Tree Fruit IPM Advisory: April 26th, 2006

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

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

DEGREE-DAY (DD) ACCUMULATIONS:

		DDs Since March 1
Location	Codling Moth/Peach Twig Borer	Western Cherry Fruit Fly
Utah County	138-185	349-424
Salt Lake County	138-178	357-431
Davis/Weber Counties	137-144	343-362
Box Elder County	140	341
Cache County	82-126	238-278
Set traps by	CM: 125/ PTB: 250	WCFF: 700
First adults expected	CM: 200-250/ PTB: 400	WCFF: 900-950

REQUEST FOR HELP WITH BIOFIX INFORMATION: 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): Set codling moth traps now in northern Utah orchards (except cooler locations in Cache County). Traps should be out by 125-150 DD and first moths are expected at 200-250 DD. It is best to have several days of no catch before the first moths are caught. This will ensure that you can identify the beginning of

adult emergence. As 200-250 DD approaches, the first moths will fly on the first evening where temperatures remain above 55-60 F. This is the temperature threshold for moth flight. Adults are most active from dusk to midnight.

At any given site, at least two traps should be set (unless it's just a backyard scenario). To increase the chance of getting an accurate biofix (= first moths caught at a site), try to set 1 trap per 3-5 acres. If you are using mating disruption, it is still recommended that you determine a biofix for your orchards. Optimal timing of supplemental sprays to coincide with peak egg hatch periods of first and second generations can be determined based on the original biofix date. Without this information, you are left guessing.

Codling moth biology: Codling moth over winter as mature larvae in cocoons in crevices on trunks and in other protected sites. The larvae form pupae as temperatures warm in the spring and adults emerge from these pupae during bloom. Good control of codling moth is dependent on killing eggs before or as they hatch or newly emerged larvae before they enter fruits. Timing of control sprays is determined by measuring heat units, degree-days, and accumulations of degree-days are initiated at first adult emergence (biofix).

PEACH TWIG BORER (Peach, Nectarine, and Apricot): First peach twig borer moths are expected 10-14 days after codling moth (400 DD), and control of the summer generations are timed based on first moth catch (biofix). Placement of PTB traps in orchards is still 1-2 weeks away.

Peach twig borer control options now: To control the over wintering larvae, bloom-time sprays for this pest are very effective because the larvae are exposed as they feed. At this time of year, there are not any succulent shoots for the larvae to burrow into, so they are forced to feed on young leaves and petals. Insecticide residues on the surface of leaves and petals are more likely to get ingested, which makes materials such as Bt (DiPel), spinosad (Success, Entrust, Conserve), or diflubenzuron (Dimilin) very effective at this time. Bt (1 lb./acre) and spinosad (7 oz. Success) should be applied twice during bloom for maximum effect.

GREEN PEACH APHID: Green peach aphid densities were high in the spring of 2005. A delayed dormant spray of dormant oil + esfenvalerate (Asana) or other effective insecticide is recommended if peach aphids are a concern this spring. Timing for the delayed dormant application is when buds begin to open and flower color is visible, but before flowers are completely open.

These aphids are ever-present and are often fed upon heavily by a variety of predators such as lacewing larvae, lady beetles, and hoverfly larvae (all of which have been found in Utah peach orchards). However, tremendous aphid populations (100+ per beat-sample or 4-10 nymphs per leaf) present a difficult situation because it may be a while before the aphids are reined in by predators. In the meantime, the first leaves of the season, as well as some of the fruit, will be fed upon heavily and ultimately deformed. It is highly recommended that growers monitor their aphid and predator populations in the

spring. High green peach aphid populations might warrant a spray with insecticidal soap (M-Pede, Safer's) before leaves become curled upon themselves (contorted leaves shield aphids that are feeding within). Alternatively, growers who will be spraying for peach twig borer, powdery mildew, and/or coryneum blight at shuck-split may want to consider tank-mixing insecticides that suppress aphids as well as twig borers (eg, Bt + narrow range oil, Success + narrow range oil, or Asana).

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/