July 2006

MEETINGS
Cranberry Field Day, Monday, July 31
WSU Long Beach Cranberry Field Day is Monday, July 31, 2006, 8:30-2:00. Speakers include Kim Patten; Brian Mauza; Kevin Talbot; Jere Downing, Cranberry Institute, and Jim Cowles, WSDA, endangered species program.

CROP MANAGEMENT

Weed Control: Select and Callisto are excellent for mid-summer post-emergent weed control. Both have short PHI (45 days), good efficacy, and, when used according to the label, pose no risk to the crop. The Callisto label recommends not using these together in a tank mix. The Callisto label only allows for 2 applications per year for a maximum of 16 oz/ac per year. If you have been using Callisto for spot treatment and have not treated that area more than once before, this is good time to clean up escapees of Lotus and other susceptible weeds that produce copious amounts of weed seed and are problematic at harvest.

Weed mapping: Many growers have been claiming they are getting declining Stevens beds to recover once they lay off the Casoron and switch to Callisto. This works great until horsetail and yellowweed populations get out of hand. If you map these areas and then selectively treat with Casoron next spring, you can minimize the concern about these weeds. Although it is too late for this season, our research suggests that by modifying the application window and/or choice of surfactant we have been able to get some decent suppression of these two species using Callisto. The registration of a liquid Casoron formulation, which was on hold, appears to be moving ahead, which should be a big aid in early season spot treatment of these weeds.

Insect Management

Guthian: The use of Guthion on cranberries has been cancelled. Use up all existing supplies this summer.

Fruitworm Control: Last season several growers had high incidence of cranberry fruitworm. These are not usually a problem in Washington, but seem to randomly show up on some years. It is most noticeable when you start seeing small groups of select berries turning red very early in the season. Closer examination of these fruits will indicate large holes with fresh worm damage.

Fruitworm are distantly different from fireworm in that they lack the black head and may be slightly larger. If you had a problem last year, consider treating when fruit get around pea size. Timing of the first
application is actually very critical and I recommend that you go to the following web site for more information. http://www.umass.edu/cranberry/downloads/chartbooks/2006/Insects2006.pdf

Fireworm Control: Most of you will have treated for the second generation of fireworm by the time that you read this. This treatment will usually be adequate to manage fireworm populations. However, if you had high trap counts spread out over the entire month of June and early July and see new live larva, a second spray may be a prudent choice.

Cranberry girdler: We recently received a new SLN (WA-060014) for Wilbur Ellis Diazinon 14G for girdler control on cranberries. It expires 12/31/06 and will need to be renewed for next year. To assure we get a renewal in 2007, use it exactly according to the label. You are only allowed to use one application per year. This treatment will not be adequate to suppress bad infestations, but it is all we really have. Early fall flooding or nematodes are other options. Sanding at any time of the year can be done to minimize the expression of damage during hot summer days.

Tipworm: There are only a few beds in WA with tipworm problems. Crop loss can be significant and there is some anecdotal evidence to suggest that there could be resistance to Diazinon. If tipworm has always been a problem for you despite numerous earlier applications of Diazinon, maybe resistance is an issue. Consider alternative chemistries. Imidan doesn’t appear to have much efficacy. Lorsban and Orthene are among the remaining alternatives that might work. Don’t waste money spraying for tipworm now. There are too many overlapping generations in the summer to target for effective control. Next year, target the first generation in May as your most critical step in managing tipworm.

Weevil: Our most recent data suggest very little suppression of adult black vine weevil with Actara. A mid-August and post-harvest application of Admire, is one of the current best choices for weevil management. If you can, a fall flooding as soon as possible after harvest for at least 10-14 days to further suppress larvae is the best option.

Disease control.
Fruit Rot: Although last year was not a high rot year, don’t be resting on your laurels. Fruit rot and reduced keeping quality can be a concern on beds receiving more mid-summer nitrogen fertilizer than needed. If either of these have been a problem for you in the past, don’t push your beds. Reducing your nitrogen may do more to reduce fruit rot than extra fungicides after set.

Twig Blight: I have been seeing several beds with twig blight this spring. If these are your beds, consider a three fungicide application after fruit set, each two weeks apart (three Bravos or Champs, or two Bravos or Champs followed by Dithane or Maneb).

Cottonball: Growers with cottonball problems should have treated with Abound during bloom. During harvest this year watch for white fruit filled white cotton-like material (mycelium). A high cottonball fruit count at harvest would warrant including Abound in your spray order for next season.

Bed renovation:
We have a new project working with a USDA molecular geneticist, Dr. Nahla Bassil, on cranberry variety identification using DNA probes. We are interested in testing off types of vines and vine harvesting method that can be used to maintain
trueness to type. If you have Stevens or Pilgrims that are not behaving like they should, let us know. Now might also be the time to stop trying to make a silk purse out of a sow’s ear and start over.

MISCELLANEOUS SAFETY ISSUES

Skin Cancer: I mention the need for sunscreen every year. I should take myself more seriously, having just lost a chunk of my nose to basal cell carcinoma this past month.

PERSONNEL NEWS

Linda White has recently filled Art Poole’s position as extension agent for Southwest Coastal Oregon. She is full of energy, enthusiasm and small fruit expertise, and we are looking forward to her providing many solutions for the tough problems facing the PNW cranberry industry.

FIELD DAY AGENDA.
MONDAY JULY 31, 2006
8:30 to 2:15

Kim Patten, Research update on weed control, insect control, disease management, cranberry management and new varieties.
Jere Downing, Update on cranberry cesticide registration/usage.
Brian Mauza, An overview of cranberry research and pest management in BC.
Kevin Talbot, Water monitoring results; IGR/Biorational plot studies and grower mitigation plans.
Jim Cowles WSDA, endangered species program, pesticides and surface water—what the cranberry industry needs to be aware of.
Tour of research plots at PCCRF.

WEATHER HISTORY

<table>
<thead>
<tr>
<th>Month</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>20 year average</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>20 year average</th>
</tr>
</thead>
<tbody>
<tr>
<td>January*</td>
<td>12.6</td>
<td>15.0</td>
<td>8.4</td>
<td>20.9</td>
<td>12.2</td>
<td>114</td>
<td>49</td>
<td>102</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>February*</td>
<td>4.5</td>
<td>6.2</td>
<td>3.0</td>
<td>3.9</td>
<td>7.7</td>
<td>31</td>
<td>49</td>
<td>44</td>
<td>26</td>
<td>49</td>
</tr>
<tr>
<td>March*</td>
<td>14.3</td>
<td>5.4</td>
<td>7.9</td>
<td>7.8</td>
<td>8.6</td>
<td>101</td>
<td>87</td>
<td>103</td>
<td>33</td>
<td>75</td>
</tr>
<tr>
<td>April*</td>
<td>7.1</td>
<td>3.7</td>
<td>9.0</td>
<td>4.3</td>
<td>6.3</td>
<td>126</td>
<td>189</td>
<td>112</td>
<td>90</td>
<td>132</td>
</tr>
<tr>
<td>May*</td>
<td>2.2</td>
<td>3.1</td>
<td>4.8</td>
<td>4.8</td>
<td>3.9</td>
<td>231</td>
<td>301</td>
<td>304</td>
<td>208</td>
<td>252</td>
</tr>
<tr>
<td>June*</td>
<td>1.8</td>
<td>2.5</td>
<td>1.4</td>
<td>4.7</td>
<td>2.9</td>
<td>382</td>
<td>410</td>
<td>334</td>
<td>345</td>
<td>345</td>
</tr>
<tr>
<td>July</td>
<td>0.9</td>
<td>0.9</td>
<td>2.2</td>
<td>1.3</td>
<td>1.3</td>
<td>467</td>
<td>536</td>
<td>417</td>
<td>446</td>
<td>446</td>
</tr>
<tr>
<td>August</td>
<td>0.8</td>
<td>5.4</td>
<td>0.7</td>
<td>1.7</td>
<td>1.7</td>
<td>453</td>
<td>544</td>
<td>411</td>
<td>460</td>
<td>460</td>
</tr>
<tr>
<td>September</td>
<td>2.4</td>
<td>4.7</td>
<td>1.6</td>
<td>2.1</td>
<td>2.1</td>
<td>375</td>
<td>381</td>
<td>238</td>
<td>378</td>
<td>378</td>
</tr>
<tr>
<td>October</td>
<td>8.6</td>
<td>10.1</td>
<td>9.1</td>
<td>6.8</td>
<td>8.2</td>
<td>336</td>
<td>262</td>
<td>208</td>
<td>234</td>
<td>234</td>
</tr>
<tr>
<td>November</td>
<td>10.6</td>
<td>4.3</td>
<td>11.4</td>
<td>11.5</td>
<td>11.5</td>
<td>63</td>
<td>78</td>
<td>25</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>December</td>
<td>9.9</td>
<td>10.2</td>
<td>12.2</td>
<td>11.9</td>
<td>11.9</td>
<td>45</td>
<td>46</td>
<td>44</td>
<td>37</td>
<td>37</td>
</tr>
</tbody>
</table>

Totals: 75.6 71.4 71.6 46.4 77.0 2723 2933 2342 732 2547

20 year average through 2006
Other months through 2005