by 920 lbs/ac with 10 percent increase in fruit weight. Grape size increased by 17.2 g/50 berries.

Simplot

# Almonds OneUP™

**Sweet Almond**
**Location:** Poplar, CA
**Investigator:** Sawtooth Ag Research—Stephen S. Deitz
**Study Design:** Randomized complete block—replicated
**Soil:** Sandy loam

**OneUP™ Treatments:**
A total of 10 gallons + 3 quarts per acre of OneUP™ was applied during the growing season (see details below).




**Yield Increase**


200 lbs/ac

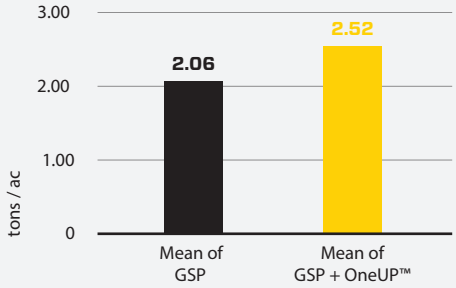
**Summary:**
A season-long program of OneUP™ was applied to mature almond (cv. Nonpareil) to evaluate yield and crop response. OneUP™ was applied at bloom and post bloom at 1 and 2 qt/ac in a foliar application program. In addition, OneUP™ was applied twice as a drench at 5 gal/ac to the soil while irrigation was running at nut sizing stages just after jacket split and again 30 days later. Foliar applications were made with a mistblower and delivered at 100 gal/ac. Each plot consisted of four trees, and each treatment was replicated four times. Yield data was taken by sampling harvested nuts in the windrow and determining the number of nuts per plot. A 100 nut sample was taken from each plot and cracked out for turnout and meat weights. The untreated plots were found to have nut population of 28.7 nuts per sq./ft. (not in a windrow) and nut meat weight of 1.08 g/nut, corresponding to yield of 1,141 lbs/ac of nut meats. OneUP™ treated trees averaged 34.5 nuts per sq./ft., nut meat weights of 1.05 g/nut, and corresponding yield of 1,341 lbs/ac.

**Conclusions:** This site had almond trees with very consistent trunk measurements. 2016 yield in this block was characterized by a light set. The untreated trees showed a light yield at 1,141 lbs/ac. The OneUP™ program applied in this block showed a 200 lb/ac yield increase (15%) over grower standard and still maintained nut weight.

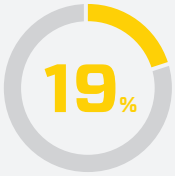
# Citrus OneUP™

**Cara Cara Navel**
**Location:** Elderwood, CA
**Investigator:** Sawtooth Ag Research—Stephen S. Deitz
**Study Design:** Randomized complete block—replicated
**Soil:** Clay loam

**OneUP™ Treatments:**
A total of 10 gallons + 3 quarts per acre of OneUP™ was applied during the growing season (see details below).




**Yield Increase**




.46 tons/ac—920 lbs/ac

15.8 more fruit/ac
(136.3 vs 120.5)

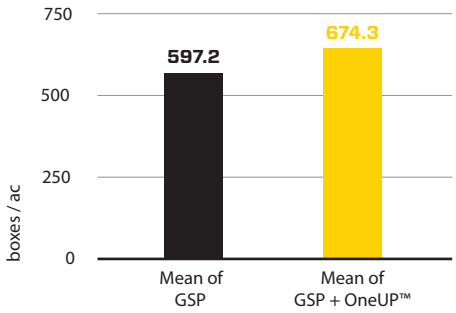
**Summary:**
A season-long program of OneUP™ was applied to fourth leaf citrus (cv. Cara cara navel) to evaluate yield and crop growth. OneUP™ was applied at bloom and petal fall at 1 and 2 qt/ac in a foliar application. An additional 5 gal/ac soil drench was made twice with irrigation at bloom and fruit size. The foliar applications were made with a mistblower and delivered at 100 gal/ac. Each plot consisted of four trees, and each treatment was replicated four times. The untreated plots averaged 120 fruit per plot weighing 61.4 lbs with average fruit weight of 0.51 lbs. OneUP™ treated trees averaged 136 fruit per plot weighing 75 lbs with an average fruit weight of 0.56 lbs.

**Conclusions:** This site started (and ended) with citrus trees in the fourth season with very consistent trunk measurements and tree sizes. The OneUP™ program applied in this block showed a 920 lb/ac yield increase (19% increase over grower standard). Trees treated with OneUP™ also had 10% heavier fruit when compared with grower standard.

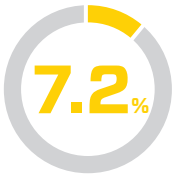
# Grapes OneUP™

**Table Grape (Vitis vinifera)**
**Location:** Delano, CA
**Investigator:** Sawtooth Ag Research—Stephen S. Deitz
**Study Design:** Randomized complete block—replicated

**OneUP™ Treatments:**
A total of 11 gallons + 1 quart per acre of OneUP™ was applied during the growing season (see details below).




**Berry Size Increase**




GSP berry size:
223 g/50 berries

OneUP™ berry size:
240.2 g/50 berries

**Summary:**
A season-long program of OneUP™ was applied to mature table grapes (Crimson) to evaluate yield and crop response. OneUP™ was applied five times throughout the season at 10 inches of growth, petal fall, and twice at berry size five days apart. Foliar applications were made with a mistblower and delivered at 1 qt/ac for the first treatment and 2 qt/ac. Soil drench applications were made at a 5 gal/ac rate twice. Each plot consisted of four vines, and each treatment was replicated six times.

**Conclusions:** OneUP™ applied in a 5 application program to table grapes showed 75 boxes per acre increase (12% increase) in yield when compared with the untreated. More importantly, OneUP™ treated vines showed an increase (38%) in #1 bunches and this was also reflected in the berry size data. Heavier berrys (7%) and bunches was the primary reason for more yield.