CONTRA COSTA COUNTY

TREE PEST UPDATES

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June 11, 2004

CODLING MOTH

HOST CROPS: Apple, Pear, Walnut

2A BIOFIX: Trap catches began to increase <u>in a few orchards</u> about **June 4th**, signaling the beginning of the second flight. Many orchards still have very little activity. *It's best to use the trap catches in your own orchard to time this spray*. Make sure your lures are fresh, wait until your traps show an increase in activity and **apply a spray 10-13 days after your trap counts increase**, depending on your material choice (see below).

2B BIOFIX: I expect a 2B flight to begin between **June 23–28** based on the 1st flight pattern. If the flight is significant, you will again need to **apply a spray 10-13 days after your traps counts increase** (depending on your material choice) which would be about **July 5-10**, if the traps and weather hold true.

TREATMENT TIMING: Predictions below are based on average weather. If the weather is colder than normal, you'll need to spray a little later. If the weather is warmer than normal you may need to spray a little sooner.

APPLES & PEARS

- General Insecticides (*Imidan, Guthion, Danitol, Assail*): Treat at 250 DD which is projected to occur June 17th OR 13 calendar days after your own biofix. Orchards with high populations may need to retreat if traps continue to show significant activity once the residue from this application is gone. *Assail* is a new material that is easier on beneficial insects and similar in effectiveness to Imidan.
- **Insect Growth Regulators** (*Confirm, Intrepid*): These materials are softer on beneficial insects. They are best used in orchards with low codling moth pressure; good spray coverage is essential. They should be applied by 200 DD which is projected to occur **June 15th** OR **10 calendar days** after your own biofix. If flight is prolonged reapply in 10-18 days, depending on pressure and previous rate.
- **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 at least 2% damage from the previous generation, you should probably treat this generation.

- General Insecticides (Lorsban, PennCap, Imidan, Guthion, Asana, Ambush): Treat at 250 DD which is projected to occur June 17th OR 13 calendar days after your own biofix.
- **Insect Growth Regulators:** (*Confirm, Intrepid, Dimlin*) *Confirm or Intrepid* should be applied by 200 DD which is projected to occur **June 15th** OR **10 calendar days** after your own biofix and reapplied in 14-21 days if flight continues. *Dimlin* should be applied just before the flight begins, if used alone, or at the general insecticide timing if mixed with a *half rate* of insecticide. The Dimlin + insecticide tank mix will provide control for any eggs laid over the last 14 days plus a 21-28 day residual.

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.

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.

Janet Caprile Farm Advisor

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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 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 ^oD. 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.