Welcome to
Florida Small Farms and Alternative Enterprises Conference
Growing Blackberry as Annual Crop in Florida
The 2014 Educational Program Committee is pleased to share conference educational materials with you under the condition that they are used without alteration for educational and non-commercial use only. All materials are protected by copyright law. The authors kindly request their work is properly cited, including the date of publication.

For more information on Small Farms, visit our website at: http://smallfarms.ifas.ufl.edu/ or contact your local County Extension Agent.

For inquiries about this topic, please contact:
Danielle Treadwell, Educational Program Chair.
Phone: (352) 273-4775
Email: ddtreadw@ufl.edu

Suggested Citation: Author Full Name. Title of Presentation or Handout. 2014 University of Florida-IFAS and Florida Agricultural and Mechanical University-CAFS Florida Small Farms and Alternative Enterprises Conference. August 1-2, Kissimmee, FL.
Growing Blackberry as Annual Crop in Florida

Fumiomi Takeda, PhD
Appalachian Fruit Research Station
Kearneysville, WV 25430
Current (perennial) blackberry production systems

Factors that limit profitability
• Lack of chill hours in South/Central Florida
  Hot, wet, and humid environment
• Parasitic Alga (Orange cane blotch)
• Leaf spot (Cercospora), cause defoliation
• Virus
Alternative Scenario

• Produce long-cane blackberry plants in the North (ready to flower immediately)
• Ship transplants to growers in Florida in late fall to late spring (like strawberry plants)
• Grow long-cane plants in soil or pot
• Fertigate and harvest from March to June
• Generate income within months
• Possibly carry plants into Year 2
1. In-ground rooting
2. TC Plant
   - Increase primocane number
   - Dig
   - Cold Treatment and Transport
3. Rooting in container
   - Transport to fruit production site
Tall-cane production procedure #3

- Rotating cross-arm
- Lateral canes
- Training wire on the cross arm
- Training wire at top of post
- Primocane
  - (horizontal)
  - (vertical)

US Patent No. 8,327,578 B1
Primocane

RCA trellis post

Cross-arm

Proximal section

Lateral cane

Distal section

Pot

US Patent No. 8,327,578 B1
Effect of cultivar and propagation method on growth and developmental parameters

<table>
<thead>
<tr>
<th></th>
<th>Nodes/ cane</th>
<th>Budbreak</th>
<th>Nodes with flower shoot</th>
<th>Flowers/cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Triple Crown</strong></td>
<td>37 b&lt;sup&gt;z&lt;/sup&gt;</td>
<td>70 a</td>
<td>12 b</td>
<td>7.0 a</td>
</tr>
<tr>
<td><strong>Siskiyou</strong></td>
<td>57 a</td>
<td>69 a</td>
<td>23 a</td>
<td>3.1 b</td>
</tr>
<tr>
<td><strong>Long Canes</strong></td>
<td>32 b</td>
<td>64 b</td>
<td>10 b</td>
<td>4.6 a</td>
</tr>
<tr>
<td><strong>Looped Canes</strong></td>
<td>62 a</td>
<td>74 a</td>
<td>26 a</td>
<td>5.3 b</td>
</tr>
</tbody>
</table>

Mean within a column and cultivar or system followed by the same letter do not differ according to T-test ($P < 0.05$).
<table>
<thead>
<tr>
<th>Harvest week</th>
<th>Fruit (no.)</th>
<th>Wt./fruit (g)</th>
<th>Yield /plant (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>7.6</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>26</td>
<td>7.4</td>
<td>192</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>7.8</td>
<td>210</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>7.4</td>
<td>111</td>
</tr>
<tr>
<td>5</td>
<td>11</td>
<td>7.6</td>
<td>84</td>
</tr>
</tbody>
</table>

Harvest data to 70% completion

Total yield: 697 (1.5 lb)
Delaying flowering by holding leafy long-cane plants under natural light, but keep temperature constant at 45 F.
Primocanes can be trained for Fruit Production in Year 2

Bending of primocanes and tip-layering promotes lateral canes
Summary

- Extending harvest period; pre-pack and u-pick
- Within months of planting; harvest > 1.5 lb/plant
- In Florida, harvest can begin as early as January or delayed until May
- The patented method can produce more long-cane plants than other methods and at less cost
- Only short-term low temperature exposures evaluated
- Need data from longer cold durations
- Phytosanitary questions need to be addressed
- Need coordination with propagators and for plant pricing
- Two-year production cycle or more with fertigation and tip-layering of newly emerged primocanes
- Studies are underway to evaluate more varieties, economics
Thank you!

QUESTIONS?

Contact information:

fumi.takeda@ars.usda.gov
(304)725-3451