

## Peninsular Research Station - Disease and Insect Reporting Service

**Friday July 24, 2009**

**Cherry fruit fly continues to be caught sporadically on the peninsula. Strangely, apple maggot flies are showing up on traps in cherry orchards more so than cherry fruit fly. Few have yet to be caught in apple orchards however. Typically growers have 7-10 days to apply a control after the first fruit fly is caught. If you are not trapping in your orchard(s) a control should go out soon. Even if no adult Cherry Fruit Flies have been caught in your orchard a pre-harvest control application should be made between 10 and 5 days before harvest to keep late emerging or undetected flies from infesting fruit. Watch pre-harvest interval (PHI) for the insecticide that you choose.**

**The lack of rainfall is resulting in significant drought stress in unirrigated fruit crops peninsula wide. Most important is the stress on the ripening tart cherry crop. A lack of adequate moisture will definitely reduce fruit size and in some orchards, along with the heavy crop, delay maturity. Young cherry trees, those that are 15 years and younger, will be the most severely affected by the drought conditions. Growers will need to consider this when planning harvest dates and when making Ethrel applications. Ethrel applied too early will increase plant stress and cause the abscission layer to form between the cherry and stem, the fruit will not continue to size as normal resulting in even greater reductions in size and yield.**

### **Diseases**

**Cherries:** Brown rot will become more of a concern as we near harvest. The best brown rot fungicides are Indar and Elite. Powdery mildew is now developing in many orchards. This disease will thrive in dry, hot and humid conditions. Growers should be most concerned with this disease on young trees as it can stunt growth when pressure is heavy. Pristine or Elite may be the best fungicides for control of this disease that can be applied at this time. Sulfur, both WP and liquid, formulations are relatively cheap and can provide suppression of powdery mildew when added to cover sprays. Rates for sulfur vary from 10 – 20 lb/acre with the dry formulations to 2 – 2.5 gal/acre for the liquids. As always check your label for rates and spray restrictions.

Very few leafspot lesions have been seen in cherry. The only so far were in the Egg Harbor area, in a block that had no early sprays. Right now the best cherry leafspot strategy at this time is to rotate full covers of fungicides in the SI's class (Nova, Elite, Indar) with the strobilurin Gem or the fungicide Pristine. Normally a 10-14 day fungicide application schedule is adequate to keep leafspot under control. Elite or Indar being applied for pre-harvest brown rot control will be adequate for leafspot control as well. If you are applying fungicides as half covers make sure that at least two consecutive sprays of any one fungicide are applied before switching to another fungicide. Also half cover applications should not be stretched out any longer than 7 days between sprays.

**Apples:** Primary scab season has long been over on the peninsula. Fungicide intervals of 2-3 weeks will be adequate if scab lesions are not present on this year's leaves or fruit. Apple growers who have scab lesions present in their orchards should be applying protectant fungicides on a regular schedule. Captan is the fungicide of choice at this time of the season when protecting fruit from secondary scab infections. In cases where early control has not been adequate and numerous scab lesions are present we have been successful in stopping further spread with two applications of Scala fungicide at 10 oz/acre 10 to 14 days apart. After that, a regular program using Captan every 14 to 21 days through the pre harvest interval should keep fruit infections to a minimum.

## **Insect Pressure**

**Cherries:** Cherry Fruit Fly was been caught in Sister Bay on 7/1 & 7/13 and in Sturgeon Bay at the research station on 7/15. Strangely, apple maggot flies are showing up on traps in cherry orchards more so than cherry fruit fly. This can happen from time to time as apple maggot are capable of infesting cherry. Monitoring with yellow sticky traps allows us to pinpoint when this pest emerges from the soil. Once these flies are caught on yellow sticky traps an insecticide should go out within 7 days. Because of the zero tolerance for this pest at harvest, growers that are not using yellow sticky traps in their orchards should consider applying at least one insecticide prior to harvest. Options for fruit fly control include Actara, with a 14 day pre-harvest interval, Imidan, Provado and Spintor, all with a 7 day pre-harvest interval and Sevin which has the shortest pre-harvest interval of 3 days.

### **Apples:**

Apple maggot flies have been caught on the research station but not in any additional orchards that we scout, other than in the cherry orchards mentioned earlier in this report. We expect them to show up in commercial orchards over the next two weeks. Like cherry fruit fly, any additional moisture in the soil should result in their emerging in greater numbers in commercial orchards. Yellow sticky traps are the best way to monitor this pest. Once caught on these traps apple orchards should be sprayed within 7 to 10 days, as that is when the mated female adults will begin to lay eggs.

We will need to plan for 2<sup>nd</sup> generation codling moth control applications in the next 2 to 3 weeks. Growers that are trapping for this insect should check their traps weekly to determine if they are still over threshold. Trap catches of more that 5-10 moths per week, in a single trap, indicate that an insecticide applications is needed to keep fruit damage under control.

**The following dates should be used as a guide for making applications to control the 2<sup>nd</sup> generation of codling moth:**

<b>Area</b>	<b>1st spray</b>	<b>2nd spray</b>
<b>Casco</b>	<b>8/5</b>	<b>10-14 days later</b>
<b>S. Door</b>	<b>8/10</b>	<b>10-14 days later</b>
<b>Sturgeon</b>	<b>8/15</b>	<b>10-14 days later</b>
<b>Egg Harbor</b>	<b>8/15</b>	<b>10-14 days later</b>
<b>Sister Bay</b>	<b>8/15</b>	<b>10-14 days later</b>
<b>Lakeside</b>	<b>8/20</b>	<b>10-14 days later</b>

Hot and dry weather may cause European red mites to flare in apples. Scout the underside of leaves for active mites. The action threshold for July is 5 mites per leaf. The August threshold is 7-10 mites per leaf. A number of orchards on the peninsula have exceeded this threshold in the last week or so and have received treatments.

Finally, 2<sup>nd</sup> generation spotted tentiform leafminer is being caught in pheromone traps and are also currently laying eggs on leaves. If you see more that 1-2 mines per fruit cluster from the earlier 1<sup>st</sup> generation, it would be best to target a control for the end of July or early august. Often the choice of apple maggot or codling moth controls during this time can double as effective leafminer controls as well. Neonicitinoids like Assail are an excellent choice as is Delegate a new insecticide that is now available.