

INSECT PEST MONITORING FOR TREE & NUT CROPS IN NORTH SAN JOAQUIN VALLEY

4 OCTOBER UPDATE

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4 Oct. 2021

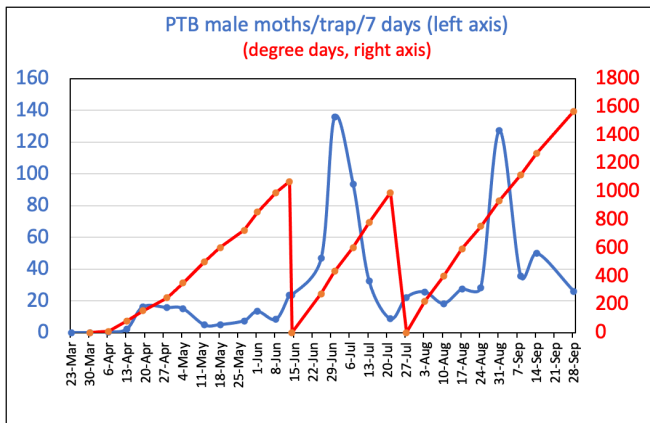
1

Pest Activities/DD in Traps (*Denair II CIMIS #206*)

■ Peach twig borer (PTB)

- 1st flight biofix: 6 April;
- 2nd flight biofix: 14 June
- 3rd flight biofix: 27 July; spray timing (300 - 400DD; peach): 6 - 10 August
- 4th flight biofix: 14 September; DD(10/4): 422

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



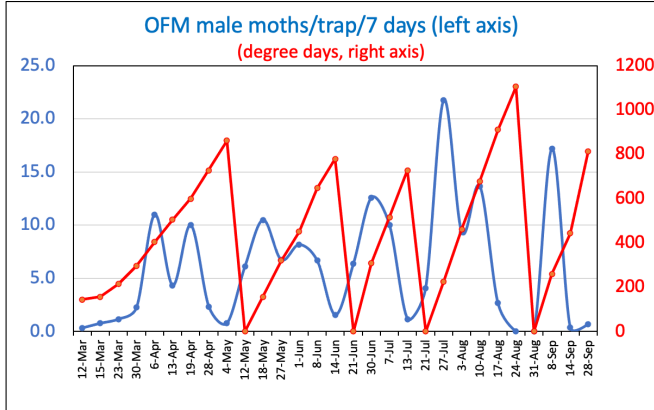
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Pest Activities/DD in Traps (Denair II CIMIS #206)

■ Oriental fruit moth (OFM)

- 1st flight biofix: 22 February
- 1st gen. spray timing (500-600DD): 13 -19 April
- 2nd flight biofix: 12 May; spray timing (400-500 DD): 30 May – 3 June
- 3rd flight biofix: 21 June; spray timing (400-500 DD): 3 – 6 July
- 4th flight biofix: 21 July; spray timing (400-500 DD): 2 – 5 August
- 5th flight biofix: 31 August; DD (10/4): 944

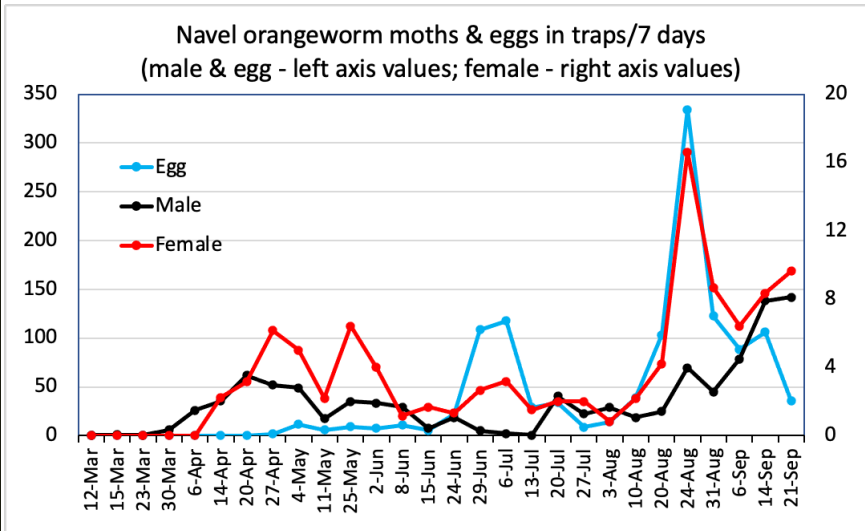
Generation Length (degree-days)			Spray Timing (degree-days)	
1st	2nd	3rd	Early generation	Later generations
920-1010	920-1010	920-1010	500-600	400-500



In addition to degree days, conduct shoot strike and fruit samplings for making treatment decisions

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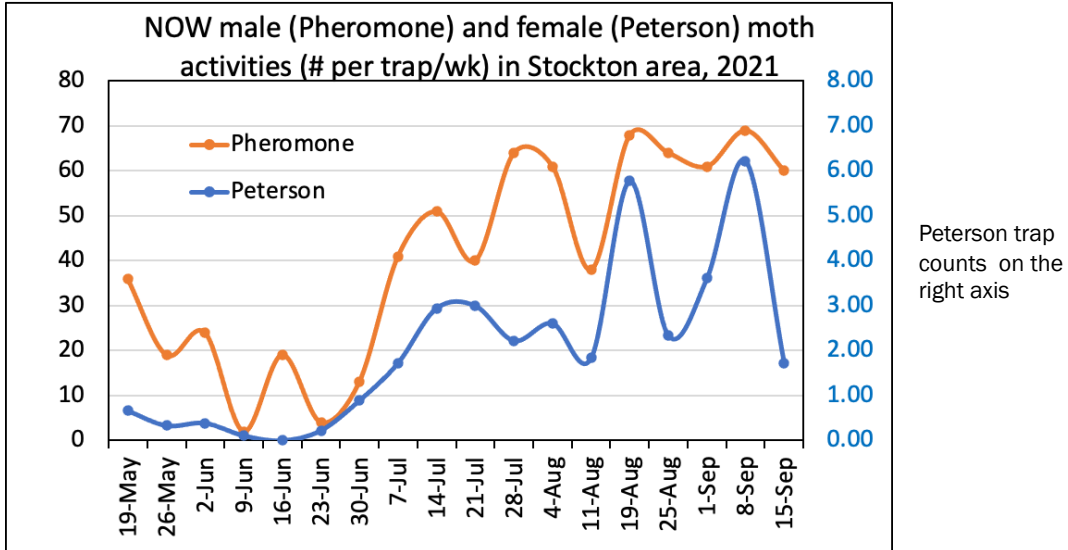
Navel Orangeworm (NOW) Activities in Traps (Almonds) - High pressure orchards: Oakdale area (Stanislaus)



- Spring eggs laying biofix; 22 April (1056 DD; 1 July)
- Notice increased egg counts from 29 June – 6 July
- Hull split spray timing: beginning of hullsplit (no later than 1% hullsplit) if eggs are being laid on egg traps or if pheromone traps indicate that the second flight has begun.
- Spray decision should be based on NOW activity and the stage of the hullsplit.
- 24 Aug: Notice the female moth counts 16 moth/wk, that's high
- 21 Sept.: male moths/trap/wk was ~150
- 21 Sept. Egg counts dropped; but female counts still over 8 moths/trap/wk

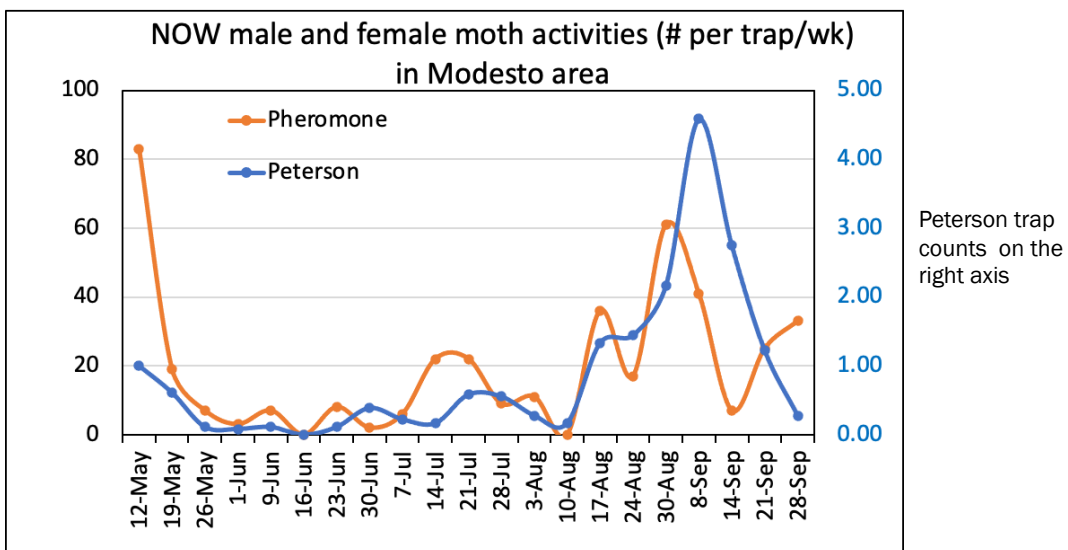
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Navel Orangeworm (NOW) Activities in Traps (Walnuts) -
 - Stockton/Farmington area (San Joaquin)



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Navel Orangeworm (NOW) Activities in Traps (Walnuts) -
 - Modesto area (Stanislaus)



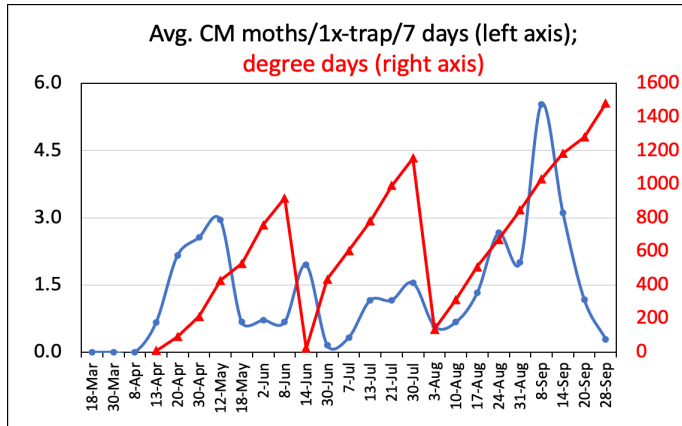
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Pest Activities/DD in Traps (Denair II CIMIS #206)

■ Codling moth (Stanislaus)

- 1st flight biofix: 13 April;
- 2nd flight biofix: 14 June; spray timing (300DD): June 26
- 3rd flight biofix: 30 July; spray timing (300 DD): August 9
- Accumulated degree-days at 10/4: 1481

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



- These trap counts are from walnuts in West Modesto area. CM pressure have built up even moderate levels this year in my monitoring sites. I have received similar feedbacks from local Pest Control Advisers as well.
- Overall CM counts have been very minimal this year, including current flight (3rd flight) which is pretty much done now.
- In most years, the third generation's late-stage (i.e., mature) larvae drop from the infested fruits to the ground and diapause (winter dormant state) inside the thick, silken cocoons under loose bark and soil or debris around the base of the trees. These larvae pupate in the next spring and emerge as adult moths. Unless we start to see significant increase in number, I think we are done as far as CM activity for this season!

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5 OCT. - 15 OCT. WEATHER

Tue 05	84°/57°	☁️ Partly Cloudy	📈 1%	🌀 NNW 12 mph
Wed 06	73°/53°	☁️ Cloudy	📈 8%	🌀 NNW 8 mph
Thu 07	71°/50°	☁️ Cloudy	📈 3%	🌀 NNW 10 mph
Fri 08	67°/46°	☁️ Partly Cloudy	📈 17%	🌀 NNW 8 mph
Sat 09	72°/47°	☀️ Sunny	📈 10%	🌀 NW 11 mph
Sun 10	78°/50°	☀️ Sunny	📈 3%	🌀 NNW 8 mph
Mon 11	70°/48°	☀️ Mostly Sunny	📈 4%	🌀 NW 17 mph
Tue 12	66°/43°	☀️ Sunny	📈 0%	🌀 NW 17 mph
Wed 13	69°/47°	☀️ Mostly Sunny	📈 3%	🌀 NNW 7 mph
Thu 14	69°/47°	☁️ Partly Cloudy	📈 9%	🌀 NNW 9 mph
Fri 15	72°/47°	☀️ Sunny	📈 3%	🌀 NNW 9 mph

Source: Weather.com

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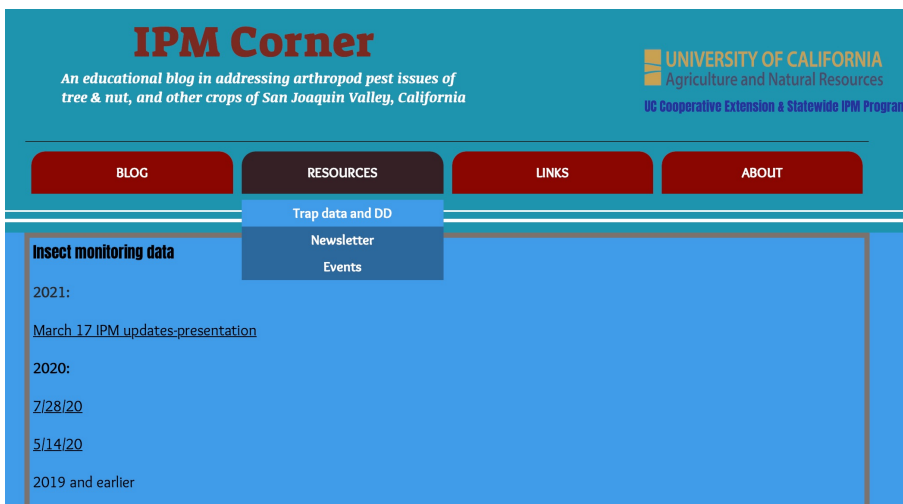
UCIPM Degree Days Models



<http://ipm.ucanr.edu/WEATHER/ddretrievetext.html>

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Trap counts/DD info at IPMCorner.com



IPM Corner
An educational blog in addressing arthropod pest issues of tree & nut, and other crops of San Joaquin Valley, California

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources
UC Cooperative Extension & Statewide IPM Program

BLOG RESOURCES LINKS ABOUT

Trap data and DD
Newsletter
Events

Insect monitoring data

2021:
[March 17 IPM updates-presentation](#)

2020:
[7/28/20](#)
[5/14/20](#)
2019 and earlier



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Disclaimer:

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.

The average numbers of insect captured may not represent what you are observing in your orchard(s). The average trend is more important than the exact number. All insect monitoring/DD information provided here are derived from the traps/weather stations located in Modesto area (Stanislaus county) in general, and may not be fully applicable to other geographic region/locations