

2024 IPM Update -6 August

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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?
- Home & landscape pests
- Agricultural pests
- Natural environment pests
- Exotic & invasive pests
- Weed gallery
- Natural enemies gallery
- Weather, models & degree-days
- Pesticide information
- Research
- Publications
- Events & training
- Links
- Glossary
- About us

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. | [Acknowledge](#)

| [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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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
 - ▶ 2nd gen. biofix: 14 May
 - ▶ DD accumulated (as of 7/11): 1601
 - ▶ 2nd gen spray timing (400-500): 30 May - 3 June
 - ▶ 3rd gen. biofix: 18 June
 - ▶ 3rd gen spray timing (400-500): 30 June - 3 July
 - ▶ 4th gen. biofix: 30 July
 - ▶ DD accumulated (as of 8/11): 426



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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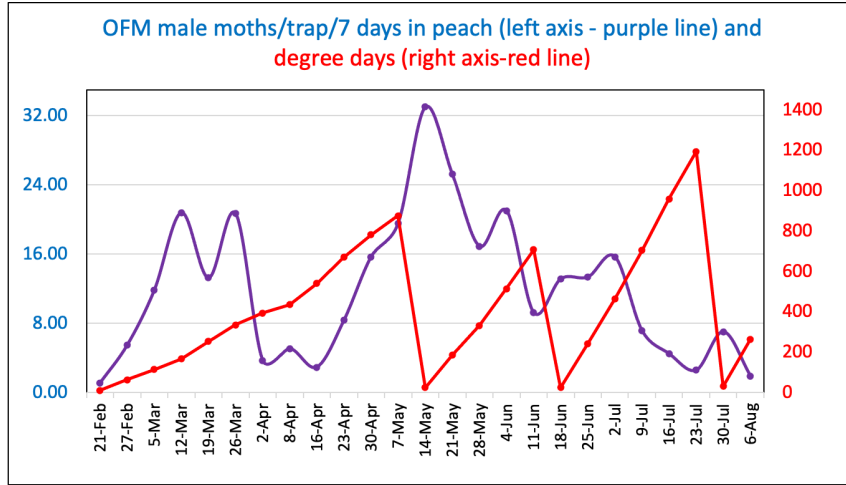
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4

2024 Insect monitoring

Oriental Fruit Moth (OFM)

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



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5

2024 Insect monitoring

▶ Peach Twig Borer (PTB):

- ▶ 1st Biofix: 2 April
- ▶ 1st gen. spray timing (400 - 500DD): 10-15 May
- ▶ DD (1st gen, 6/11): 1050
- ▶ 2nd gen. Biofix: 11 June
 - ▶ 2nd gen. spray timing (300-400DD): 22-26 June
- ▶ 3rd gen. biofix: 23 July
 - ▶ DD accumulation (as of 8/11): 536

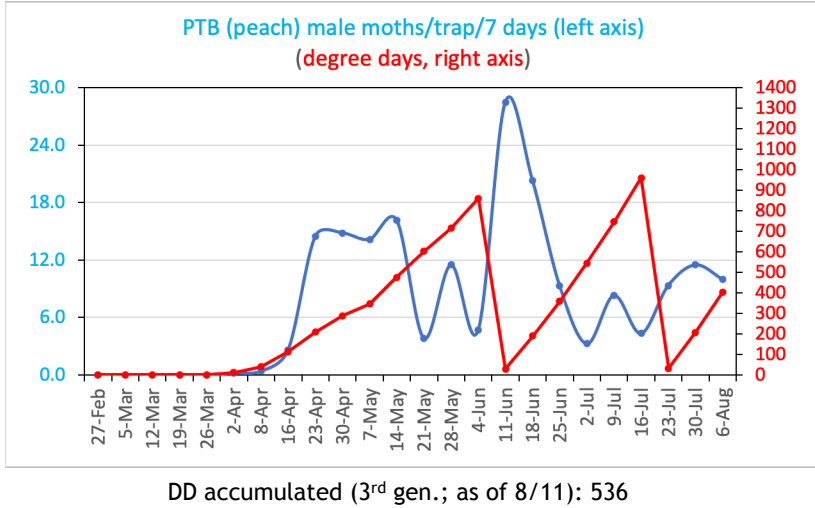
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early Generation	Later Generations
1030	1030	1030	400-500	300-400

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6

2024 Insect monitoring

- ▶ Peach Twig Borer (PTB):
- ▶ 1st biofix: 2 April; 2nd biofix: 11 June; 3rd biofix: 23 July



7

2024 Insect monitoring

- ▶ Codling Moth (CM): 1st flight biofix 8 April
 - 1st gen. spray timing:
 - ▶ 1A flight (300 DD): 4 May
 - ▶ 1B flight (600 - 700 DD): 23 May - 28 May
 - 2nd gen. biofix: 11 June
 - ▶ 2nd gen. spray timing (2A timing: 300DD): 23 June
 - 3rd gen. biofix: 30 July
 - ▶ DD accumulation (as of 8/11): 353
 - ▶ Treatment timing (300 DD): 9 August

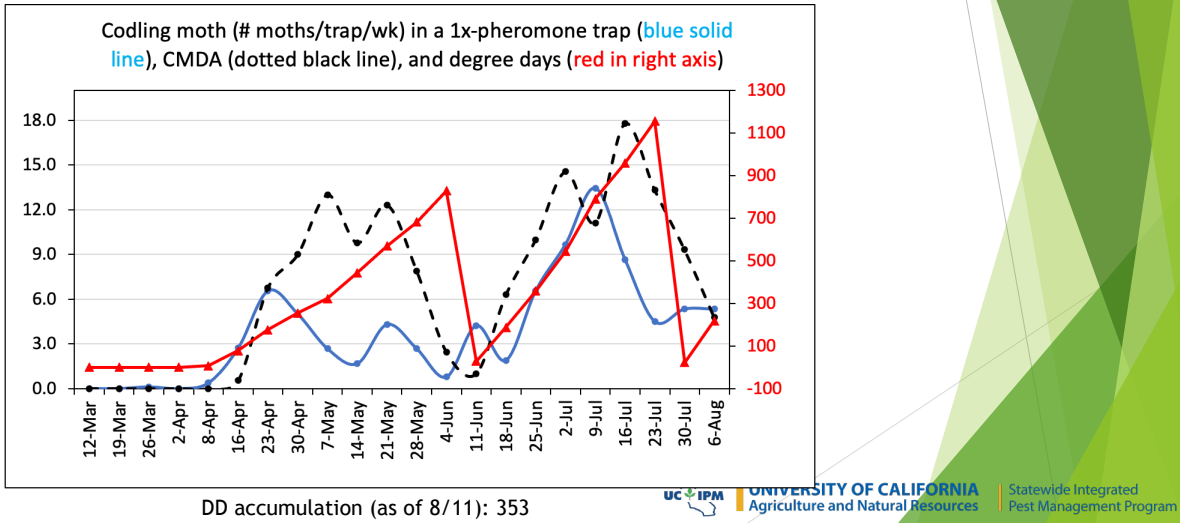
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early generation	Later generations
1060	1100	1200	1A Peak: 300 1B Peak: 600-700	300

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8

2024 Insect monitoring

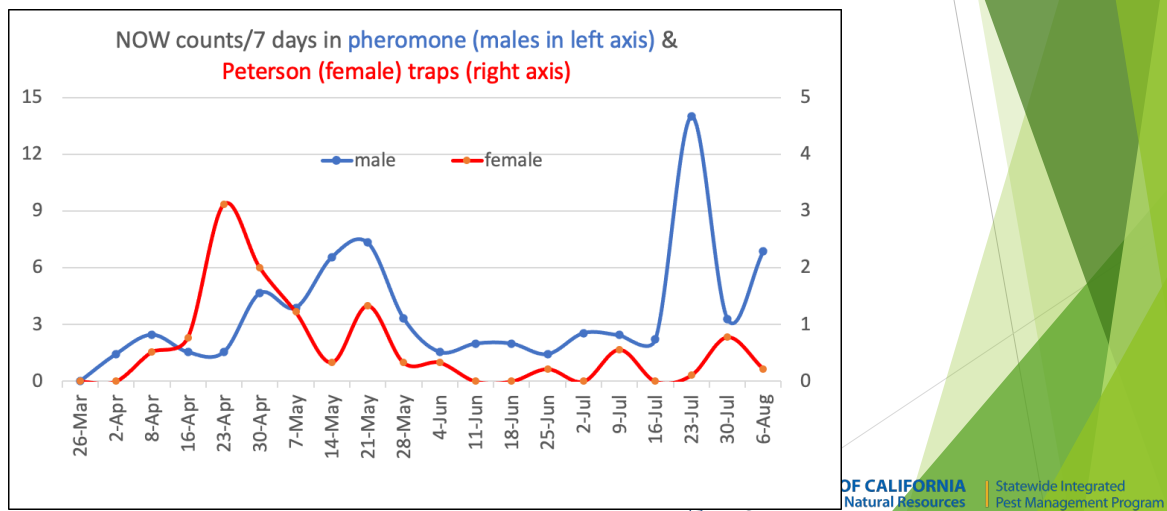
► Codling Moth (CM) in Walnut: 1st biofix: 8 April; 2nd biofix: 11 June; 3rd biofix: 30 July



9

2024 Insect monitoring

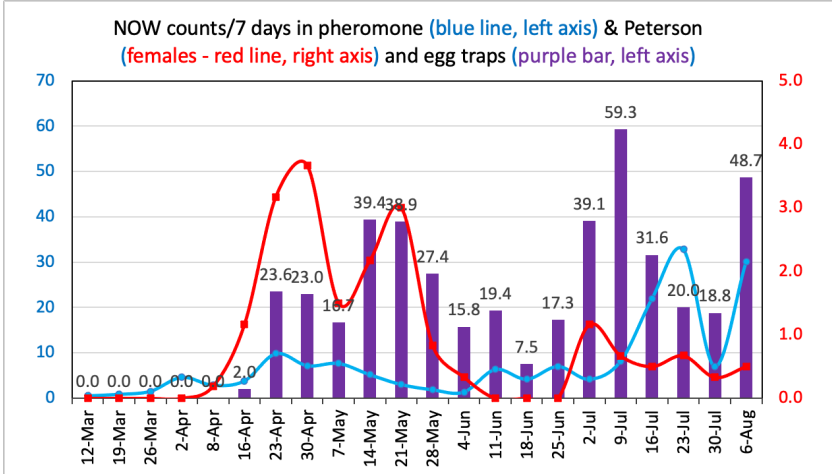
► Navel Orangeworm (NOW) in Walnuts



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 2nd flight (1056 DD) was June 29
- Projected beginning of the 3rd flight (700 DD) was July 30th
- Egg laying activities of the 3rd gen. flight has increased lately (Aug. 6)

11

Year 2024

Date	Pheromone (left axis)	Peterson (females - right axis)	Egg traps (left axis)
12-Mar	0.0	0.0	0.0
19-Mar	0.0	0.0	0.0
26-Mar	0.0	0.0	0.0
2-Apr	0.0	0.0	0.0
8-Apr	0.0	0.0	0.0
16-Apr	2.0	0.0	0.0
23-Apr	10.0	2.0	23.6
30-Apr	10.0	4.0	23.0
7-May	8.0	3.0	16.7
14-May	7.0	3.0	39.4
21-May	6.0	3.0	38.9
28-May	4.0	1.0	27.4
4-Jun	2.0	0.5	15.8
11-Jun	3.0	0.5	19.4
18-Jun	2.0	0.5	7.5
25-Jun	3.0	0.5	17.3
2-Jul	4.0	1.0	39.1
9-Jul	5.0	1.0	59.3
16-Jul	4.0	0.5	31.6
23-Jul	3.0	0.5	20.0
30-Jul	2.0	0.5	18.8
6-Aug	3.0	0.5	48.7

- Egg biofix: 16 April
- 1st gen. spray (100DD): 27 April
- Peak 1st flight: 17 May
- Beginning of the 2nd gen. (1056DD): 29 June
- Predicted beginning of the 3rd 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	5.9	0.5	20.9
9-May	20.6	1.0	20.6
17-May	30.0	2.0	43.5
23-May	30.0	3.0	55.5
30-May	20.0	4.0	77.0
6-Jun	10.0	2.0	59.6
13-Jun	5.0	1.0	33.9
20-Jun	3.0	0.5	5.3
27-Jun	2.0	0.5	9.3
4-Jul	3.0	0.5	38.6
11-Jul	4.0	1.0	52.8
18-Jul	5.0	1.0	63.8
26-Jul	4.0	0.5	42.9
1-Aug	2.0	0.5	12.9
8-Aug	3.0	0.5	31.7
15-Aug	3.0	0.5	31.7

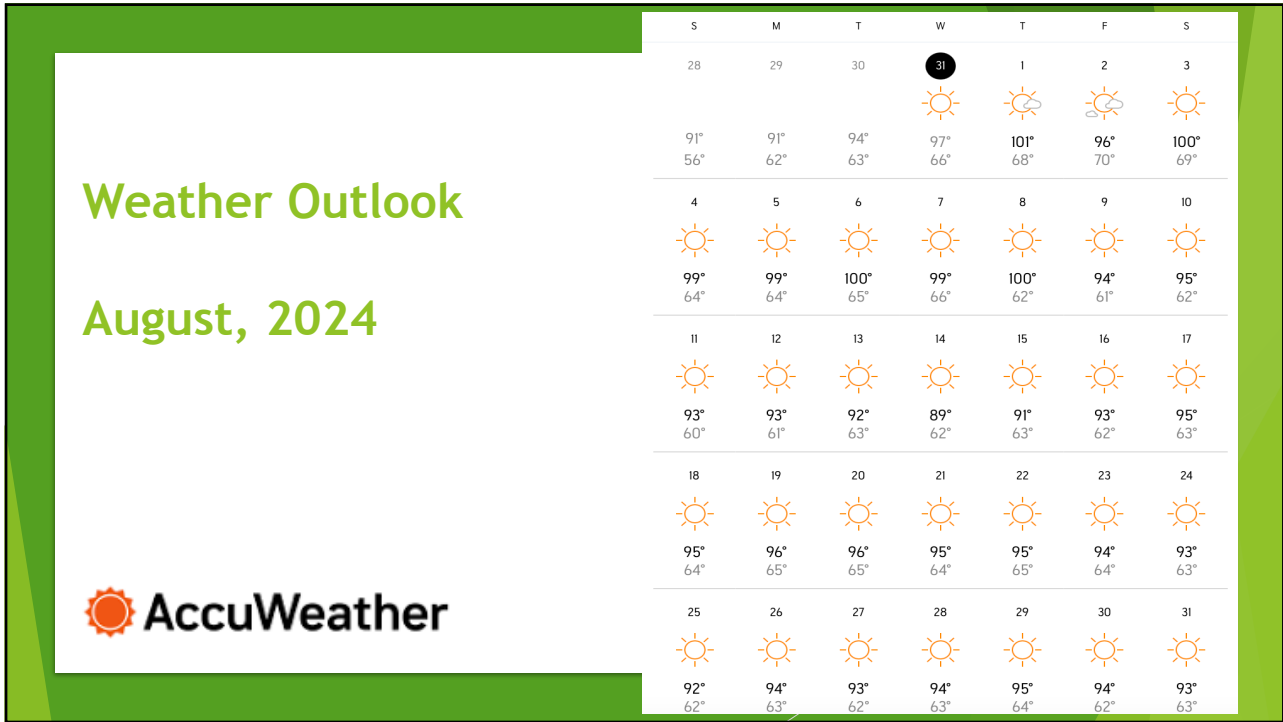
- Egg biofix: 26 April
- 1st gen. spray (100DD): 8 May
- Peak 1st flight: 30 May
- Predicted beginning of the 2nd gen. (1056DD): 5 July

2024

vs.

2023

12



17

Updated information is also available in www.IPMCorner.com website as well.

Disclaimer/Note

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18