

TREE PEST UPDATES

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Diablo Valley Farm Center, Delta Rd. & 2nd St., Knightsen

April 22, 2014

PEACH TWIG BORER

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

BIOFIX: Flight started in most orchards between April 3-7. I'm setting a general areawide biofix of **April 6**. If your own traps show that consistent 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 5-12 OR 30-37 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	5/5-5/12	30 - 37	X	X	X	X
Altacor	400-500	5/5-5/12	30 - 37	X	X	X	X
Belt	400-500	5/5-5/12	30 - 37	X	X	X	X
Entrust ⁴	400-500	5/5-5/12	30 - 37	X	X	X	X
Intrepid	300-400	4/27-5/5	22 - 30	X	X	X	X
BT ⁴	300 & 500	4/27 & 5/12	22 & 37	X	X	X	X
Imidan ^{1,2,3}	400-500	5/5-5/12	30 - 37		X	X	X
Asana ^{1,2,3}	400-500	5/5-5/12	30 - 37		X	X	X

NOTES: ¹ toxic to mite predators - may increase mite problems

² toxic to general predators and parasites – may lead to secondary pest outbreaks

³ restricted material permit or applicator's certificate required for use

⁴ 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

Note: The above information is provided to serve as baseline data for East Contra Costa County. For best results compare with traps and observations in your own orchards. Depending on pest pressure, sprays may not be necessary. Projected treatment times are based on historical weather data

PEACH TWIG BORER UPDATE

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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