

# TREE PEST UPDATES

75 Santa Barbara Rd., 2<sup>nd</sup> floor, Pleasant Hill, CA 94523-4215 (925) 646-6540  
Diablo Valley Farm Center, Delta Rd. & 2<sup>nd</sup> St., Knightsen

May 17, 2010

## PEACH TWIG BORER

**HOST CROPS:** Almonds, Apricots, Peaches, Nectarines, Plums

**BIOFIX:** Flight started late but has been fairly constant. The areawide biofix is **April 22**. If flight started on a different day in your orchard, use that as your own orchard biofix.

**TREATMENT AND TIMING:** In-season sprays may be needed to protect fruit and nuts from damage only if you have significant trap counts. This will be especially important if you did not apply a dormant spray or bloom sprays. Effective control can be achieved by applying most sprays 400-500 degree days (DD) after biofix. This is projected to occur **May 24-30 OR 32-38 days after your own orchard biofix**. Orchards with heavy flight should spray earlier in the window and those with light populations can spray later in the window.

The table below lists some of the materials which can be used to control PTB in the various crops. Delegate, Altacor, Belt, Entrust, Intrepid and BT can be very effective, have very low human toxicity, and are less likely to disrupt beneficial insects. Note the variation in treatment timing for BT and Intrepid in the table below. More information can be found at the UC IPM website: <http://www.ipm.ucdavis.edu>

Material	Treatment Timing			Almond	Apricot	Nectarine & Peach	Plum
	Degree Days	Expected Dates	Days after biofix				
Delegate	400-500	5/24-30	32-38	X	X	X	X
Altacor	400-500	5/24-30	32-38	X	X	X	X
Belt	400-500	5/24-30	32-38	X	X	X	X
Entrust <sup>4</sup>	400-500	5/24-30	32-38	X	X	X	X
Intrepid	300-400	5/18-5/24	27-32	X	X	X	X
BT <sup>4</sup>	300 & 500	5/18 & 5/30	27 & 38	X	X	X	X
Imidan <sup>1,2,3</sup>	400-500	5/24-30	32-38		X	X	X
Asana <sup>1,2,3</sup>	400-500	5/24-30	32-38		X	X	X

NOTES:

<sup>1</sup> toxic to mite predators - may increase mite problems

<sup>2</sup> toxic to general predators and parasites – may lead to secondary pest outbreaks

<sup>3</sup> restricted material permit or applicator's certificate required for use

<sup>4</sup> organically acceptable material

*Mating Disruption* materials are also available and can be effective in controlling PTB in orchards larger than 5-10 acres. They should have been applied before biofix. Think about this option for next year.

*Many thanks to Suterra for providing traps for the Contra Costa County Tree Pest Updates Program*

## PEACH TWIG BORER UPDATE

UC Cooperative Extension  
75 Santa Barbara Rd, 2nd floor  
Pleasant Hill, CA 94523

Janet Caprile  
Farm Advisor

The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6<sup>th</sup> Floor, Oakland, CA 94612-3550, (510) 987-0096.

**What's a Biofix?** It's just the beginning of the flight for each new generation. We usually have 3 generations for peach twig borer in this area. We use the Biofix to begin degree day calculations for each generation so we know when egg laying, hatchout, and other lifecycle events will happen. This helps us to time our treatments most effectively.

**What's a Degree Day?** Insects develop faster or slower depending on the temperature. Degree days are a measure based on the maximum and minimum temperatures for each day which allow us to figure out how fast the insects are developing. You may see them abbreviated as DD or °D. If you have the daily maximum & minimum temperatures for your orchard, you can look the degree days up on a chart. If you have access to the Internet, you can get Brentwood weather data and do a degree day calculation from the UC IPM Program home page. This page also lets you calculate the projected degree days based on historical weather data so you can make projections for potential treatment windows (this is how I do it!). The address is <http://www.ipm.ucdavis.edu>. Give me a call if you would like a degree day chart or more information