OBJECTIVE

To evaluate the impact of three cover spray protocols with Timac Agro USA's bionutritional products on fruit sizing, firmness and total soluble solids (BRIX%) on early season variety of Peach – Ruby Prince.

Site Location:

Fort Valley, GA

Researchers:

Michael Pisciotta, CCA Timac Agro USA

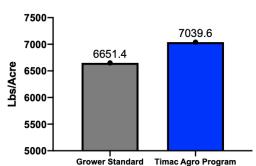
STUDY INFORMATION

Tree Planting Date 2013

Harvest Dates 22-May-19, 25-May-19, 27-May-19

Crop Variety Ruby Prince 132

Harvest Volume of Ruby Prince Peach for Three Pickings



TIMAC AGRO PRODUCTS



KEY FINDINGS

+ 388 lbs/acre

(7.76 more bu/acre with 297 less peaches*)

ROI per acre of Timac Program @\$0.75/Lb:

\$243.14

35.2%+" more fruit

in >2.75" desirable market category

Fruit firmness (lbs/force) was much improved:

59.5% + over Grower Standard

based on picking volume of trial

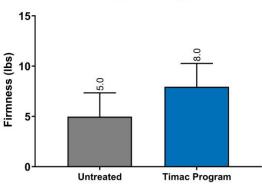
TIMING

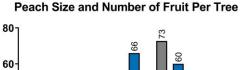
| Treatment | Application Rate | | |
|--------------------------|--|--|--|
| Control | Grower Standard Program | | |
| Timac Agro Spray Program | Fertileader Gold, 1.5 Qt/Ac @ Early Shuck Split (3-April) | | |
| | TimaCal, 1.5 Qt/Ac, 14 days following 1st application (17-April) | | |
| | TimaCal, 2 Qts/Ac, 14 days following 2 nd application (1-May) | | |
| | TimaCal, 2.5 Qt/Ac, 14 days following 3 rd application (14-May) | | |



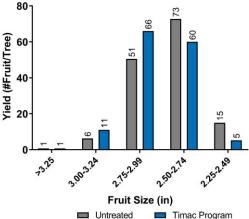
FRUIT SIZING & FIRMNESS

Timac Program Effects on Ruby Prince Peach Firmness





Timac Program Effects on Ruby Prince



DATA COLLECTION

- Soil and Tissue tests were done
- Sizing trays were used to measure fruit picked from trees, all sizes were counted
- Scales were used to measure final weights in each size category
- A penetrometer was used to determine fruit firmness on 10 randomly selected fruit of the same size and color per picking
- A refractometer was used to measure total soluble solids or sugar (brix, %) on 10 randomly selected fruit of the same size and color per picking.

RETURN ON INVESTMENT

| TIMAC TREATMEN | NT | | | |
|-----------------|-------------------|--------------------|------------------|-----------------|
| Sizing Category | Timac Treat. (#) | Total Wt (Lbs.) | \$/lb | |
| >3.25 | 3 | 1.8656 | \$0.75 | \$1.40 |
| 3.00-3.24 | 44 | 22.1584 | \$0.75 | \$16.62 |
| 2.75-2.99 | 264 | 105.3338 | \$0.75 | \$79.00 |
| 2.50-2.74 | 240 | 78.6038 | \$0.75 | \$58.95 |
| 2.25-2.49 | 21 | 5.3614 | \$0.75 | \$4.02 |
| Total # | 572 | 213.323 | | \$159.99 |
| | T. Wt - 132 trees | 7039.659 | X 33 = 132 Trees | \$5,279.74 |
| | | lbs/ac | | Gross |
| GROWER STANDAR | RD | | | |
| Sizing Category | Gr. Standard (#) | Total Wt (Lbs.) | \$/lb | |
| >3.25 | 3 | 1.9316 | \$0.75 | \$1.45 |
| 3.00-3.24 | 25 | 12.4432 | \$0.75 | \$9.33 |
| 2.75-2.99 | 202 | 81.0216 | \$0.75 | \$60.77 |
| 2.50-2.74 | 291 | 90.7478 | \$0.75 | \$68.06 |
| 2.25-2.49 | 60 | 15.4154 | \$0.75 | \$11.56 |
| Total # | 581 | 201.5596 | | \$151.17 |
| | T. Wt - 132 trees | 6651.4668 | X 33 = 132 Trees | \$4,988.60 |
| | | lbs/ac | | Gross |
| | | | | |
| Difference | from Revenue of | Timac Program over | Grower Std. | \$291.14 |
| | | MINUS | Spray Program | <u>-\$48.00</u> |
| | Return on Invest | Prince Variety | \$243.14 | |

Trial ID: DT-19-SE-PEA-FLGO-TC-2

RESULTS AND CONCLUSIONS

The Timac Agro spray program made a quantifiable improvement on Ruby Prince peach yield, sizing and firmness over Grower Standard practices. Proper timing of Timac Treatment is critical but can be achieved without changing current Integrated Pest Management Cover Spray program.

Author:

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3/17/2021

