

# North San Joaquin Valley IPM Update – May 20, 2026

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## Degree days calculation from UCIPM website

### Weather Models and Degree Days

Access weather station data for your location and use the pest weather models to make pest management decisions and time pest management activities.



On This Page: [Pest and Plant Weather Models](#) [Degree-Day Calculator](#) [California Weather Data](#) [Resources](#)

#### Pest and Plant Weather Models

Type to search for model



[Beet armyworm](#)



[California red scale](#)



[Codling moth](#)



[Conspere stink bug](#)



[Fire blight](#)



[Fuller rose beetle](#)



[Lygus bug](#)



[Navel orangeworm](#)

<https://ipm.ucanr.edu/weather/#gsc.tab=0>

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# Oriental Fruit Moth

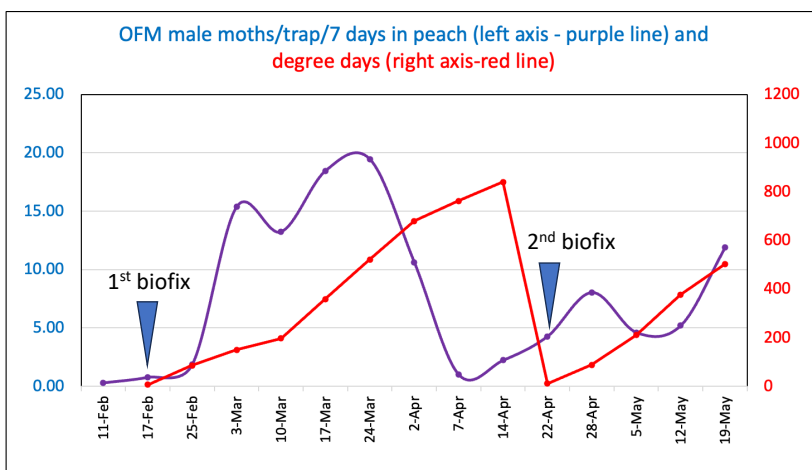


- 1st biofix: 17 February
- **2nd biofix: 22 April**
- DD (5/19): 503
- Projected 1st gen. spray timing (500 - 600DD): 23-28 March
- **Projected 2nd gen. spray timing (400 - 500DD): 16-21 May**

| Generation Length (degree-days) |          |          | Spray Timing (degree-days) |                   |
|---------------------------------|----------|----------|----------------------------|-------------------|
| 1st                             | 2nd      | 3rd      | Early generation           | Later generations |
| 920-1010                        | 920-1010 | 920-1010 | 500-600                    | 400-500           |

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# Oriental Fruit Moth



1st biofix: 17 February  
 2nd biofix: 22 April\*  
 DD (5/19): 503

\*The graph shows only a mild increase in the average number of all traps from April 14 to 22. However, in one high infestation orchard, the count rose from 1.6 OFM/trap/day on 14 April to 14 OFM/trap/day on 22 April. Because of that, I have considered 22 April as the second biofix.

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# Peach Twig Borer (PTB)

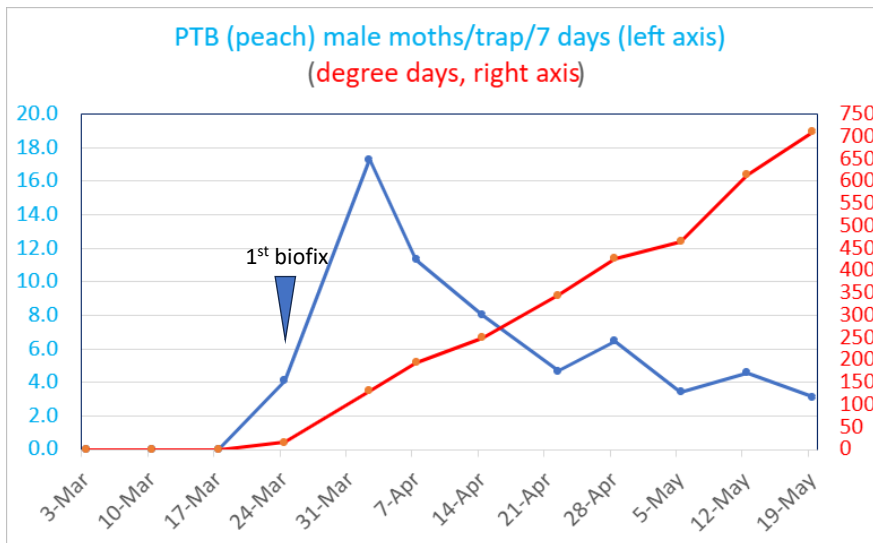
- 1st biofix: **24 March**
- DD (5/19): 710
- Projected 1st gen. spray timing (300 - 400 DD): **21-29 April**



| Generation Length (degree-days) |      |      | Spray Timing (degree-days) |                   |
|---------------------------------|------|------|----------------------------|-------------------|
| 1st                             | 2nd  | 3rd  | Early Generation           | Later Generations |
| 1030                            | 1030 | 1030 | 400-500                    | 300-400           |

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# Peach Twig Borer (PTB)



- 1st biofix: **24 March**;
- DD (5/19): 710

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# Codling Moth

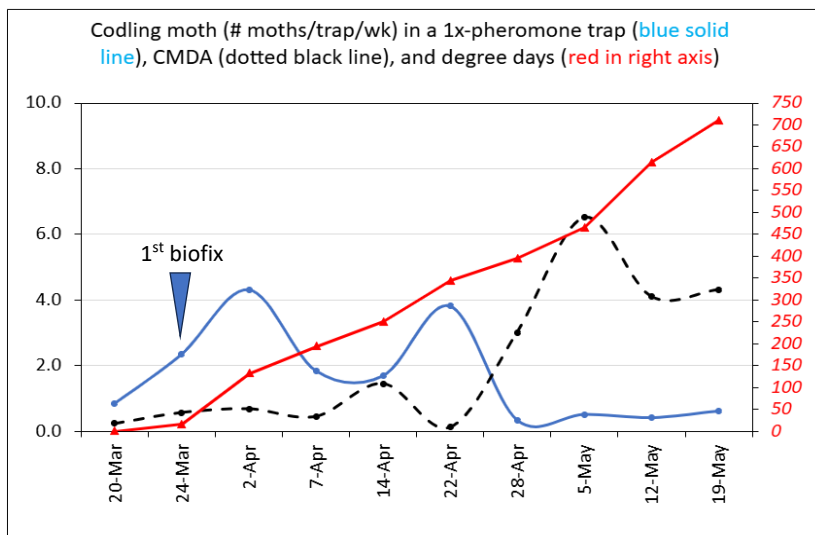


- 1st biofix: **24 March**
- DD (5/19): 710
- Projected 1st gen. 1A spray timing (250 – 300 DD): **April 17**
- Projected 1st gen. 1B spray timing (600 DD): **May 14**

| Generation Length (degree-days) |      |      | Spray Timing (degree-days) |                   |
|---------------------------------|------|------|----------------------------|-------------------|
| 1st                             | 2nd  | 3rd  | Early generation           | Later generations |
| 1060                            | 1100 | 1200 | 250-300                    | 250               |

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# Codling Moth

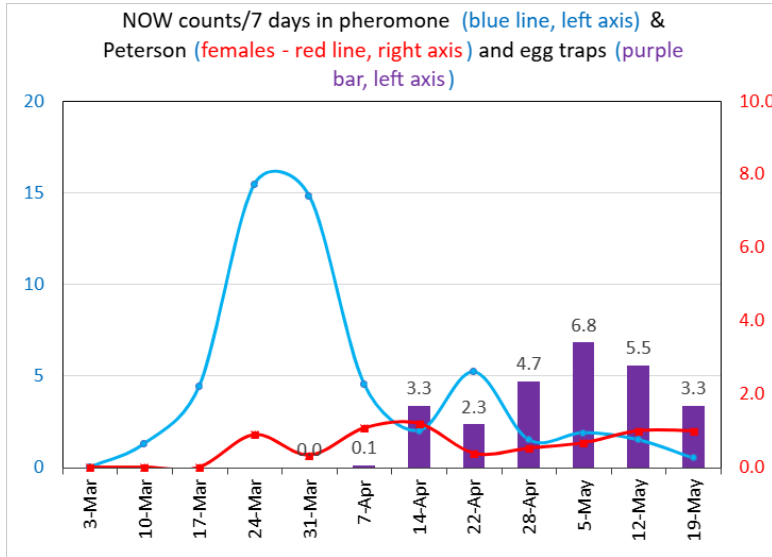


- 1st biofix: **24 March**
- DD (5/19): 710

We captured 2 adults in 3 traps in one of the three orchards on March 20, but all the orchards had moths on March 24. So, March 24 was our 1<sup>st</sup> flight biofix.

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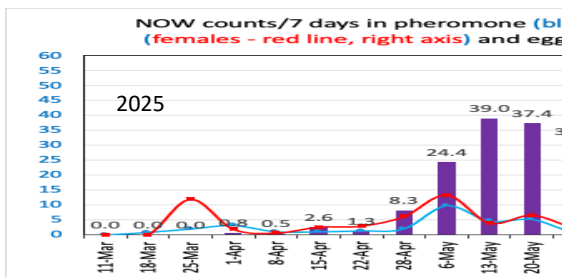
## Navel Orangeworm in almonds



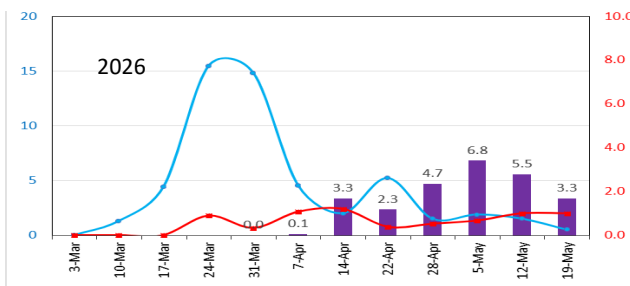
- Egg laying biofix: **7 April**
- 2<sup>nd</sup> Flight (1056 DD): 3 July

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## Navel Orangeworm in almonds



- Egg laying biofix: **7 April**
- 2<sup>nd</sup> Flight (1056 DD): 3 July



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AlphaScents Panel trap with AlphaScents lure (2-3 weeks)  
Size: about 2 ft tall

Testing new Leaffooted bug traps  
– both working fine for detection



Trece Canopy trap with Trece lure (8-12 weeks)  
Size: Same as delta or wing trap

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### Brown marmorated stink bug (BMSB) traps



Clear Panel Trap



Pyramid Trap



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## Spider Mite Management



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## Habitats of Spider Mites

Understanding mite behavior explains why standard, uncalibrated spray configurations often lead to critical control failures:

- **Underside Preference (Abaxial):** Mites colonize the lower leaf surfaces to shield from sun and wind. Leaf turnover (flutter) during spraying is required.
- **Webbing as a Shield:** Fine silken webbing protects eggs and acts as a hydrophobic umbrella, deflecting large, slow spray droplets.
- **Canopy as a Filter:** Foliage acts as a physical filter. Outer leaves intercept most droplets, leaving the interior "dead air" zones completely dry.

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## Miticide options (almonds)

| Brand Name(s)                 | Active Ingredient | IRAC MoA  | Standard Labeled Rate (per acre) | Preharvest Interval (PHI) | Target Stages & Coverage Dynamics  |
|-------------------------------|-------------------|-----------|----------------------------------|---------------------------|--|
| Agri-Mek SC<br>(and generics) | Abamectin         | Group 6   | 2.25 – 4.25 fl oz                | 21 days                   | <b>Translaminar.</b> Requires minimum 1% narrow-range horticultural oil (NR 415) to penetrate waxy cuticles. Excellent early summer choice; limited adult control.   |
| Onager Optek<br>Savey 50DF    | Hexythiazox       | Group 10A | 12 – 24 fl oz<br>3 – 6 oz        | 30 days                   | <b>Ovicidal / Juvenile.</b> Must be placed early before adult spike. Long PHI means it cannot be used as a late-season rescue treatment. Non-systemic; needs thorough wetting. NIS.                                |
| Zeal MVP<br>Zeal WSP          | Etoxazole         | Group 10B | 23 – 34.6 fl oz<br>2 – 3 oz      | 28 days                   | <b>Ovicidal / Juvenile.</b> Excellent residual that prevents egg-hatch. Locally systemic (translaminar). Pair with oil or NIS. Limited to one application per season.  |
| Acramite 50WS<br>Evervate 4SC | Bifenazate        | Group 20D | 0.75 – 1.0 lb<br>16 – 24 fl oz   | 7 days                    | <b>Strictly contact.</b> Fast knockdown of motile stages. Short PHI makes it a premier option for hull split or mid-summer rescue, but entirely dependent on the <b>70/30 nozzle split</b> to hit leaf undersides. |

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## Miticide options (almonds)

| Brand Name(s)          | Active Ingredient | IRAC MoA  | Standard Labeled Rate (per acre) | Preharvest Interval (PHI) | Target Stages & Coverage Dynamics   |
|------------------------|-------------------|-----------|----------------------------------|---------------------------|---|
| Kanemite 15SC          | Acequinocyl       | Group 20B | 21 – 31 fl oz                    | 7 days                    | <b>Strictly contact.</b> Knocks down all stages. Highly selective and safe on beneficial predatory mites ( <i>G. occidentalis</i> ). Must use at least 100 GPA water volume.        |
| Nealta                 | Cyflumetofen      | Group 25A | 13.7 fl oz                       | 7 days                    | <b>Strictly contact.</b> Controls all life stages. Exceptional safety profile for predatory mites and sixspotted thrips. Requires thorough coverage to coat webbing. Organosilicons |
| Portal XLO<br>Fujimite | Fenpyroximate     | Group 21A | 32 fl oz                         | 14 days                   | <b>Strictly contact.</b> Fast stop-feeding action on motile stages. Inhibits cell respiration. <i>Needs a high-quality surfactant or oil to maximize canopy spread.</i>             |
| Envidor 2SC            | Spirodiclofen     | Group 23  | 16 – 34 fl oz                    | 7 days                    | <b>Contact.</b> Lipid synthesis inhibitor. Slow acting on eggs and nymphs but provides long residual control. Most effective when tank-mixed with <i>0.5% to 1% oil.</i>            |
| Vigilant 4SC           | Fenazaquin        | Group 21A | 16 – 24 fl oz                    | 7 days                    | <b>Strictly contact.</b> Broad knockdown of all life stages (including eggs). Short PHI allows late usage, but complete coverage of both leaf surfaces is required.                 |

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## Mite management: Spray coverage is the key

- Water volume: almonds 150-200 gallons/a  
: walnuts 200-250 gallons/a
- Tractor speed: 2 miles/hour
- Nozzle orientation: targeting the majority of the volume to the top half-to-2/3<sup>rd</sup> of the canopy. Effectiveness drops at 16-18 ft above the canopy.
- Fine droplets (<200 microns) have good penetration, but a high risk of drift; Coarse droplets (>350 microns) have low drift, but no penetration in webbings. Desirable/medium-sized droplets: *200-350 microns*
- Temperature >85F, humidity <40% triggers evaporation, and try to avoid those conditions
- Rotating the products based on IRAC groups

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### Next meeting (June 3) speaker

Linda Pinfold  
Agricultural Commissioner, Stanislaus




**Stanislaus County**  
**TREE & VINE IPM**  
**BREAKFAST MEETING**  
 March - June, 2026  
 Dates:  
 MARCH 4 & 18  
 APRIL 1 & 15  
 MAY 6 & 20  
 JUNE 3 & 17  
*1 hour DPR "Other"  
 CE hour offered*

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Today's Speaker (May 20)

Dr. Roger Baldwin

Topic: Vertebrate Pest Specialist



UC Cooperative Extension  
University of California  
Agriculture & Natural Resources

Stanislaus County

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**Disclaimer:** Mention of commercial insecticides/products in this presentation does not constitute product endorsement, nor does it suggest products not listed would not be suitable for use. Some research results included involve the use of chemicals which are currently registered for use, or may involve use which would be considered off label. These results are reported but are not a recommendation from the University of California for use. Consult the label and use it as the basis of all recommendations.