Strawberry Commission Regulatory Update

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Director of Research
• New Federal Regulations for Fumigants
• Methyl Bromide Critical Use Exemption
• Emerging California Fumigation Regulations
• Raised-Bed Trough Experiment update (Farming without Fumigants)
New Federal Labels for all Fumigants

- Buffer zones will be slightly larger for broadcast applications
- Will get credit for using high barrier films (VIF/TIF) and potassium thiosulfate (2011)
  - 60% Reduction in buffer zones for VIF/TIF
  - 15% reduction for using K-thiosulfate
  - 75% reduction for using both
- Must either monitor site for 24 hrs or notify neighbors
  - Notification zone is based on size of buffer zone
- Most non-CUE uses will be dropped (raspberry?)
Methyl Bromide CUE

- CA strawberry has been awarded:
  - 1.89 million pounds for 2010
  - 1.65 million pounds for 2011
- Asked for 1.9 million pounds for 2012 due to regulatory restrictions (telone cap and Pic) and emerging disease issues (*Macrophomina* and *Fusarium*)
- Other large users have seen significant cuts in their CUE (tomatoes and peppers) amounts for 2010 & 2011
- Stockpiles of MB have been reduced significantly
Methyl Bromide CUE Amounts from 2008 - 2011

-29%
-73% to -76%
Methyl Bromide Use on Strawberry

- Santa Maria
- Oxnard
- Monterey/Santa Cruz
- Strawberry CUE

Millions of Pounds

2005: 1.81
2006: 1.95
2007: 1.9

2005-2011
Significant portion of MB used is from Stockpile (EPA allocation rule)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total US CUE (lbs)</th>
<th>New Production (lbs)</th>
<th>From Stocks (lbs)</th>
<th>% of CUE From Stocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>13,736,243</td>
<td>9,515,272</td>
<td>4,220,970</td>
<td>31%</td>
</tr>
<tr>
<td>2008</td>
<td>11,807,840</td>
<td>6,798,401</td>
<td>3,813,311</td>
<td>32%</td>
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<tr>
<td>2009</td>
<td>9,248,189</td>
<td>5,017,093</td>
<td>4,231,096</td>
<td>46%</td>
</tr>
<tr>
<td>2010</td>
<td>6,539,305</td>
<td>5,017,093</td>
<td>3,355,903</td>
<td>51%</td>
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</tbody>
</table>
California Fumigant Regulations

- Working with DPR to allow use of VIF and K-thiosulfate for reducing VOC emissions
- Evaluating chloropicrin as a toxic air contaminant
  - Preliminary report was very negative
  - Claimed that chloropicrin is a carcinogen (Prop 65)
  - Could lead to large buffer zones and township caps
- New CA restrictions for MB due to lawsuit
  - This will probably result in monthly township caps to reduce “subchronic” exposure
  - Will likely take effect in 2011
Raised- Bed Trough Experiments

- Evaluating the production of strawberry fruit in substrate and soil/substrate mixtures
  - Peat, coconut coir, rice hulls, soil, etc.
- Conducted two field studies last season
  - Had good results but problems with nutrition
- Have installed three field studies for this season
  - Camarillo
  - Santa Maria
  - Watsonville (MBA)
Santa Maria
Santa Maria
Santa Maria