

# 2024 IPM Update -3 September

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1

## Monitoring

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



Or google "Run Degree Days UCIPM"

### Note:

- All trapping data reported in this presentation were collected from 2-4 commercial orchards in Stanislaus County. The weather station used for calculating degree days was CIMIS Station #206, Denair.
- Therefore, the information provided here should be used as a general reference, this is not a recommendation of any kind. All growers/PCAs should have their monitoring systems and tools in place, and use that information in making pest management decisions as "every orchard is different"

2

## Degree-day models: UCIPM

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- What is IPM?
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- Agricultural pests
- Natural environment pests
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- Weather, models & degree-days
- Pesticide information
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- Publications
- Events & training
- Links
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### How to Manage Pests

#### Run Models and Calculate Degree-Days

Our degree-day calculator has two branches. You can run preset models as recommended in our pest man Or, you can specify thresholds and method of calculation to calculate any degree-days. Weather data for th come from the UC IPM database for California, a file you supply, or data you enter online. | [Acknowledgme](#)

| [Using this calculator](#) | [Reference degree-day tables](#) | [About degree-days](#) |

[Run models](#)  
[Calculate degree-days](#)

**Run models**—using degree-days, as recommended by UC Cooperative Extension

**Select an organism and preset thresholds**

- Beet armyworm (Lower=54 F)
- California red scale (Lower=53 F)
- Codling moth (Lower=50 F, Upper=88)
- Conspere stink bug (Lower=53.6 F)
- Cotton (Lower=60 F)
- Elm leaf beetle (Lower=52 F)
- Fuller rose beetle (Lower=51 F)
- Lygus bug (Lower=54 F)


- [Reference degree-day tables](#) for accumulating de
- [Other models](#) of plants, pests, and beneficials—u (unknown validation)

**Calculate degree-days**—specify thresholds

**Specify thresholds and method of calculation**

**Thresholds**

Fahrenheit
  Celsius






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3

## 2024 Insect monitoring

- ▶ Oriental Fruit Moth (OFM): 1st Biofix 21 February
  - ▶ 1st biofix 21 February
  - ▶ 1st gen. spray timing (500 - 600DD): 12-19 April
  - ▶ 2<sup>nd</sup> gen. biofix: 14 May
    - ▶ DD accumulated (as of 7/11): 1601
  - ▶ 2<sup>nd</sup> gen spray timing (400-500): 30 May - 3 June
  - ▶ 3<sup>rd</sup> gen. biofix: 18 June
    - ▶ 3<sup>rd</sup> gen spray timing (400-500): 30 June - 3 July
  - ▶ 4th gen. biofix: 30 July
    - ▶ DD accumulated (as of 9/3): 1055



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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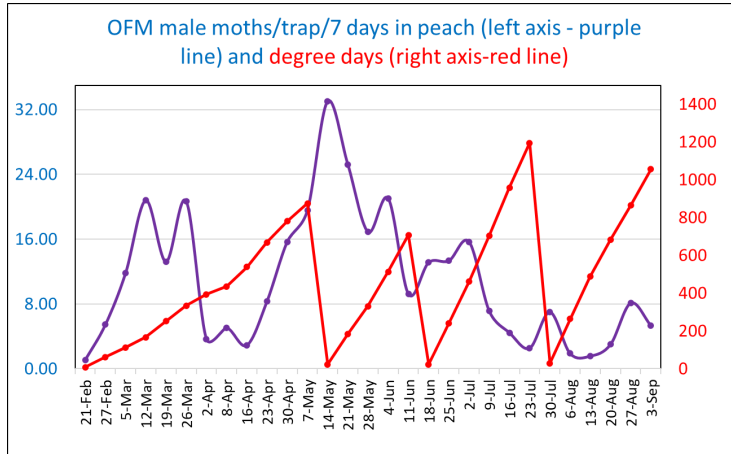
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4

## 2024 Insect monitoring

Oriental Fruit Moth (OFM)

1<sup>st</sup> biofix: 21 February; 2<sup>nd</sup> flight biofix: 14 May; 3<sup>rd</sup> flight biofix: 18 June;  
4<sup>th</sup> flight biofix: 30 July



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5

## 2024 Insect monitoring

▶ Peach Twig Borer (PTB):

- ▶ 1<sup>st</sup> Biofix: 2 April
- ▶ 1st gen. spray timing (400 - 500DD): 10-15 May
- ▶ DD (1<sup>st</sup> gen, 6/11): 1050
- ▶ 2<sup>nd</sup> gen. Biofix: 11 June
  - ▶ 2<sup>nd</sup> gen. spray timing (300-400DD): 22-26 June
- ▶ 3rd gen. biofix: 23 July
  - ▶ DD accumulation (as of 9/3): 1077.44

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

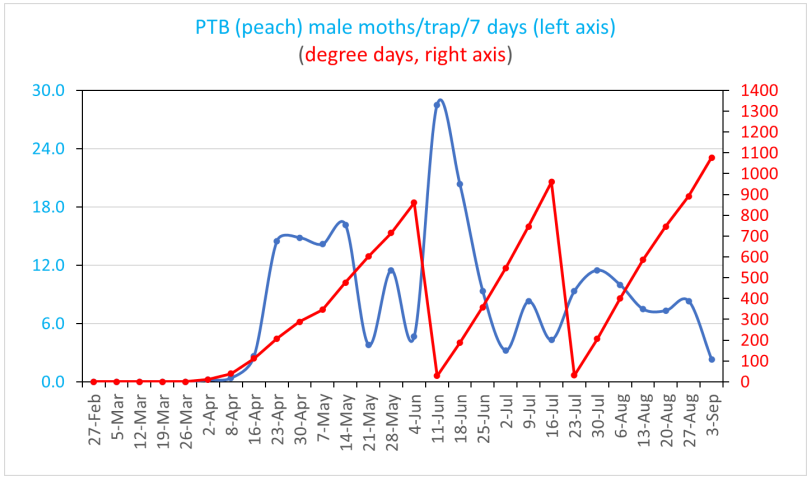
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6

## 2024 Insect monitoring

▶ Peach Twig Borer (PTB):

▶ 1<sup>st</sup> biofix: 2 April; 2<sup>nd</sup> biofix: 11 June; 3<sup>rd</sup> biofix: 23 July



DD accumulated (3<sup>rd</sup> gen.; as of 9/3): 1077.44

7

## 2024 Insect monitoring

▶ Codling Moth (CM): 1<sup>st</sup> flight biofix 8 April

➢ 1<sup>st</sup> gen. spray timing:

▶ 1A flight (300 DD): 4 May

▶ 1B flight (600 - 700 DD): 23 May - 28 May

➢ 2<sup>nd</sup> gen. biofix: 11 June

▶ 2<sup>nd</sup> gen. spray timing (2A timing: 300DD): 23 June

➢ 3<sup>rd</sup> gen. biofix: 30 July

▶ DD accumulation (as of 8/20): 563

▶ Treatment timing (300 DD): 9 August

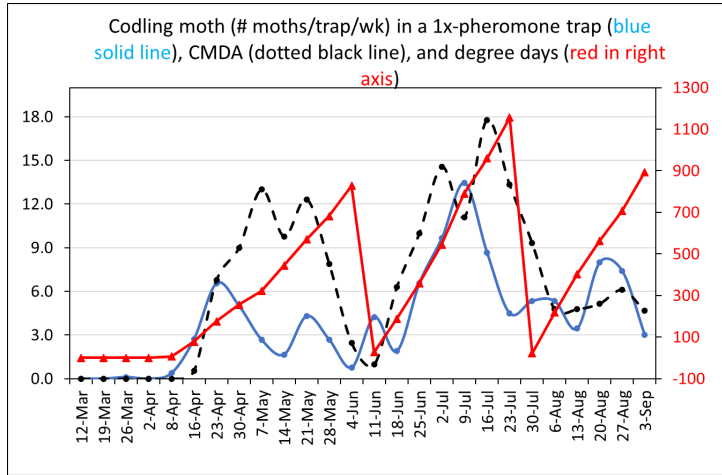
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early generation	Later generations
1060	1100	1200	1A Peak: 300 1B Peak: 600-700	300

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8

# 2024 Insect monitoring

- ▶ Codling Moth (CM) in Walnut: 1<sup>st</sup> biofix: 8 April; 2<sup>nd</sup> biofix: 11 June; 3<sup>rd</sup> biofix: 30 July

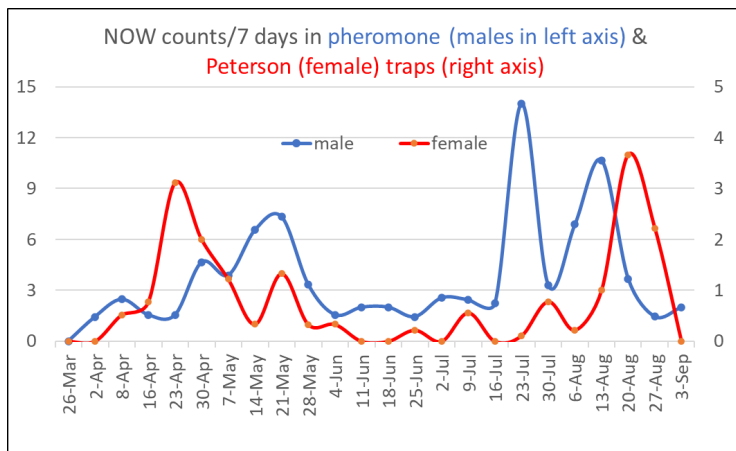


DD accumulation (as of 9/3): 894.37

9

# 2024 Insect monitoring

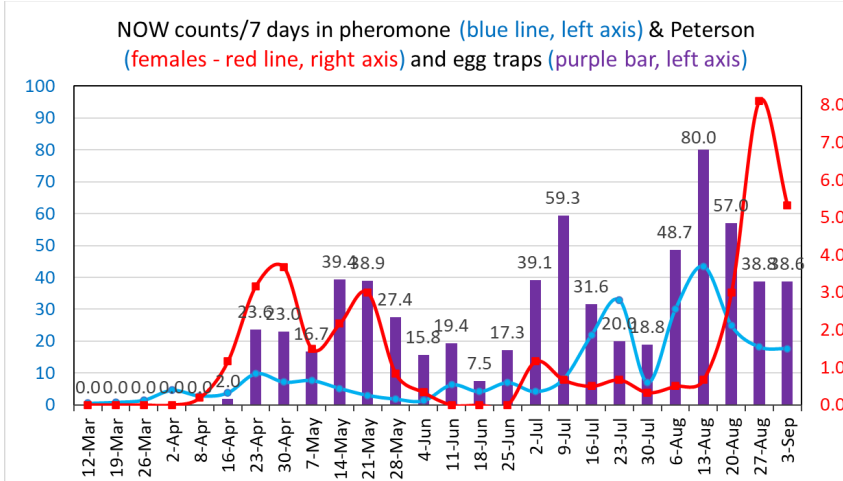
- ▶ Navel Orangeworm (NOW) in Walnuts



10

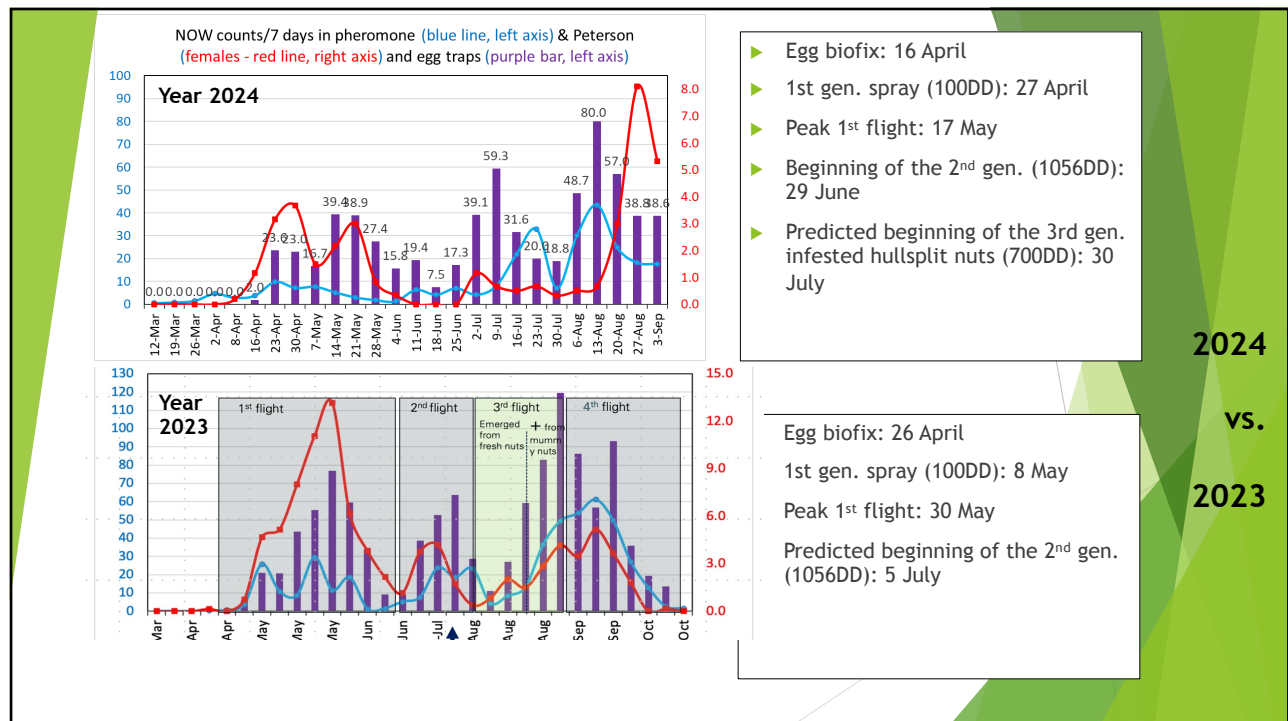
# 2024 Insect monitoring

► Navel Orangeworm (NOW) in almonds: Spring egg laying biofix: 16 April



- Spring spray timing (100DD): April 27
- Projected beginning of the 2<sup>nd</sup> flight (1056 DD) was June 29
- Projected beginning of the 3<sup>rd</sup> flight (700 DD) was July 30<sup>th</sup>
- Egg laying activities of the 3<sup>rd</sup> gen. flight has increased lately (Aug. 6)


11



12

# Weather Outlook

## August, 2024

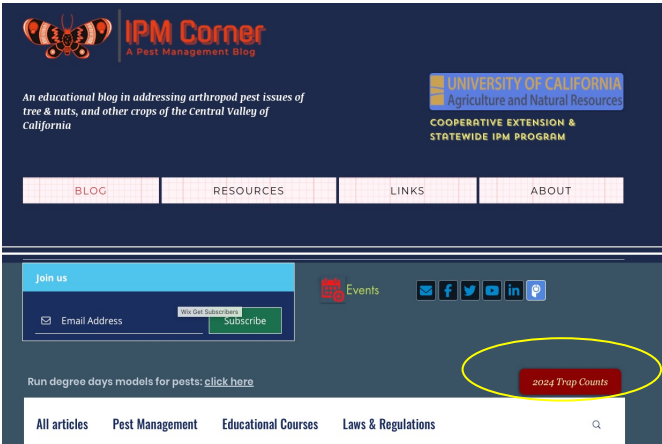


September 2024

S	M	T	W	T	F	S
1	2	3	4	5	6	7
94° 63°	92° 61°	97° 62°	103° 63°	103° 71°	104° 70°	103° 70°
8	9	10	11	12	13	14
101° 67°	101° 61°	88° 56°	84° 57°	83° 58°	86° 59°	91° 58°
15	16	17	18	19	20	21
85° 59°	83° 56°	85° 56°	87° 59°	85° 57°	87° 56°	92° 53°
22	23	24	25	26	27	28
91° 61°	91° 61°	89° 60°	82° 58°	83° 61°	85° 59°	88° 60°


17

Updated information is also available in [www.IPMCorner.com](http://www.IPMCorner.com) website as well.




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18