Tree Fruit IPM Advisory: May 16th, 2006

Past IPM advisories are archived at:
http://extension.usu.edu/cooperative/ipm/index.cfm/cid.610/

News Alert!

Codling moth is now active in most areas and peach twig borer moths have begun to emerge. Predictions for first cover spray dates are now available and coming up later this week and next week. It is now time to place yellow sticky traps for western cherry fruit fly in cherry trees in all warmer northern Utah sites.

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

DEGREE-DAY (DD) ACCUMULATIONS:

CODLING MOTH

Location	DDs Since Biofix	Projected Onset Date for Larval Emergence
Utah County		
Alpine	33 (Biofix: May 13)	May 23
Genola	130 (Biofix: May 2)	May 19
Payson	113 (Biofix: May 2)	May 19
Provo	64 (Biofix: May 8)	May 21
Santaquin	86 (Biofix: May 6)	May 20
West Mountain	98 (Biofix: May 4)	May 20
Salt Lake County		
Salt Lake City	106 (Biofix: May 6)	May 20
Davis County		
Kaysville	63 (Biofix: May 10)	May 22
Box Elder County		
Perry	121 (Biofix: May 1)	May 19
Cache County		
North Logan	52 (Biofix: May 10)	May 24
Logan	75 (Biofix: May 5)	May 22

Projected onset dates for larval emergence correspond to when egg hatch is predicted to begin (at 220 DDs after biofix) based on biofix dates and temperatures. Cover sprays to prevent larvae from entering fruit should be applied by this date.

PEACH TWIG BORER

Location	DDs Since Biofix	Projected Onset Date for Larval Emergence
Utah County		
Lincoln Point	19 (Biofix: May 14)	May 24
Payson	49 (Biofix: May 12)	May 22
Provo	73 (Biofix: May 7)	May 21

Projected onset dates for larval emergence correspond to when egg hatch is predicted to begin (at 220 DDs after biofix) based on biofix dates and temperatures. Cover sprays to prevent larvae from entering fruit should be applied by this date.

WESTERN CHERRY FRUIT FLY

Location	DDs Since March 1	Projected Date to Place Traps
Utah County		
Alpine	645	May 17
Genola	754	May 14
Lincoln Point	659	May 16
Payson	667	May 16
Provo	761	May 14
Sanataquin	698	May 15
West Mountain	660	May 16
Salt Lake County		
Salt Lake City	583	May 19
West Valley City	640	May 17
Davis County		
Kaysville	665	May 17
Pleasant View	664	May 17
Box Elder County		
Perry	669	May 16
Cache County		
North Logan	407	May 25
Logan	484	May 22

Yellow sticky traps for cherry fruit fly should be placed at 700 DDs after March 1 and first adults are expected on traps from 900-950 DDs.

REQUEST FOR HELP WITH BIOFIX INFORMATION: Thank you to all who have sent in biofix data this spring! For anyone setting and monitoring insect traps (for codling moth, peach twig borer, cherry fruit fly, greater peachtree borer) in orchards this year, please send in your biofix dates (dates of first insect catch) by email (respond to this

email message). Include your location, insect species, and biofix date. This will help us with determining insect biofix dates for a wider range of locations. Thank you.

CODLING MOTH (Apple and Pear): Spray dates to target the beginning of larval emergence are predicted for later this week and next week in all northern Utah locations (see Codling moth table above).

Codling Moth Control:
Recommendations for Commercial Orchards
Larvicides: Kill young larvae as they hatch from eggs and before they enter the fruit.
Guthion
Imidan
Assail
Intrepid
Calypso
Danitol
Codling moth granulosis virus

Ovicides: Kill the eggs before they hatch. Need to apply before and/or during the egg-laying period (50-200 DDs after biofix depending on insecticide).
Rimon
Esteem
Intrepid
Assail
Calypso
Horticultural mineral oil

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.

Recommendations for Home Orchards: Homeowners can use a 1% oil spray (such as SunSpray Ultra-Fine) with esfenvalerate (Ortho Bug B Gon), carbaryl (Sevin), malathion, spinosad (Ferti-lome formulation), Codling moth virus (Cyd-X, Virusoft, Carpovirusine), pyrethrin, pyrethrum, azadirachtin (AZA-Direct), or Bt (Dipel, Thuricide). Bagging fruit to keep larvae out after fruit is at least ½ - ¾ " inches in diameter and placing cardboard bands around trunks to trap cocooning larvae can also suppress injury. Go to the USU Extension Home Orchard Pest Management Guide for more detailed management information: http://extension.usu.edu/files/publications/homeorchard2006.pdf

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.

PEACH TWIG BORER (Peach, Nectarine, and Apricot): We have received peach twig borer biofix information for three sites in Utah County. Projected spray dates are early to mid next week (see Peach Twig Borer table above). Spray timing is selected to target the beginning of egg hatch.

Insecticides effective for PTB:
Imidan
Bt-kurstaki
Spinosad (Success, Entrust)
Intrepid
Asana
Warrior
Proaxis
Endosulfan (Thiodan, Thionex)
Guthion
Sevin
Diazinon
Permethrin (Pounce, Ambush)
Malathion

WESTERN CHERRY FRUIT FLY (Sweet and tart cherry): It is time to put out yellow sticky traps for cherry fruit fly in all locations except Cache County and other cooler sites in northern Utah. First flies on traps are expected at 900-950 DDs after March 1 (see Western Cherry Fruit Fly table above).

OTHER ORCHARD INSECT PESTS: Green Peach Aphid - Scouting tours in northern Utah this week found high numbers of green peach aphids in some peach orchards (as many as 63 aphids in one beating tray sample). If green peach aphid numbers are high, consider using an insecticide effective on this pest for your first PTB cover spray (e.g., Asana, Thiodan, Warrior, Diazinon). Campylomma Bug – Low numbers (1-2 per beating trap sample) of Campylomma nymphs were observed in some apple orchards. Fruit are most susceptible to injury during bloom to petal fall, but injury can continue to occur while fruit is small. Light skinned fruits (e.g., Golden Delicious) are especially susceptible to the raised, corky bumps caused by their feeding. If your fruit is at risk, keep a watch on Campylomma densities and if necessary, treat with Assail, Carzol, Thiodan, or Diazinon. Rosy Apple Aphid – leaf rolling, sticky honeydew, and moderate to high densities of rosy apple aphids were observed in one apple orchard this week. Feeding on fruit can cause fruit distortion and stunting. Effective insecticides include Provado, Assail, and Diazinon. Green Fruitworms – Speckled green fruitworms have been observed feeding on leaves and young fruit, especially in tart cherry orchards. Fruitworm larvae are easy to control with most insecticides applied for other pests. If fruitworms are causing substantial injury and no other insecticide treatments are planned

in the next few days, apply *Bacillus thuringiensis* (Bt; DiPel, Thuricide) or spinosad (Success, Entrust) to knock down their populations.

TO VIEW SPECIFIC ORCHARD INSECT FACT SHEETS:

Codling Moth: http://extension.usu.edu/files/gardpubs/8.pdf
Peach Twig Borer: http://extension.usu.edu/files/factsheets/twigbore.pdf
Campylomma Bug: http://extension.usu.edu/files/gardpubs/9.pdf
Apple Aphids:
http://extension.usu.edu/files/publications/Insects%2013%20apple%20aphids..pdf
Speckled Green Fruitworm:
http://extension.usu.edu/files/publications/green%20fruitworm7-14.pdf

FOR MORE INFORMATION ON TREE FRUIT PEST MANAGEMENT:

For a posting of archived and current pest advisories and orchard spray timing tables, see the USU Extension IPM web page at:
http://extension.usu.edu/cooperative/ipm/

The 2006 update of the Utah "Home Orchard Pest Management Guide" (USU Extension Publication HG 137) is now available at:
http://extension.usu.edu/files/publications/homeorchard2006.pdf

For Utah commercial orchard insect control guides (peach and cherry), see:
http://extension.usu.edu/cooperative/ipm/index.cfm/cid.1424/

For one-stop shopping for information on Utah insects, plant diseases, IPM, and the Plant Pest Diagnostic Laboratory, go to our "Insects and Plant Diseases" umbrella web site at:
http://extension.usu.edu/cooperative/ipd/