

# TREE PEST UPDATES

75 Santa Barbara Rd, 2<sup>nd</sup> floor, Pleasant Hill, CA 94523 (925) 646-6540

June 16, 2017

## CODLING MOTH

**HOST CROPS:** Apple, Pear, Walnut

**2nd BIOFIX:** The second flight of codling moth has been very modest. The **2A flight began about June 7th** in apples and some walnuts. Many walnuts have had very little 2A flight (so far) and this reflects the modest 1A activity in those orchards. Be prepared for a substantial **2B flight in early July** that reflects the large 1B flight that we had in walnuts May 8-24. It's best to use the trap catches in your own orchard to set your own orchard biofix at this time of year *as there may be several days variation from orchard to orchard* due to spray program and orchard differences.

**TREATMENT TIMING:** After your traps show renewed activity in early June (2A), apply a spray **13-18 days** later depending on your material choice (see below). Watch for a 2<sup>nd</sup> increase in trap counts indicating a 2B flight **the 1st week of July** and treat at 600 DD or 32 days from the beginning of the 2A flight if numbers are significant. If the weather remains "normal," the projected degree days (DD) and corresponding treatment dates for those orchards that resumed flight about June 7 will be as follows:

--- Expected Treatment Date ---

Degree Days	2A	2B	Number of Days after your own orchard flight begins
200 DD	June 19		13 days
250 DD	June 21		15 days
300 DD	June 24		18 days
600 DD		July 10	32 days from 2A (7-10 days from 2B)

### APPLES & PEARS

**Delegate, Altacor, Imidan, Warrior, Assail:** Should be applied at 250DD. *Delegate* and *Altacor* are newer, reduced risk materials that are effective against moderately high populations; *Assail* is effective against moderate populations. The addition of 1% oil to the reduced risk materials can improve efficacy.

**Intrepid, Entrust, Cxd-X or Oil:** Should be applied at 200 DD. *Intrepid* is a reduced risk material that is effective against low to moderate populations. *Entrust* and *Cxd-X* are organic spray options and effective against lower populations. The addition of 1% oil can improve their efficacy. *Oil* is a mild organic suppressant that is best used as a supplement to Mating Disruption or an additions to other sprays.

**Mating Disruption:** Reapply the mating disruption product at the interval recommended by the manufacturer. If this is the first year under mating disruption and/or you have a high population or a problem spot, you may want to consider a supplemental insecticide spray.

### WALNUTS

*Not all walnut orchards need to treat every generation of codling moth. If you've had close to 2% damage from the previous generation, you should probably treat this generation.*

**PennCap, Warrior, Baythroid, Brigade, Delegate, Altacor, Imidan, Lorsban, Asana, Ambush:** Should be applied at 300 DD. *Delegate* and *Altacor* are newer, reduced risk materials that are effective against moderately high populations.

**Intrepid, Entrust, Cyd-X:** should be applied at 200 DD. *Intrepid* is a reduced risk material that is effective against low to moderate populations. The addition of Latron or similar spreader/sticker improves efficacy. *Entrust* and *Cyd-X* are organic options effective against lower populations. Efficacy is improved with the addition of 1% oil.

**Dimlin** should have been applied just before the flight began, if used alone, or at the 300 DD timing if mixed with a *low rate* of insecticide. The Dimlin + insecticide tank mix will provide control for any eggs laid over the last 14 days plus a 21 day residual. This amounts to 5 weeks of control with 1 spray!

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

## **CODLING MOTH UPDATE**

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

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

**FOR MORE DETAILED INFORMATION ON TREATMENTS AND TIMING, CALL FOR A COPY OF OUR MOST RECENT CODLING MOTH IPM GUIDELINES FOR APPLES, PEARS, OR WALNUTS.**

If you would like to subscribe to this newsletter by email, go to: <http://cecontracosta.ucdavis.edu/newsletterfiles/newsletter860.htm>

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 codling moth 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 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.