

IPM for worms...

The biofix date or when you catch the first moth or trap the first eggs is used as the starting point to run degree day models for each of the following pests. These insect phenology models can improve spray timing if pressure is great enough to suggest that sprays are needed or they can provide a clue as to when pest pressure will occur as harvest approaches. Biofix dates will vary with location and the environment so it's best to have traps in *your* orchard if you wish to use this information most effectively.

Today, degree day calculations can be made easily from the biofix in your orchard using the Degree Day calculator on the UCIPM web site at <http://www.ipm.ucdavis.edu>.

Navel orangeworm (NOW). If you're the type of person looking for the glass that's half full rather than half empty the January 4th windstorm accomplished the best area wide sanitation of mummy almonds we've had in years. This natural sanitation really knocked down the NOW overwintering population. As a result, I believe it is unlikely that NOW will be a serious problem in our district this year.

Our egg traps caught very few NOW eggs this season in the orchard we're trapping. This year's biofix for the NOW day degree model was May 6. Using this date, the third generation NOW egg laying should begin around August 16th. If an early harvest can begin as close as possible to this date, worm damage from this pest will be largely avoided in Nonpareil.

Peach Twig Borer (PTB). We caught our first PTB moths in pheromone traps in the orchard we're monitoring on April 16th this year. For a May spray, optimum spray timing is 400 to 500 D° after the first sustained moth catches in pheromone traps indicating when larvae should hatch and create shoot strikes. The second generation of PTB larvae hatched ahead of the majority of Nonpareil hull split and should have been feeding mainly on shoots.

Based on the above biofix and the degree day model, the third generation of PTB larvae is projected to hatch between August 13th and August 17th. This generation will begin to feed in newly splitting hulls of pollenizer varieties and could move into the kernels of poorly sealed soft shelled varieties.

Oriental Fruit Moth (OFM). OFM is rarely a pest of almond kernels but can often be found feeding in the soft tissue of newly splitting hulls. The 4th generation of OFM should be starting about now and new larvae are expected to arrive on the scene between August 10th and August 14th. Watch for them in the hulls of pollenizers that are splitting at that time. OFM larvae are cream or pinkish colored while PTB larvae are brown banded.

Remember, a timely and rapid harvest is the best way to avoid worms. It can also keep you out of the mud if we get early fall rains like we had last fall. Get the crop off the tree and into the huller while the sun shines!