



Trial Data Summary on Cherries and Grapes

Introduction

Agronomist Stephen S. Deitz of Sawtooth Ag Research ran two-season field trials on sweet cherries (*Prunus avium*) and table grapes (*Vitis vinifera*). The two-season 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 the vineyards and orchards of Western America.

Methods

The treatments were delivered to the plants 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 grape yield by 21% (132 more boxes/acre), berry size by 7%, and quantity of #1 bunches by 38%. In cherries, application produced 21% more large fruit and 50% less small fruit when compared with the untreated plots. With a \$15/box premium for fruit size increases, OneUP increased the cherry grower's returns by an average of \$650/acre.

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





Cherry OneUP™

Sweet Cherry (*Prunus avium*)

Location: Plainview, CA

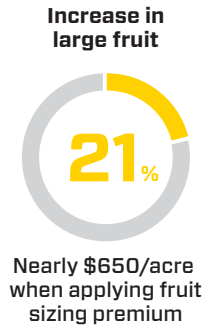
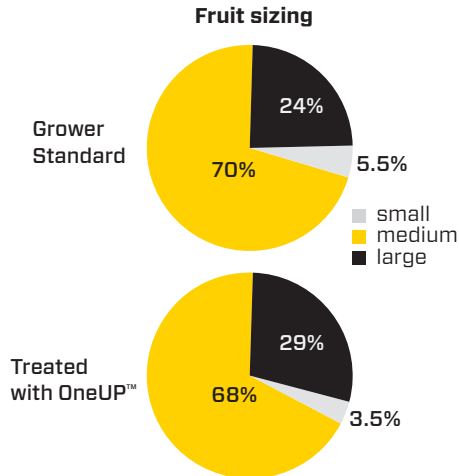
Investigator: Sawtooth Ag Research—Stephen S. Deitz

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).



Summary: A two-season-long program of OneUP™ was applied to mature cherry (cv. Tulare) to evaluate yield and crop response. OneUP™ was applied at bloom and post bloom at 1 and 2 qts/ac in a foliar application program. Additional 5 gal/ac drench applications were made to the soil while irrigation was running at bloom and again 30 days later. Foliar applications were made with a Stihl mistblower and delivered at 100 gpa. Each plot consisted of four trees and each treatment was replicated four times.

Conclusions: While the OneUP™ applications provided a modest yield increase (3%), the treated fruit showed 21% more large fruit and half as much smaller fruit when compared to the untreated plots. When applying a \$15 premium per box to medium-size fruit over small fruit and a similar premium of large fruit over medium sized fruit, OneUP™ plots returned roughly an average of \$650/acre more each year to the grower.

Grapes OneUP™

Table Grape (*Vitis vinifera*)

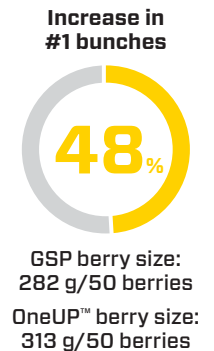
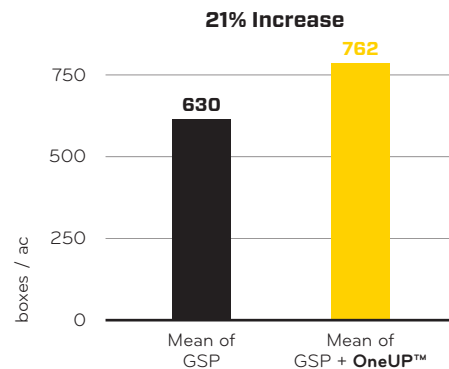
Location: Delano, CA

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).



Summary: A two-season-long program of OneUP™ was applied to mature table grapes (cv. 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 sizing five days apart. Foliar applications were made with a mistblower and delivered at 1 qt/ac for the first treatment and 2 qt/ac twice. Soil drench applications were made at a 5 gal/ac twice. Each plot consisted of four vines, and each treatment was replicated six times.

Conclusions: Incorporating OneUP™ into a table grape program over two seasons showed a 132 box per acre increase (21% 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. Yield increases were attributed to heavier berries (7%) and a greater number of bunches.

4R NUTRIENT STEWARDSHIP

OneUP™ liquid fertilizer promotes and supports 4R Nutrient Stewardship—a best management practice for fertilizer that's accepted worldwide—by applying the right source of nutrients at the right time in the right place and at the right rate.

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