

# TruResponse®

## TRIAL DATA



## PRB9® Application Rate and Method in Citrus

October, 2024

### OBJECTIVE

Evaluate the effects of the rate and application method of PRB9 applications on the yield and quality of citrus fruit during winter stress.

### OVERVIEW

- Plants in the field can be exposed to many kinds of abiotic stress including severe cold which can inhibit the normal growth and activity of a plant leading to decreases in yield and quality of a crop.
- PRB9 contains an osmolyte compound which increases resistance to abiotic stress and optimizes conditions for improved crop yield and plant performance.

### TRIAL DETAILS

**Crop:** CITRUS

**Year:** 2023-24

**Number of Trials:** 3

**Location:** United States - Central California

**Data Source:** Field studies were conducted by third-party, independent researcher

#### Treatments:

- Untreated Control (UTC)
- PRB9 soil applications; 3 applications at either a low or standard rate
- PRB9 foliar application; 1-3 applications at standard rate depending on temperatures
- Soil or foliar applied competitor products

**Cultivar:** Tango or Murcott

**Cropping Conditions:** Trial conformed to local cropping practices.

**Application Rate:** 32 or 42 fl oz/ac

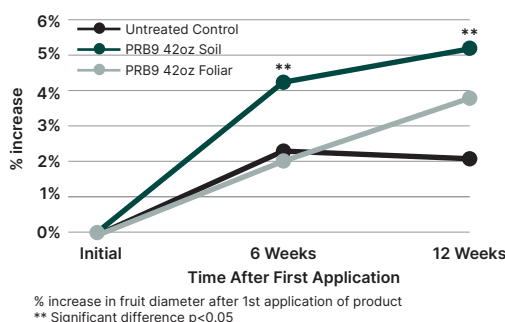
**Application Method:** Foliar applications made with mist blower; soil applications applied as a drench.

**Application Timing:** Foliar application made before expected freezing temperatures. Soil applications made on regular basis during cold season.

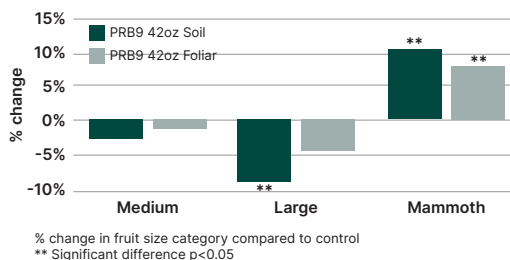
### RESULTS

#### Performance in Citrus

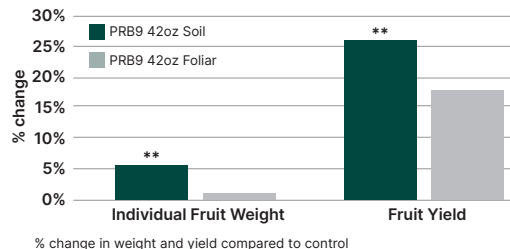
##### Fruit Diameter Increase



##### Citrus Size Classes



##### Fruit Weight and Yield



### SUMMARY

- Soil applied PRB9 increased fruit diameter shifting the harvest into more of the larger, heavier fruits and producing higher overall yields.
- Foliar applications of PRB9 produced similar results to the soils applications although the effects were not quite as large.

**5%**  
INCREASE IN  
FRUIT DIAMETER

**9%**  
INCREASE IN  
MAMMOTH  
SIZED FRUIT

**.17<sup>oz</sup>/FRUIT**  
INCREASE IN  
INDIVIDUAL  
FRUIT WEIGHT

**2.8<sup>T</sup>/AC**  
INCREASE IN  
OVERALL FRUIT  
YIELD

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location to location and from year  
to year. This result may not be an  
indicator of results you may obtain,  
as local growing, soil and weather  
conditions may vary. Growers  
should evaluate data from multiple  
locations and years whenever  
possible.

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