Evaluating Costs and Returns of Central Coast Raspberries

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Santa Cruz County

Annual Raspberry Meeting - January 11, 2013
New Raspberry Study Available Online
Focus on: Central Coast

Fresh Market Raspberries
Primocane Bearing

Establishment & Production Cycle
2 Full Years
Why / How Study Performed

• Number of cost & return study requests

• Constructed by building on previous 2005 raspberry study and working with Central Coast growers to determine most up-to-date practices and estimate associated costs and potential returns. Budget Planner software program used to generate analysis.

• Most detailed, comprehensive raspberry study to date, completed November 2012.
Thank You

- Central Coast Growers
- Supply & Service Companies
- Rich De Moura and Karen Klonsky
  Department of Ag & Resource Economics
  UC Davis

Cooperative, Collaborative Effort
Central Coast Raspberry Study
Selected Calculation Assumptions

• 30 acre operation – 15 acres in raspberries
• Land rent – $2,300/acre/year
• Water – $270/acre foot
• Labor – machine $19.10/hour (incl 34% overhead)
• Labor – general $12.06/hour (incl 34% overhead)
• Piece rate at harvest

• Trellis & tunnels - $2,586/acre & $10,800/acre
• Food safety & regulatory programs - $25/acre & $50/acre
### Calculation Assumptions: Yield & Price

<table>
<thead>
<tr>
<th>Per Acre Tables</th>
<th>Yield (trays/ac)</th>
<th>Price ($/tray)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment</td>
<td>Na</td>
<td>Na</td>
</tr>
<tr>
<td>Production Year 1</td>
<td>4,500</td>
<td>$15</td>
</tr>
<tr>
<td>Production Year 2</td>
<td>5,000</td>
<td>$15</td>
</tr>
</tbody>
</table>

Study Yield Range: 3,000 to 6,500 trays/ac

Study Price Range: $10 to $20/tray
# Establishment & Production Cycle

<table>
<thead>
<tr>
<th>Calendar Year 1 (Partial)</th>
<th>Calendar Year 2 (Full)</th>
<th>Calendar Year 3 (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>August – December</td>
<td>January – December</td>
<td>January - July</td>
</tr>
</tbody>
</table>

## Establishment
- Land preparation
- Fumigation
- Fertilization
- Plant Raspberries
- Sprinkler Irrigation

## Production Year 1
- Install Trellis & Tunnels
- Install Drip / Irrigation
- Fertilization
- Pollination
- Pest Management
- Harvest 1
- Cover Crop

## Production Year 2
- Prune
- Cover Crop
- Pest Management
- Fertilization
- Irrigation
- Tunnels (M & R)
- Pollination
- Harvest 2
- Postharvest
Cultural Practice Details

Fertilization
- Compost
- Cover crop
- Fertilizer blends

Pest Management
- Fumigation
- Hand weeding
- Herbicide
- Insecticide
- Fungicide
- PCA

Specific materials & choices determined by soil & tissue analyses; pest control advisers and other informational inputs.
Total Costs Snapshot

$/acre

- Non Cash
- Cash OH
- Int Op Cap
- Harvest
- Cultural

Establish | Prod Yr 1 | Prod Yr 2

UCCE
Total Raspberry Establishment Costs = $7,759 ($/acre)

- Land Prep 43% (incl fumigation)
- Fertilization 7%
- Cash OH 19%
- Non Cash OH 2%
- Misc 2%
- Plant 25%
- Irrigation 2%

Misc includes ATV & pickup truck use, interest on operating capital
Total Raspberry Costs Production Year 1 = $47,296 ($/acre)

- Harvest 74% (incl clamshells, hauling, cooling, sales fees)
- Pest Mgt, Irrigation, Fertilization 2-3% each
- Cash & Non Cash OH 7% each
- Misc 5%

Misc includes ATV & pickup truck use, labor for installation of trellis & tunnels, interest on operating capital
## Net Returns Above Total Costs*
### Production Year 1

<table>
<thead>
<tr>
<th>Price $/tray</th>
<th>Yield/acre</th>
<th>3,000 trays</th>
<th>4,500 trays</th>
<th>6,000 trays</th>
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*Study has ranging analysis with more detail*
Total Raspberry Costs Production Year 2 = $48,210 ($/acre)

- Harvest 82% (incl clamshells, hauling, cooling, sales fees)
- Misc 6%
- Cash & Non Cash OH 3-4% each
- Prune, Pest Mgt, Irrigation, Fertilization 1-2% each

Misc includes ATV & pickup truck use, labor for maintenance of trellis & tunnels, interest on operating capital
# Net Returns Above Total Costs*

## Production Year 2

<table>
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<th>Price $/tray</th>
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* Study has ranging analysis with more detail
Raspberry Study Notes

- High cost and value crop
- Intense production and management
- Substantial evolution of raspberry industry over time with new practices / techniques
- Potential for both financial loss at low(er) yields and prices and gain at high(er) yields and prices
Questions? Comments??

Raspberry & other studies available at:

http://cesantacruz.ucdavis.edu
http://coststudies.ucdavis.edu