Welcome! to the first issue of the fifth volume of Fruit Pest News. We hope the newsletter is helpful to you, so please let us know of any changes we can make to better meet your needs. One of our most important functions is to keep you apprised of pest occurrences in the state. So please let us know when you see a disease or insect for the first time for the year, or if you have an unusual outbreak. We won't use your name. Our contact numbers are at the end of each issue of the newsletter.

Fruit Pest News also brings you research reports, pesticide registration changes, and other pest-related news. The newsletter will be compiled each Monday and should be available for viewing on the Internet the following day. There will be a new issue each week through mid-July, then every two weeks through early October.

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1. Current Conditions

Plants are waking up as a result of last week's warm spell. This week's cool weather is keeping things in check. Temperatures dropped into the upper 20's last night and are expected to do so again the mornings of March 12 and 13. Most crops have not yet begun blooming, although there may be some Sweet Charlie strawberry plants blooming. Most Chandler buds are still safely tucked away and won't be damaged by upper 20's.

The earliest blueberry cultivar in the planting at the Plant and Pest Diagnostic Center at Nashville is O'Neal. It makes for a good indicator of the earliness of spring. This year, the first open bloom was March 9, which is about average, but two week earlier than last year. Peaches are at the red calyx stage of swollen bud and blackberries are at 1/2 inch green tip. (SB)

2. Dormant and Delayed Dormant Oil Sprays
If anything, dormant oil sprays are more important now than ever. Dormant oil sprays help prevent problems down the road. On peaches, nectarine or plum, oil helps control San Jose scale and white peach scale as a Dormant or Delayed Dormant spray. Dilute applications should ideally be made 10-14 days apart. For dormant trees, oil can be applied at 2-4% by volume (2.5 to 5 gallons per 125 gallons of spray). For partially dormant trees, apply 1 to 1.5% by volume (1.25 to 1.9 gallons per 125 gallons of spray). Use 125 gallons of spray per acre.

At Delayed Dormant to 1 to 5% bud swell on peaches, nectarine or plum, use oil at 1 to 1.5% by volume. Lorsban 4E, Esteem 35 WP or Supracide 2E can be added to the oil to strengthen performance against scale. Esteem, applied with oil at delayed dormant is our best scale control material. Lorsban also offers some suppression of lesser peachtree borer. Do not use oil after 5% bud swell.

European red mite eggs, rosy apple aphid eggs and San Jose scale are reduced on apples by applying oil at Green Tip to 1/2 Inch Green. Insecticides can be applied with the oil to help control scale and climbing cutworms. Esteem will control San Jose scale if applied before 1/2 Inch Green. See the Integrated Orchard Management Guide for Commercial apples in the Southeast for a total listing of the recommended insecticides. If you are having scale problems, avoid using pyrethroid insecticides during the growing season, because they can kill scale predators and parasitoids that normally would help manage scale populations. There are new insecticides and miticides available for tree fruit, but if you can manage a pest using the less expensive dormant oil, then it behooves you to get all you can out of the oil sprays. (FH)

3. Pheromone Trap Time Again

Pheromone traps were mailed to our cooperators last Friday March 5. On March 4, I checked my old redbanded leafroller (RBLR) trap from last year at the Ellington Agricultural Center in Nashville. The pheromone from August was still attracting RBLR moths. It had 3 new RBLR in it. I put out a new trap with fresh pheromone and caught 15 on Friday and 29 more over the weekend. Nothing has been caught in the Oriental fruit moth, obliquebanded leafroller, codling moth, or grape berry moth traps. (FH)

4. Strawberry Spray Schedule

Below is a recommended spray schedule to follow for springtime disease control in strawberries. The exact design of a spray schedule can vary depending on disease control needs and products available. However, the principles illustrated below should serve as a good general guide for management of the two most common diseases, Botrytis and anthracnose.

<table>
<thead>
<tr>
<th>Application no.</th>
<th>Product</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Weekly intervals)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If anthracnose is not present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (early bloom)</td>
<td>Elevate</td>
<td>Botrytis is the primary target. This fungus is known for &quot;getting used to&quot; a fungicide and developing resistance to it. Try to include 3 chemical classes, as in the example, to keep Botrytis off-balance. It does not matter what order these materials are used in.</td>
</tr>
<tr>
<td>2</td>
<td>Switch</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Pristine*</td>
<td>* Pristine is in low supply in 2004. If unavailable, use Topsin-M plus either captan or thiram in the first application, then Elevate-Switch-Elevate-Switch.</td>
</tr>
<tr>
<td>4+</td>
<td>(repeat sequence; program may be relaxed somewhat during harvest)</td>
<td></td>
</tr>
</tbody>
</table>

If anthracnose is present

| 1 - 4+ |
| Harvest period |
| Follow above schedule during bloom, with captan or thiram included in each application. | The activity of anthracnose, if present, is low during bloom. The use of captan or thiram will provide adequate protection during this time. Thiram and captan are interchangeable because they are equally effective against Botrytis and also against anthracnose. Thiram has an advantage over captan in that thiram has a deer and rabbit repellence property. Thiram does not fit the harvest period because of a 3-day preharvest interval. Captevate® is a premix of captan and Elevate, and may be used in lieu of a tank mix. |
| 1 | Captain plus either Quadris, Cabrio, or Pristine | NOTE: The strobilurins (Quadris, Cabrio, Pristine) are limited to 5 applications per crop, either individually or collectively. For this reason, beware of using the strobilurins during bloom because you don't want to use up part of your allotment before the harvest period, which is a critical time for anthracnose control. |
| 2 | Captain alone |
| 3+ | (repeat harvest sequence) |

5. Strawberry Field Sanitation for Gray Mold Management

Many plasticulture strawberry producers remove senescent (dead and dying) leaves and stems from their plants before first bloom in the spring. This practice (leaf sanitation) eliminates a food base for the Botrytis fungus and, thus, reduces the amount of spores available for infecting the blossoms. This practice should be done before bloom, because leaf sanitation would damage the blooms. Recent research has cast some doubt on the usefulness of leaf sanitation, but it is still practiced by many growers.

6. New Fungicide Recommendations for 2004

The following national registrations have occurred within the last year and have been added to our recommendations for 2004. NOTE: Pristine is reportedly in low supply.
for 2004 and may not be available.

**Blackberries and raspberries**

- Captan 80WDG, for anthracnose, Botrytis, and spur blight; 2.5 lb per acre with a 12.5 lb per acre maximum per year and a 3-day PHI.
- Switch 62.5WG, for Botrytis; 11-14 oz per acre with a 56 oz per acre maximum per year and a 0-day PHI.
- Pristine 38WDG, for anthracnose, Botrytis, spur blight, Septoria, and rusts; 18.5-23 oz per acre with a maximum of 4 applications per year, no more than 2 consecutively, and a 0-day PHI.

**Blueberries**

- Captivate 68WDG, for anthracnose, Botrytis, mummy berry, and Phomopsis twig blight; 3.5-4.7 lb per acre with a maximum of 21 lb per acre per year and a 0-day PHI.
- Switch 62.5WG, for anthracnose, Alternaria, Botrytis, mummy berry, and Phomopsis twig blight; 11-14 oz per acre with a 56 oz per acre maximum per year and a 0-day PHI.
- Pristine 38WDG, for anthracnose, Alternaria, Botrytis, mummy berry, Phomopsis twig blight, rust; 18.5-23 oz per acre with a maximum of 4 applications per year, no more than 2 consecutively, and a 0-day PHI.

Also, the restricted-entry interval for Captan was reduced from 96 hours to 72 hours.

**Grapes**

- Pristine 38WDG, for anthracnose, black rot, downy mildew, Phomopsis cane and leaf spot, powdery mildew; 6-10.5 oz per acre with a maximum of 6 applications per year, no more than 2 consecutively, and a 14-day PHI.

Also, the restricted-entry interval for Captan was reduced from 96 hours to 72 hours.

**Peaches and other stone fruits**

- Pristine 38WDG, for anthracnose, brown rot, peach scab, powdery mildew, cherry leaf spot; 10.5-14.5 oz per acre with a maximum of 5 applications per year, no more than 2 consecutively, and a 0-day PHI.

Also, the restricted-entry interval for Captan was reduced from 96 hours to 24 hours.

**Strawberries**

- Captivate 68WDG, for anthracnose, Botrytis, and leaf spot; 5.25 lb per acre with a maximum of 4 applications per year, no more than 2 consecutively, and a 0-day PHI.
- Pristine 38WDG, for anthracnose, Botrytis, leaf spot, and powdery mildew; 18.5-23 oz per acre with a maximum of 5 applications per year, no more than 2 consecutively, and a 0-day PHI.

Also, the restricted-entry interval for Captan was reduced from 96 hours to 24 hours.
Apples

The restricted-entry interval for Captan was reduced from 96 hours to 24 hours.

(SB)

The Fruit Pest News URL is: http://web.utk.edu/~extepp/fpn/fpn.htm

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