Kim Blue Field Trials: 2010

Dave Trinka
Director of Research

Kim Blue

- Plant growth regulator
- Synthetic cytokinin
- Cytokinins involved in cell division
- Label approved 5/10
Kim Blue

- Enhanced fruit set of RE cvs.
- Maturity delay
- Maintain or enhance fruit size
- Benefit compared to ProGibb

Hypothesis

- Post bloom application of Kim Blue will delay maturity of Bluecrop and Elliott
2010 Great Lakes Trials

- Bluecrop and Elliott
- 8 oz/acre
- 75 gal water
- Kinetic @ .1% v/v

Kim Blue Treatments - Timing

- Control
- PF – complete petal fall
- PF10 – 10 days after PF
- PF20 – 20 days after PF
Sites

• Hodgman Blueberry Plantation
• Cornerstone Ag
• New Day Farms
• DeGrandchamp Blueberry Farm

Kim Blue 2010 - Bluecrop

• Phytotoxicity to Bluecrop fruit
• Symptoms appeared 3-5 weeks after application
• Foliage unaffected
• Bluecrop trial discontinued
Albert Einstein

"If we knew what it was we were doing, it would not be called research, would it?"

Elliott Yield Data - Hodgman

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Lbs/bush*</th>
<th>Berries/cup (avg)</th>
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</thead>
<tbody>
<tr>
<td>Control</td>
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*Total of 3 harvests
Elliott – Hodgman

- 33-95% yield increase
- No effect on fruit size
- Initial harvest delayed 7 days vs. control
- Final harvest delayed 18 days vs. control

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Elliott Yield Data – New Day

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Lbs/bush</th>
<th>Berries/cup (avg)</th>
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</thead>
<tbody>
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<tr>
<td>PF20</td>
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*Total of 4 harvests
Elliott – New Day

- Yield increases at PF and PF10 timings
- Initial harvest delayed 7 days; final delayed 8 days
- % crop harvested by 8/20/10
  - Control – 95% (3 harvests)
  - Treated – 82% (2 harvests)

Elliott Yield Data – Cornerstone Ag

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<th>Treatment</th>
<th>Lbs/bush*</th>
<th>Berries/cup (avg)</th>
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*Total of 5 harvests
Elliot – Cornerstone Ag

- Control out-yielded treated
- No effect on fruit size
- Initial harvest delayed 10 days; final 13 days
- % crop harvested by 8/23
  - Control: 82% (3 harvests)
  - Treated: 58% (2 harvests)
Economics – New Day

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<th>$ Value</th>
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$1.98/lb

$2.54/lb
### Economics – Cornerstone Ag

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$2.58/lb $3.43/lb

### Summary

- Kim Blue applied after petal fall caused a delay in Elliott fruit maturity
- Initial harvest delayed 7-10 days
- Final harvest delayed 8-18 days
- Maturity delay not influenced by crop load
- Inc. fruit: leaf ratio?
Summary

- Kim Blue-treated Elliott had higher yields than control in most, but not all trials
- Berry size was not affected
- Berry size not responsible for yield differences
- Kim Blue application enhanced Elliott fresh returns

Considerations for 2011

- Proceed with caution and on a limited area
- Use 50 GPA minimum
- Do not use a surfactant
- Single application: 8 oz/A, 10-15 days after petal fall
- Split application: 4 oz/A at 75% bloom plus 4 oz/A, 14 days later
Kim Blue Contact Info

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  Fresno, CA

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  Phone: 813-781-0902