

# Seasonal IPM Update -Northern San Joaquin Valley

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## Pest Monitoring

- ▶ Use traps to monitor insect pests
- ▶ Keep trapping records
- ▶ Use biofix, *UCIPM guidelines*
- ▶ Use degree day models for making treatment decisions



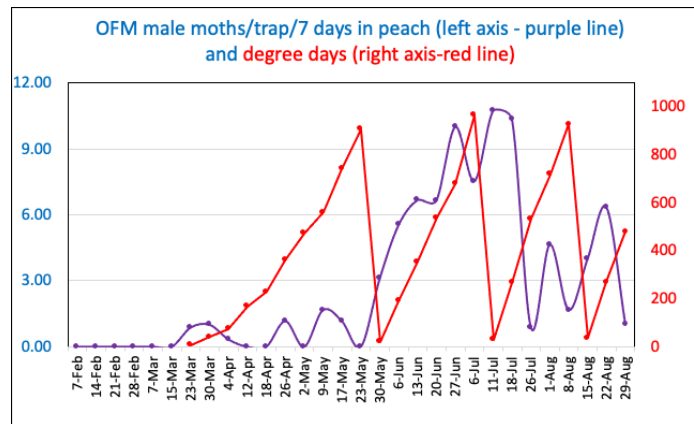
Run Degree Days-UCIPM

For all of our degree-days calculation, we used CIMIS Station #206, Denair, Stanislaus County

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## 2023 Insect monitoring

Oriental Fruit Moth (OFM): 1<sup>st</sup> Biofix 23 March; 2<sup>nd</sup> biofix: 30 May; 3<sup>rd</sup> biofix: 11 July; 4<sup>th</sup> biofix: 15 August



Lower/upper threshold

=45/90°F

The low trap count on 29 August is most likely related to the most recent spray

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## 2023 Insect monitoring

- ▶ Oriental Fruit Moth (OFM):
  - ▶ 1<sup>st</sup> gen. biofix: 23 March
    - ▶ 1<sup>st</sup> gen. spray timing (500 - 600DD): 13-17 May
  - ▶ 2<sup>nd</sup> gen. biofix: 30 May
    - ▶ 2<sup>nd</sup> gen. spray timing (400-500 DD): 15-19 June
  - ▶ 3<sup>rd</sup> gen. biofix: 11 July
    - ▶ 3<sup>rd</sup> gen. spray timing (400-500 DD): 22-25 July
  - ▶ 4<sup>th</sup> gen. biofix: 15 August (DD as of 8/30): 511
    - ▶ 3<sup>rd</sup> gen. spray timing (400-500 DD): 26-30 August

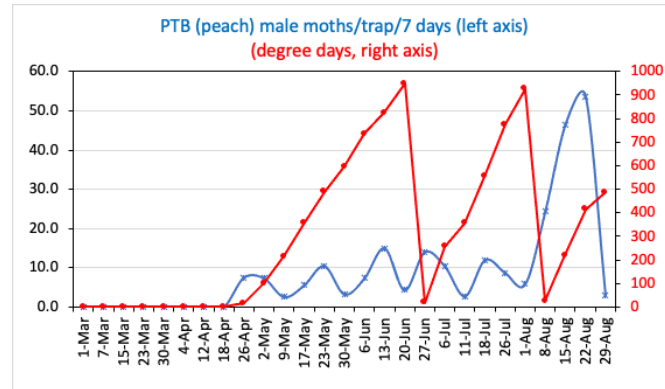
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early generation	Later generations
920-1010	920-1010	920-1010	500-600	400-500

Integrated Management Program

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## 2023 Insect monitoring

- ▶ Peach Twig Borer (PTB): 1<sup>st</sup> Biofix: 22 April; 2<sup>nd</sup> biofix: 27 June; 3<sup>rd</sup> biofix: 8 August



Lower/upper threshold =50/88°F

The low trap count on 29 August is most likely related to the most recent spray

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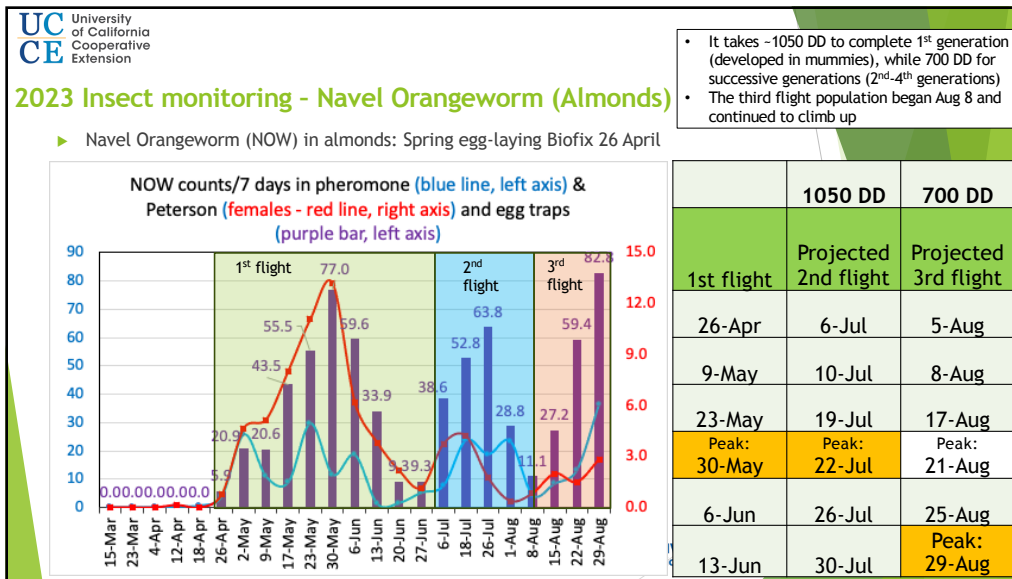
## 2023 Insect monitoring

- ▶ Peach Twig Borer (PTB):
  - ▶ 1<sup>st</sup> biofix: 22 April
    - ▶ 1st gen. spray timing (400 - 500DD): 19-24 May
  - ▶ 2<sup>nd</sup> biofix: 27 June
    - ▶ 2nd gen. spray timing (300 - 400DD): 8-13 July
  - ▶ 3<sup>rd</sup> biofix: 8 August
    - ▶ 3rd gen. spray timing (300 - 400DD): 18-22 August
      - ▶ DD as of 8/30: 614

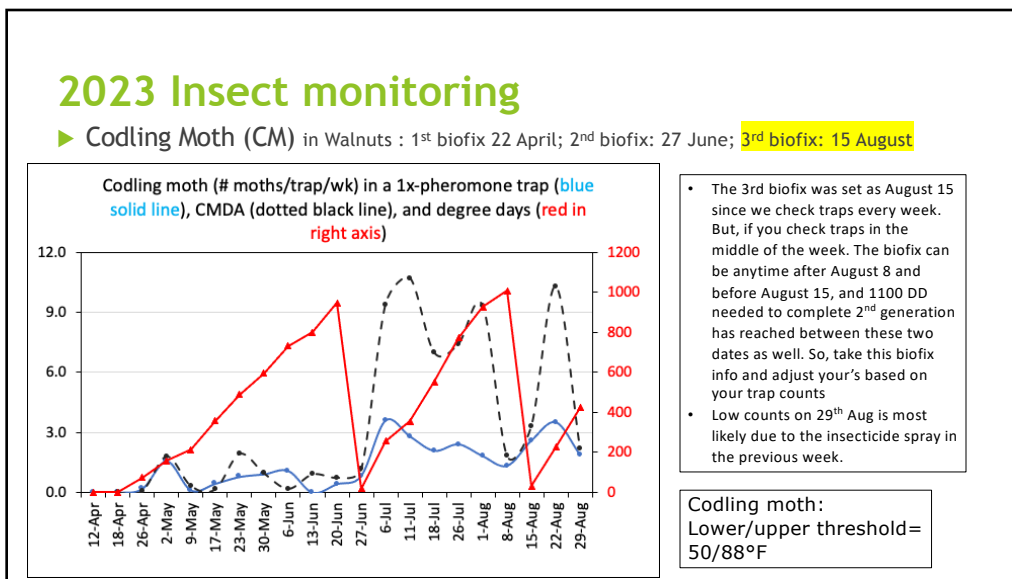
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early Generation	Later Generations
1030	1030	1030	400-500	300-400

Wide Integrated Management Program

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## 2023 Insect monitoring

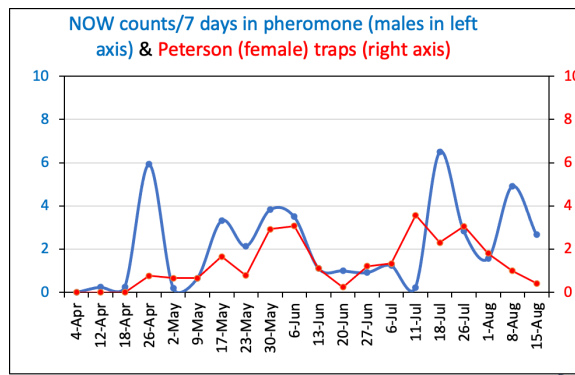
- ▶ Codling Moth (CM):
- ▶ 1<sup>st</sup> biofix: 22 April
  - ▶ 1st gen. spray timing:
    - 1A flight (300 DD): 12-14 May
    - 1B flight (600 - 700 DD): 29 May - 3 June
- ▶ 2<sup>nd</sup> biofix: 27 June
  - ▶ 2<sup>nd</sup> gen. spray timing - predicted (300 DD): 9 July
- ▶ 3<sup>rd</sup> biofix: 15 August; spray timing (300 DD): 25 August
  - ▶ DD as of 8/30: 424

Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early generation	Later generations
1060	1100	1200	1A Peak: 300 1B Peak: 600-700	300

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## 2023 Insect monitoring

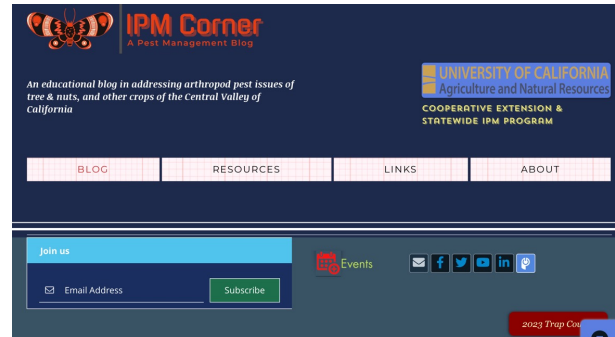
### ▶ Navel Orangeworm (NOW) in Walnuts



- Minimal risks from NOW in walnuts, especially from the first 2 flights
- The tail end of the 3<sup>rd</sup> flight can be a risk to early varieties
- Chandler is the least susceptible, and 4<sup>th</sup> flight might infest them, but low risk

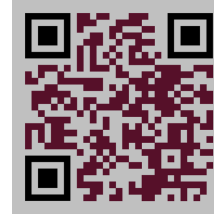
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#### **Disclaimers**

*The information provided here is for your reference purpose only. Every orchard is different regarding the insect activity and damage history. We highly encouraged to use your own monitoring tools, biofix dates, and degree-days for making pest management decisions.*

*In this presentation, discussing research results requires the use of pesticide trade names, but this does not constitute an endorsement of the products, nor does not imply that other products are not available. Some products mentioned may be for experimental use only and included for informational purposes. Pesticide Label is the law! Please follow all instructions and safety precautions on the label when applying pesticide products.*