Responses of Primocane Blackberries to Different Mow-down and Tipping Regimes

Blackberry Irrigation Management

Mark Gaskell, Farm Advisor
San Luis Obispo
• *Traditional floricane blackberries bear on one-year old wood*
  - have a limited production season

• *Primocane fruiting varieties fruit on current seasons growth*
  - more flexibility to manage harvest season
Weekly Fresh Blackberry Wholesale Prices (highs)
Los Angeles Terminal Market - 2011

Wholesale blackberry price highs ($/flat)

MX
CA
OR
GU
Primocane fruiting offers new management options
Field trials to evaluate timing of mow-down and tip pruning of Primeark-45 blackberry

- Mow-down January 15, February 15, March 15  
  - may also treat has floricane

- Previous research showed advantages to tip pruning

- Important market window remains
  
  June > December?
Tip pruning > force branching to increase fruiting branches and yield.

- **Timing is important**

- **When? Repeat later?**
2013 Primeark 45 pruning / tipping trials

- Two sites
  - Nipomo – open field until June
  - Los Alamos – tunnel from beginning

- Mow-down at varying times – January > April
  + floricane – Los Alamos

- Tipping height (Nipomo)
  - 18"
  - 50"
  - 18'/ 50"
  - none
All Shipping Points

$14.05

Average Price Trend

Average Price


Feb Mar Apr May July Aug Sept Oct Nov Dec

Week Ending Date

Avg Price
lbs per acre

Jan No Prune
Jan 18"
Jan 18"/50"

20-Jul  9-Aug  29-Aug  18-Sep  8-Oct  28-Oct  17-Nov  7-Dec
Response to mow-down and tipping regimes

Jan No Prune
Jan 18"
Jan 18"/ 50"
March No Prune
March 18"
March 18"/ 50"
May No Prune
May 18"
May 18"/ 50"
## Total Seasonal Berry Yield (marketable)

<table>
<thead>
<tr>
<th>Pruning Treatment</th>
<th>Yield (lb / acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January mow / no tip</td>
<td>8,960</td>
</tr>
<tr>
<td>January mow 18&quot; tip</td>
<td>8,481</td>
</tr>
<tr>
<td>January mow 18&quot; tip + 50&quot; tip</td>
<td>10,469</td>
</tr>
<tr>
<td>March mow / no tip</td>
<td>7,697</td>
</tr>
<tr>
<td>March mow / 18&quot; tip</td>
<td>9,530</td>
</tr>
<tr>
<td>March mow / 18&quot; tip + 50&quot; tip</td>
<td>8,518</td>
</tr>
<tr>
<td>May mow / no tip</td>
<td>5,762</td>
</tr>
<tr>
<td>May mow / 18&quot; tip</td>
<td>6,392</td>
</tr>
<tr>
<td>May mow / 18&quot; + 50&quot; tip</td>
<td>6,358</td>
</tr>
</tbody>
</table>
Weekly marketable blackberry production from tunneled Primeark 45 blackberry with varying mow-down periods – 2013 season, Los Alamos, CA
Primocane vegetative growth may be excessive in warm tunnels
Questions for future trials

Floricane pruning of Primeark?

- Does elimination of foliage with mow-down affect redberry mite?
- Is traditional redberry control with oils adequate enough to take advantage of earlier harvest resulting from floricane pruning?

In-season pruning?

- What about late season pruning?
  - will August cut back to 3 ft increase October production?

Effects of tunnels, heating?

- Put up plastic as late as possible to minimize vegetative growth, reduce fruiting height?
2013 Ouachita Irrigation Management

- Effects of irrigation regime on blackberry yield and quality

- Compared weekly harvests at 4 irrigation regimes
  
  > 50 % Et
  > 75% Et
  > 100% Et
  > 125% Et
Early harvest termination due to redberry mite infestation in the 2013 season.
Acknowledgements

Financial support provided by:

• California Department of Food and Agriculture Specialty Crop Block Grant program

• UC Hansen Trust

• San Luis Obispo and Santa Barbara Counties