

Fire Blight, Coryneum, Codling Moth

May 19, 2005

*****Disease Advisory*****

FIRE BLIGHT: Cache Valley and other higher-altitude sites in northern Utah still have apples in bloom. Open flowers are the main infection sites for fire blight bacteria at this time of year. Using recent weather data as well as forecasts, the MARYBLYT model has indicated that susceptible apple varieties (Jonathan, Jonagold, Gala, Idared) in Cache County have endured “moderate” fire blight risk the last several days. However, starting tomorrow (Friday, May 20th), the risk of infection is very high if the forecasted temperatures and rain arrive. Saturday also presents a high risk of infection. Growers who are concerned about fire blight may want to apply a bactericide before the rain event. Backyard growers should be able to find streptomycin formulations at certain nurseries.

CORYNEUM BLIGHT (Peach Shothole): It appears that this fungal pathogen has really benefited from the wet Utah spring. Its spores are distributed by rain-splash, so any cankers that were established prior to spring have had the opportunity to infect surrounding buds, blossoms, and leaves. Infected peach trees are turning up all over the state, and in some instances, the infections are SEVERE (eg, Payson, Spanish Fork, Kaysville). It is highly recommended that all peach growers investigate their peaches, particularly if coryneum/shothole has been a problem in the past.

Characteristic signs of coryneum blight: 1) dark, unopened buds, often with amber gumming at the bud, 2) reddish, sunken spots on last year’s wood, 3) young leaves with red spotting, 4) many small round holes in leaves, and 5) blighted blossoms/leaves (dried blossoms, dead or chlorotic leaves). Hail damage generally does not produce the same type of well-defined, circular “shotholes.” Hail damage will usually show up on peach leaves as either linear tears or as numerous small, tan “scuff” marks.

It is recommended that infected wood be pruned out as soon as possible. A shuck-split or shuck-fall spray of Bravo (Daconil for home use), Abound, Captan, Ziram, or Pristine may also be necessary.

CHERRY POWDERY MILDEW: This is a serious disease of cherries, particularly tart cherries. Scouting this week did not reveal any powdery mildew lesions in Kaysville, Payson, or Santaquin tart cherry orchards.

*****Insect Advisory*****

CODLING MOTH: Codling moths are emerging in greater numbers across northern Utah, and female moths should have started laying eggs on apple and pear trees in many locations. Egg-laying generally begins around 60 degree-days (post-biofix).

The earliest eggs of the 1st generation will probably begin hatching around 220 DDs. The PROJECTED start-dates of egg-hatch are as follows:

BOX ELDER CO.

Perry: May 25

CACHE CO.

Logan: May 29

N. Logan: May 28
River Heights: May 28

DAVIS CO.
Kaysville: May 24

SALT LAKE CO.
Salt Lake City: May 26
W Valley City: May 26

UTAH CO.
Alpine: June
Lincoln Point: May 29
Orem: May 26
Payson: May 26
Provo: May 25
Santaquin: May 25
West Mountain: May 24

WEBER CO.
Pleasant View: May 24

Most insecticides function as larvicides, which means the insecticide kills the codling moth larvae following egg-hatch (and hopefully before they enter the fruit). For the 1st cover spray of the season, Assail, Danitol, Imidan, Guthion, Intrepid, and Calypso can be expected to perform well. Remember to buffer spray water where necessary and follow the label directions closely. Uniform coverage is crucial. Tank-mixing 1% (or less) of oil will likely increase the efficacy of most materials. Where growers have had a history of insecticide resistance, consider tank-mixing materials with different modes of action. Intrepid, Rimon, and Esteem are effective ovicides (kills codling moth eggs) and will help to reduce insecticide resistance. Assail and Calypso have ovicidal and larvicidal activity.

Homeowners can use a 1% oil spray (such as SunSpray Ultra-Fine) with esfenvalerate (Ortho Bug B Gon), malathion, or spinosad (Ferti-lome formulation). Diazinon and phosmet (Imidan) can be used if you have been able to find remaining supplies on the shelves, but their registrations have been cancelled for home use.

In terms of DDs, another critical “benchmark” for codling moth is 340 DDs. This is the point at which egg-hatch (larval emergence) accelerates tremendously. Approximately 70% of the 1st generation can be expected to hatch within the 340-640 DD period. This relatively short 320 DD window of time will see the greatest amount of pest pressure. Multiple applications may be necessary for the 1st generation, depending on the severity of the codling moth infestation.

WESTERN CHERRY FRUIT FLY (WCFF): Yellow sticky traps should be put up soon. Degree-day totals for areas south of Cache County range from 573 (Alpine) to 680 (Provo). Cache County cherry growers have 423 to 525 DDs accumulated at this time. This fly will likely emerge when 800-900 degree-days have accumulated. With the temperatures forecasted for the next several days, expect to get 20-25 DDs per day.

SPECKLED GREEN FRUITWORM (SGFW): SGFW caterpillars were found in sweet cherries in the Lincoln Point area of Utah County. In Payson, an egg cluster was found on a lower scaffold branch of an apple tree. This pest is not a huge concern unless densities are high. Beat-samples of the tree canopy will determine fruitworm densities.

Precautionary Statement: All pesticides have benefits and risks, however following the label will maximize the benefits and reduce risks. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use. Any mention of a pesticide brand in this document is not an endorsement by USU, and brand lists are not all-inclusive.