

# 2024 IPM Update -8 October

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## 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"

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## Degree-day models: UCIPM

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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)


[Continue](#) [Clear Selections](#)

**Calculate degree-days**—specify thresholds

**Specify thresholds and method of calculation**

**Thresholds**

Fahrenheit  Celsius






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## 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 10/8): 2042



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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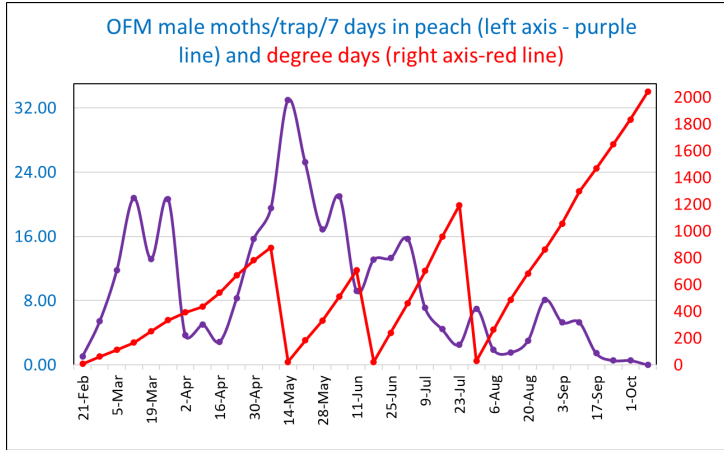
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## 2024 Insect monitoring

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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## 2024 Insect monitoring

- ▶ Peach Twig Borer (PTB):
  - ▶ 1<sup>st</sup> Biofix: 2 April
  - ▶ 1<sup>st</sup> 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
  - ▶ 3<sup>rd</sup> gen. biofix: 23 July
    - ▶ DD accumulation (as of 10/8): 1820

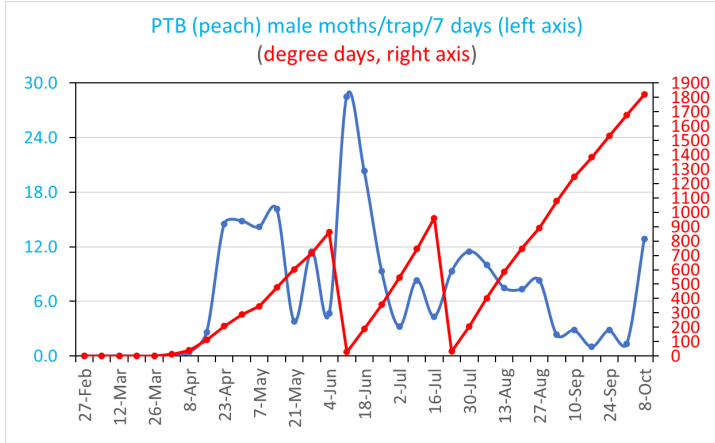
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early Generation	Later Generations
1030	1030	1030	400-500	300-400

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## 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 10/8): 1820

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## 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 10/8): 1664
    - ▶ Treatment timing (300 DD): 9 August

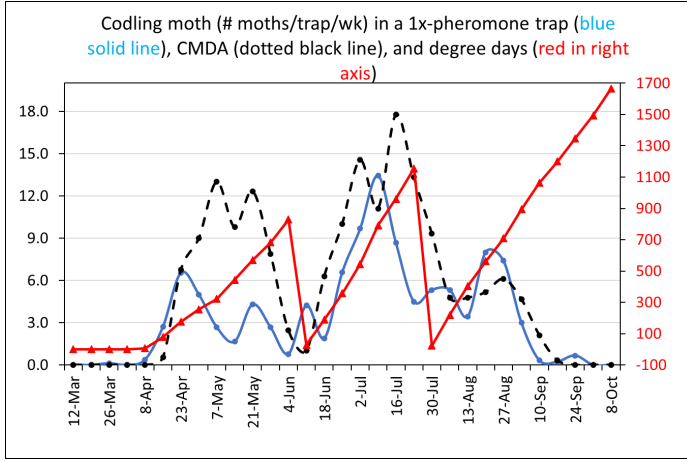
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early generation	Later generations
1060	1100	1200	1A Peak: 300 1B Peak: 600-700	300

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# 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

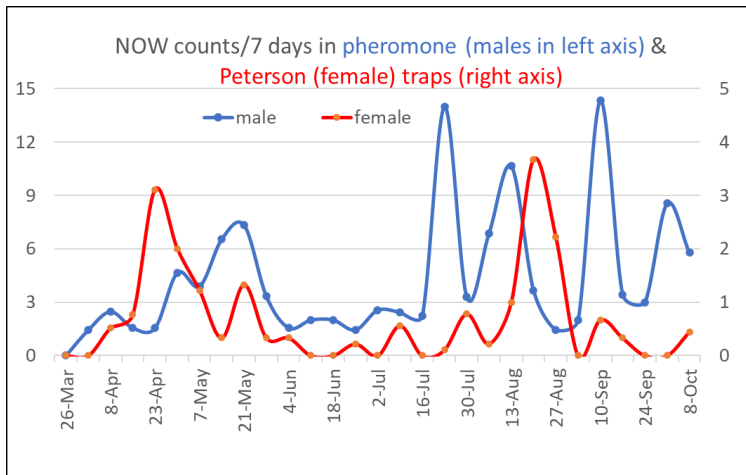


DD accumulation (as of 10/8): 1664

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# 2024 Insect monitoring

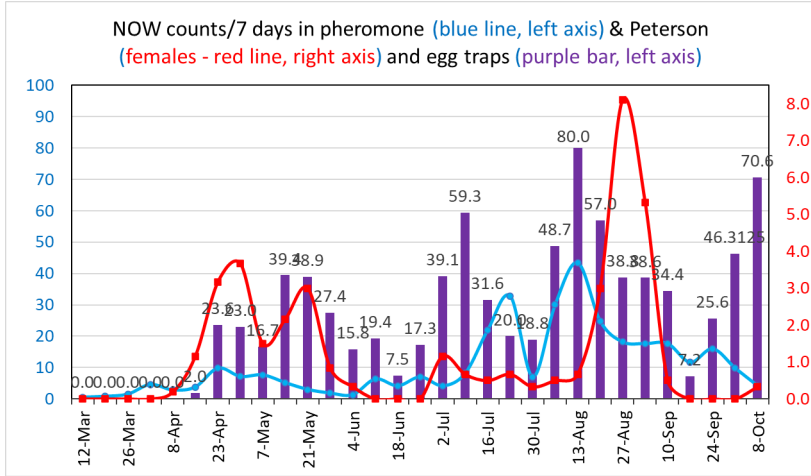
▶ Navel Orangeworm (NOW) in Walnuts



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# 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)

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**Year 2024**

Date	Pheromone (left axis)	Peterson (females - right axis)	Egg traps (left axis)
12-Mar	0.0	0.0	0.0
26-Mar	0.0	0.0	0.0
8-Apr	0.0	0.0	0.0
23-Apr	23.8	3.0	0.0
7-May	16.7	3.0	39.4
21-May	27.4	3.0	48.9
4-Jun	15.8	1.0	19.4
18-Jun	7.5	1.0	17.3
2-Jul	39.1	1.0	59.3
16-Jul	31.6	1.0	20.8
30-Jul	20.8	1.0	48.7
13-Aug	48.7	1.0	80.0
27-Aug	57.0	7.0	38.8
10-Sep	34.4	1.0	34.4
24-Sep	25.6	1.0	46.3
8-Oct	70.6	1.0	31.2

- Egg biofix: 16 April
- 1st gen. spray (100DD): 27 April
- Peak 1<sup>st</sup> flight: 17 May
- Beginning of the 2<sup>nd</sup> gen. (1056DD): 29 June
- Predicted beginning of the 3<sup>rd</sup> gen. infested hullsplit nuts (700DD): 30 July

**Year 2023**

Date	Pheromone (left axis)	Peterson (females - right axis)	Egg traps (left axis)
15-Mar	0.0	0.0	0.0
23-Mar	0.0	0.0	0.0
4-Apr	0.0	0.0	0.0
12-Apr	0.0	0.0	0.0
18-Apr	0.0	0.0	0.0
26-Apr	0.0	0.0	0.0
2-May	0.0	0.0	0.0
9-May	0.0	0.0	0.0
17-May	0.0	0.0	0.0
23-May	0.0	0.0	0.0
30-May	0.0	0.0	0.0
6-Jun	0.0	0.0	0.0
13-Jun	0.0	0.0	0.0
20-Jun	0.0	0.0	0.0
27-Jun	0.0	0.0	0.0
6-Jul	0.0	0.0	0.0
18-Jul	0.0	0.0	0.0
26-Jul	0.0	0.0	0.0
1-Aug	0.0	0.0	0.0
8-Aug	0.0	0.0	0.0
15-Aug	0.0	0.0	0.0
22-Aug	0.0	0.0	0.0
29-Aug	0.0	0.0	0.0
5-Sep	0.0	0.0	0.0
12-Sep	0.0	0.0	0.0
19-Sep	0.0	0.0	0.0
27-Sep	0.0	0.0	0.0
3-Oct	0.0	0.0	0.0
10-Oct	0.0	0.0	0.0
17-Oct	0.0	0.0	0.0
25-Oct	0.0	0.0	0.0

- Egg biofix: 26 April
- 1st gen. spray (100DD): 8 May
- Peak 1<sup>st</sup> flight: 30 May
- Predicted beginning of the 2<sup>nd</sup> gen. (1056DD): 5 July

**2024**


vs.

**2023**

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# Weather Outlook

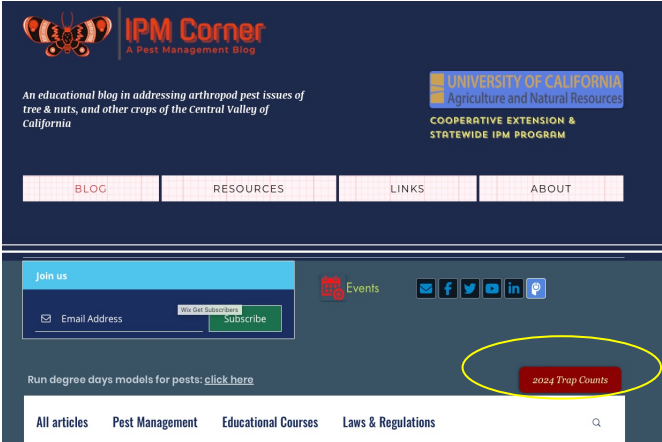
## October, 2024



October 2024							DAILY →
S	M	T	W	T	F	S	
29	30	1	2	3	4	5	
87° 58°	93° 60°	98° 58°	104° 62°	104° 62°	102° 63°	98° 68°	
6	7	8	9	10	11	12	
99° 69°	99° 63°	98° 71°	89° 61°	86° 58°	87° 54°	82° 57°	
13	14	15	16	17	18	19	
83° 61°	84° 56°	84° 57°	76° 51°	72° 54°	75° 50°	78° 49°	
20	21	22	23	24	25	26	
81° 52°	83° 52°	84° 54°	75° 53°	78° 52°	78° 53°	76° 51°	


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



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