

TruResponse*





PRB9® Application Rate and Method in Citrus

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:

- 1. Untreated Control (UTC)
- 2. PRB9 soil applications; 3 applications at either a low or standard rate
- 3. PRB9 foliar application; 1-3 applications at standard rate depending on temperatures
- 4. 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

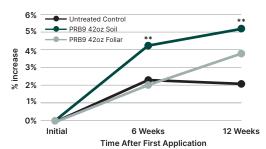
Application Method: Foliar applications made with mist blower; soil applications applied as a drench.

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

RESULTS

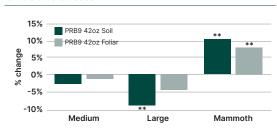
Performance in Citrus

Fruit Diameter Increase



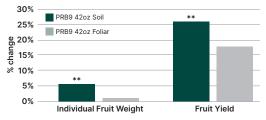
% increase in fruit diameter after 1st application of product
** Significant difference p<0.05

Citrus Size Classes



% change in fruit size category compared to control
** Significant difference p<0.05

Fruit Weight and Yield



% change in weight and yield compared to control

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.

October, 2024

5%

INCREASE IN FRUIT DIAMETER

9%

INCREASE IN MAMMOTH SIZED FRUIT

17oz/

INCREASE IN INDIVIDUAL FRUIT WEIGHT

2.8_{T/AC}

INCREASE IN OVERALL FRUIT YIELD

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Individual results may vary, and performance may vary from 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.

For more information, go to **cropnutrition.com**