Citrus There and Here: Perspectives on Pest Management from Florida

Eric Middleton, UC Cooperative Extension Farm and Nursery Expo, November 10, 2022
Citrus in Florida
What does the situation look like?
Outline

Citrus in Florida
What does the situation look like?
Consequences of Asian Citrus Psyllid and Huanglongbing
Damage to citrus industry
Current management
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Consequences of Asian Citrus Psyllid and Huanglongbing
Damage to citrus industry
Current management
Downstream Effects
Hibiscus Mealybug
My Background
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Conducted research at Citrus Research and Education Center
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Studied citrus pests/production in Florida
Focused on insect pests
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California citrus was surprising…
Why this talk?
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Florida citrus is profoundly different than California
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Many in California don’t know what Florida is like
Only a general sense of “It’s bad”
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Understand the past to avoid a possible future.
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Understand the past to avoid a possible future.

Help provide perspective.
Asian Citrus Psyllid/Huanglongbing is the lens by which to view Florida citrus production.
Asian Citrus Psyllid and Huanglongbing Overview
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Asian Citrus Psyllid (ACP) *Diaphorina citri*
Asian Citrus Psyllid and Huanglongbing Overview

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Sap feeding insect, targets new flush
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Spread by feeding ACP
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Huanglongbing (HLB)
- Bacterium that lives in phloem
- Causes systemic disease
- Spread by feeding ACP
- No cure: trees lose roots, dies back
  - Fruit is bitter, stays green
ACP and HLB in California
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ACP found in 2008
Decently widespread
ACP and HLB in California

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HLB found in 2012
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Area-wide treatment and quarantines
Remove trees with HLB
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Prevention and vigilance

Remove trees with HLB
ACP and HLB in Florida
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ACP found in Florida in June 1998
Quickly spread to all citrus growing counties
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What has this meant for Florida citrus?
Citrus Production in Florida
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Acres of Citrus (Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres</th>
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</thead>
<tbody>
<tr>
<td>1995</td>
<td>750</td>
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<tr>
<td>2000</td>
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<tr>
<td>2005</td>
<td>750</td>
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<tr>
<td>2010</td>
<td>0</td>
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<tr>
<td>2015</td>
<td>0</td>
</tr>
<tr>
<td>2020</td>
<td>0</td>
</tr>
</tbody>
</table>
Citrus Production in Florida

Acres of Citrus (Thousands)

- 1995: 750
- 2000: 750
- 2005: 500
- 2010: 250
- 2015: 0
- 2020: 0
Citrus Production in Florida

Acres of Citrus (Thousands)

2004: 748,555 acres