



Tree Fruit IPM Advisory: June 6th, 2006

Past IPM advisories are archived at:

<http://extension.usu.edu/cooperative/ipm/index.cfm/cid.610/>

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

Degree-days, spray dates, and fruit protection intervals are being updated twice per week (Mondays and Fridays). Visit the Orchard Spray Timing Tables for the latest updates at: <http://extension.usu.edu/cooperative/ipm/index.cfm/cid.645/> (Select 1st generation CM or PTB in the right-side column).

CODLING MOTH (Apple and Pear): Keep fruit protected from newly emerging codling moth larvae throughout the first generation (late May to late June/early July). All locations in northern Utah, except Alpine (Utah Co.) and Cache Co., have entered into a **critical period for codling moth control: 340-640 Degree-Days (DD) after biofix (first adult activity)**. The percentage of egg hatch (larval emergence) for the first generation changes from 12 to 80% during this period. This relatively short 300 DD window of time (approx. 10-15 days in length) will see the greatest amount of codling moth pressure. It is important to have adequate residues of insecticide present on fruit during this period. Refer to the "Orchard Spray Timing Tables" posted on the IPM website to track the rate of codling moth development for your area: <http://extension.usu.edu/cooperative/ipm/index.cfm/cid.645/>. Select 1st Generation CM in the right column and then the most recent date.

The projected end of larval emergence for the first generation (920 DDs after biofix which corresponds to 99% egg hatch of the first generation) is also posted in the spray timing tables (see web page link above). Currently, the codling moth model predicts that egg hatch for 1st generation will end between June 26 and July 12 for northern Utah sites. There will then be a short "break" between the 1st and 2nd generation where fruit protection is not necessary. Second generation larval emergence (egg hatch) will begin at 1100 DDs.

Refer to past advisories for a listing of insecticides recommended to control codling moth in commercial and home orchards.

PEACH TWIG BORER (Peach, Nectarine, and Apricot): Emergence of peach twig borer larvae from eggs has now begun in all northern Utah sites where PTB biofix was

established. PTB larvae prefer to feed in succulent shoots (new leaf growth) over fruit; therefore, it isn't as critical to initiate insecticide treatments at the very beginning of egg hatch as it is for codling moth. Based on past experience, most peach growers shoot for 300-400 DDs after biofix for their first spray. This corresponds to 5-28% egg hatch for the first generation. Sites in northern Utah now range from 226 to 397 DDs after biofix for PTB. Visit the PTB phenology table to check the projected developmental status of PTB in your area: <http://extension.usu.edu/cooperative/ipm/index.cfm/cid.645/>. Select 1st generation PTB and latest update to view the most recent table.

To view pictures of what PTB infestations look like, visit the Extension Photo Gallery: <http://eureka.ext.usu.edu/admin/plugin.cfm?id=2&gid=21>.

Refer to past advisories for a listing of insecticides recommended to control peach twig borer in commercial and home orchards.

WESTERN CHERRY FRUIT FLY (Sweet and tart cherry): Western cherry fruit fly adults have been caught on traps in Perry (June 5), Kaysville (May 22), and Orem (June 3). It is time to put out yellow sticky traps for cherry fruit fly in all locations. Please send in your dates of first catch to post in this advisory.

The first cherry fruit flies of the season may emerge before fruit is soft enough for them to insert their eggs under the fruit skin. Based on numerous years of observation in Utah, fruit is not susceptible to egg-laying from cherry fruit fly females until it changes from yellow to a salmon or blush color. When earliest maturing fruit on the tree takes on a blush color, protect cherries with an insecticide application. Based on research, adult females are not ready to lay mature eggs until 7-10 days after first catch of the season. Use these two pieces of information for your location to initiate insecticide sprays to protect fruit from cherry fruit fly.

Insecticides effective for WCFF:

- GF-120 NF (apply with an electric pump sprayer mounted on a 4-wheeler; reapply every 7 days; excellent adulticide; not rainfast)
- Provado (moderate adulticide, excellent larvicide, can kill larvae within fruit; reapply every 14 days; watch for mite flare-up with repeated applications)
- Success and Entrust (reapply every 7 days)
- Guthion (reapply every 14 days; 15 day PHI)
- Sevin (reapply every 7 days; watch for mite flare-up with repeated use)
- Diazinon (reapply every 7-10 days; 21 day PHI)
- Malathion (reapply every 3 days; watch for mite flare-up with repeated use)

OTHER ORCHARD INSECT AND MITE PESTS: Low numbers of **spider mites** have been seen on the lower center leaves of fruit trees. Scout for spider mites and their stippling and bronzing feeding injury. Also look for predaceous mites that can prevent plant-feeding spider mites from reaching economic injury levels. Horticultural mineral oil can be an excellent suppressant of mite populations. Consider adding 1% or less concentration of oil in with cover sprays to keep mite populations at bay. When daily

temperatures rise above approximately 85°F, spider mite populations can increase very rapidly. Twospotted spider mite can complete a generation in 7-10 days when temperatures are high and each female can produce 100-150 eggs.

Visit fact sheets on spider mites for more information on scouting, biological control, and management:

Web Spinning Spider Mites:

<http://extension.usu.edu/files/gardpubs/6.pdf>

European Red Mite:

<http://extension.usu.edu/files/gardpubs/5.pdf>

The drying down of vegetation outside of orchards can prompt the migration of **lygus and stink bugs** into orchards. These insects can cause cat-facing injury to young pome and stone fruits. Scout for plant-feeding bugs with a sweep net in the vegetation borders, ground cover, and canopies of orchards at risk for migration of plant bugs. Endosulfan (Thionex), Danitol, and Warrior are effective insecticides that can be used post-bloom to protect fruit from cat-facing injury. See a factsheet on cat-facing insects and how to prevent fruit injury:

Cat-facing Insects:

<http://extension.usu.edu/files/gardpubs/3.pdf>

Light stippling of apple and cherry leaves from **white apple leafhopper** feeding has been observed. No more than one nymph per leaf was observed in Diane's recent scouting trip. If densities of 3-4 nymphs per leaf are present, consider treating before the oldest nymphs (5th instar) and adults develop. Effective insecticides include Sevin, Thionex, Provado, Avaunt, Surround, and horticultural mineral oil. Refer to this factsheet for scouting and spray timing information:

White Apple Leafhopper:

<http://extension.usu.edu/files/gardpubs/7.pdf>

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/twiggore.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>

Cat-facing Insects:

<http://extension.usu.edu/files/gardpubs/3.pdf>

European Red Mite:

<http://extension.usu.edu/files/gardpubs/5.pdf>

Web Spinning Spider Mites:

<http://extension.usu.edu/files/gardpubs/6.pdf>

White Apple Leafhopper:

<http://extension.usu.edu/files/gardpubs/7.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/>

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