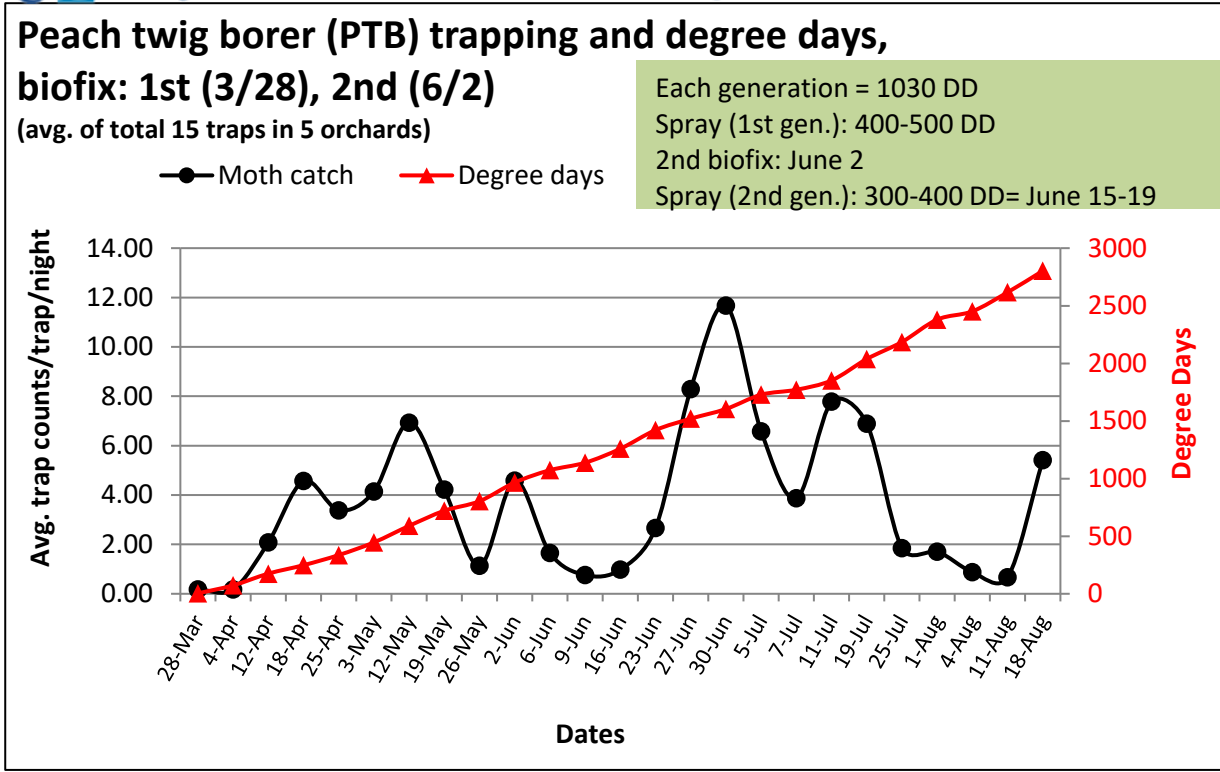


Peach twig borer (PTB) trap catch and degree days calculation-2016

Jhalendra Rijal, IPM Advisor,
UC Cooperative Extension-Stanislaus
rijal@ucanr.edu; 209-525-6800



Degree days were calculated by using UC-IPM Degree days calculation link:

<http://www.ipm.ucdavis.edu/calludt.cgi/DDMODEL?MODEL=PTB&CROP=almonds>

The weather station used to calculate DD is CIMIS Station # 206 (i.e. Denair II)

Peach twig borer model

Lower/upper threshold: 50/88°F

Calculation/upper cutoff method: single sine/horizontal

Biofix: The biofix is the first date that male moths are caught consistently in pheromone traps.

Biofix Date: 28 March 2016

Additional information: [Pest Management Guidelines](#)

Typical generation periods and spray timing

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

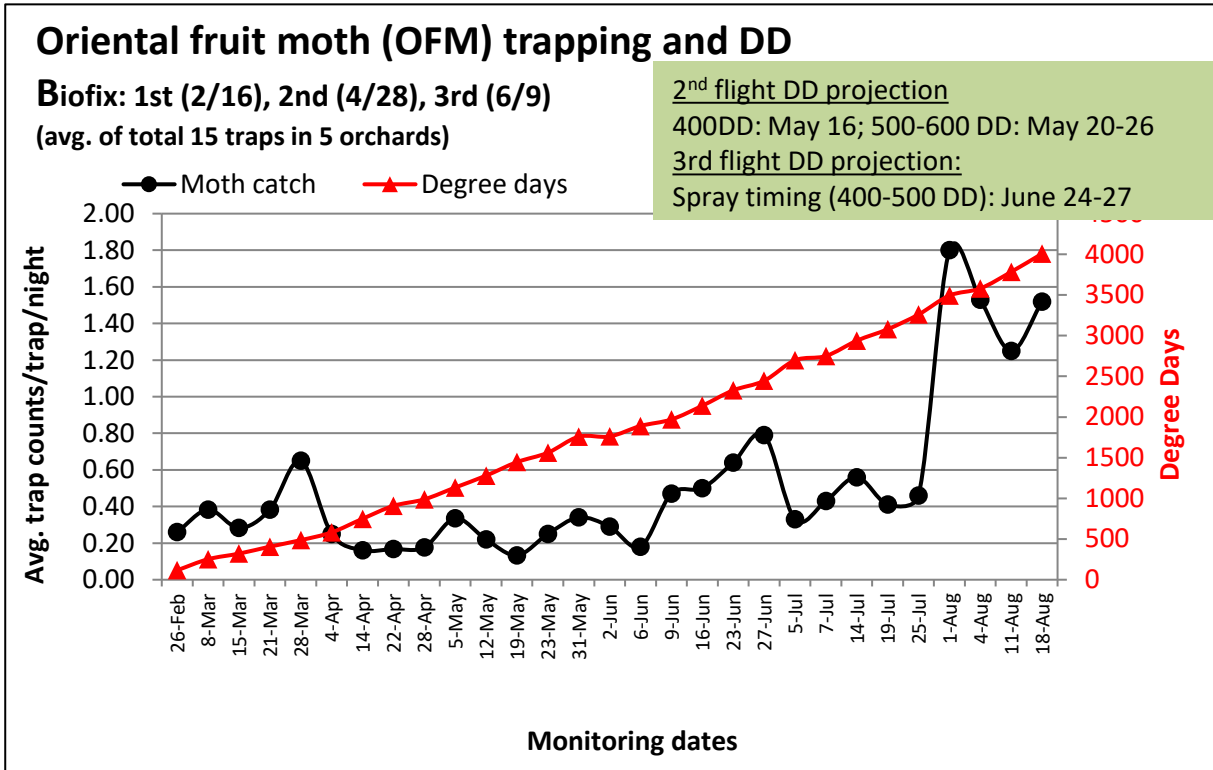
Peach twig borer (PTB) trap catch and degree days calculation-2016

Traps were placed in almond orchards

Date	Avg PTB per trap/day	Degree-days	
28-Mar	0.18	4	Biofix at 3/28
4-Apr	0.18	73	
12-Apr	2.08	175	
18-Apr	4.57	248	
25-Apr	3.38	336	
3-May	4.15	446	
12-May	6.93	590	
19-May	4.21	721	2nd Biofix at 6/2
26-May	1.14	804	DD2 (2nd flight)
2-Jun	4.58	966	24
6-Jun	1.65	1073	131
9-Jun	0.76	1138	196
16-Jun	0.98	1259	318
23-Jun	2.665	1421	482
27-Jun	8.2925	1520	578
30-Jun	11.67	1604	662
5-Jul	6.58	1728	786
7-Jul	3.87	1771	829
11-Jul	7.78	1852	910
19-Jul	6.89	2038	1096
25-Jul	1.85	2186	1244
1-Aug	1.71	2380	
4-Aug	0.88	2452	
11-Aug	0.67	2617	
18-Aug	5.41	2803	

Oriental Fruit moth (OFM) trap catch and degree days calculation-2016

Jhalendra Rijal, IPM Advisor,
 UC Cooperative Extension-Stanislaus
 jrijal@ucanr.edu; 209-525-6800



Degree days were calculated by using UC-IPM Degree days calculation link:

<http://www.ipm.ucdavis.edu/calludt.cgi/DDMODEL?MODEL=OFM&CROP=peaches>

The weather station used to calculate DD is CIMIS #206, Denair II

Oriental Fruit Moth Model

Lower/upper threshold: 45/90°F

Calculation/upper cutoff method: single sine/horizontal

Biofix: The biofix is the first date that male moths are caught consistently in pheromone traps.

Biofix Date: 16 February 2016

[Additional information on using this model: Pest Management Guideline](#)

Typical generation periods and spray timing

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

Oriental Fruit moth (OFM) trap catch and degree days calculation-2016

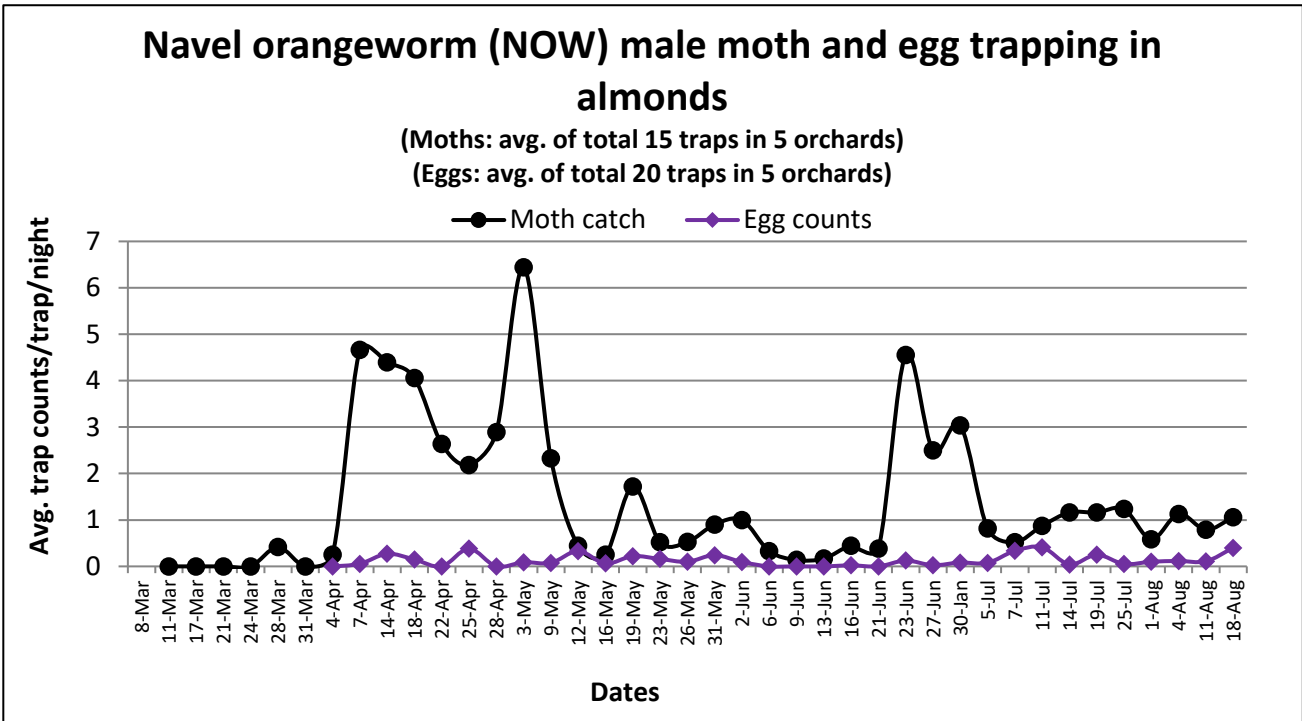
Traps were placed in almond orchards.

Date	Avg OFM per trap/night	Degree-days			
26-Feb	0.26	116			
8-Mar	0.38	252			
15-Mar	0.28	321			
21-Mar	0.38	407			
28-Mar	0.65	486			
4-Apr	0.25	582			
14-Apr	0.16	749	2nd Biofix 4/28		
22-Apr	0.17	908	DD2 (2nd flight)		
28-Apr	0.18	988	16		
5-May	0.34	1133	165		
12-May	0.22	1279	311		
19-May	0.13	1446	478		
23-May	0.25	1561	533		
31-May	0.34	1758	730		
2-Jun	0.29	1761	793	3rd biofix 6/9	
6-Jun	0.18	1890	922	DD3	
9-Jun	0.47	1970		25	
16-Jun	0.5	2139		180	
23-Jun	0.64	2328		382	
27-Jun	0.79	2445		502	
5-Jul	0.33	2697		751	
7-Jul	0.43	2750		804	4th biofix 7/14??
14-Jul	0.56	2938		992	31
19-Jul	0.41	3079		1134	171
25-Jul	0.46	3260		1315	354
1-Aug	1.8	3493			587
4-Aug	1.53	3581			646
11-Aug	1.25	3784			878
18-Aug	1.52	4008			

Note: Two of the five orchards monitored had relatively high moth counts, but rest of the orchard had a very minimal moth activity. That's the reason that average moth capture from total 5 orchards is low

Navel Orangeworm (NOW) moth catch and degree day calculation-2016

Jhalendra Rijal, IPM Advisor,
UC Cooperative Extension-Stanislaus
rijal@ucanr.edu; 209-525-6800



Additional information: [Pest Management Guideline](#)

Navel Orangeworm (NOW) moth catch and degree day calculation-2016

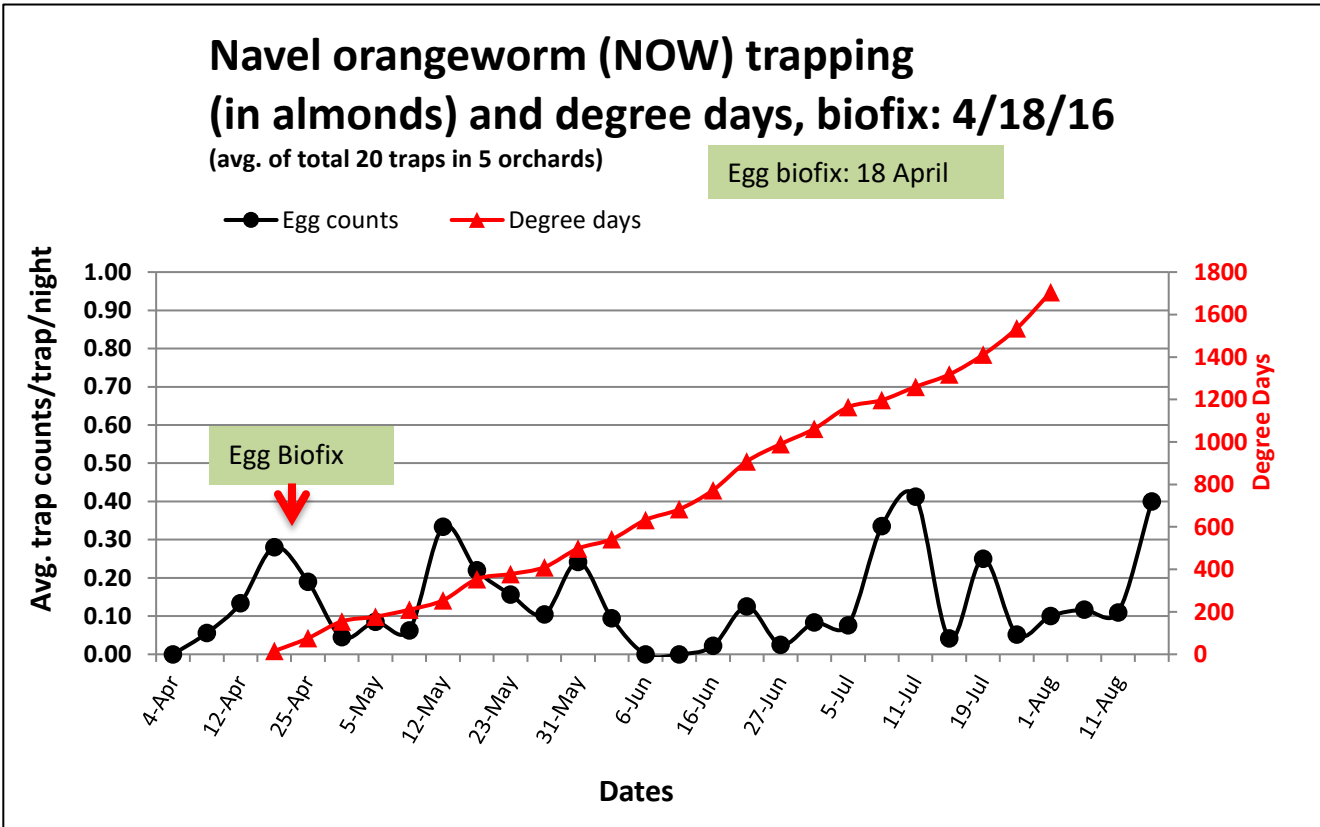
Traps were placed in almond orchards

Date	Avg NOW moth per trap/night	Avg. eggs/night
8-Mar		
11-Mar	0.00	
15-Mar	0.00	
17-Mar	0.00	
21-Mar	0.00	
24-Mar	0.00	
28-Mar	0.42	
31-Mar	0.00	
4-Apr	0.25	0.00
7-Apr	4.67	0.06
14-Apr	4.39	0.27
18-Apr	4.06	0.15
22-Apr	2.64	0.00
25-Apr	2.18	0.38
28-Apr	2.89	0.00
3-May	6.44	0.09
9-May	2.33	0.08
12-May	0.44	0.33
16-May	0.25	0.06
19-May	1.72	0.22
23-May	0.52	0.16
26-May	0.53	0.10
31-May	0.90	0.24
2-Jun	1.00	0.09
6-Jun	0.33	0.00
9-Jun	0.14	0.00
13-Jun	0.17	0.00
16-Jun	0.44	0.02
21-Jun	0.38	0.00
23-Jun	4.56	0.13
27-Jun	2.50	0.03
30-Jan	3.04	0.08
5-Jul	0.82	0.08
7-Jul	0.52	0.34
11-Jul	0.88	0.41
14-Jul	1.16	0.04
19-Jul	1.16	0.25
25-Jul	1.24	0.05
1-Aug	0.59	0.10

4-Aug	1.13	0.12
11-Aug	0.79	0.11
18-Aug	1.06	0.40

Navel Orangeworm (NOW) egg counts and degree day calculation-2016

Jhalendra Rijal, IPM Advisor,
UC Cooperative Extension-Stanislaus
jrijal@ucanr.edu; 209-525-6800



Degree days were calculated by using UC-IPM Degree days calculation link:

<http://www.ipm.ucdavis.edu/calludt.cgi/DDMODEL?MODEL=NOW&CROP=almonds>

The weather station used to calculate DD is CIMIS Station #206 (i.e. Denair II)

Navel orangeworm model

Lower/upper threshold: 55/94°F

Calculation/upper cutoff method: single sine/horizontal

Biofix: The first biofix is the beginning of a consistent increase in egg laying on egg traps.

When at least 75% of the egg traps in a given location show increases in the number of eggs on two consecutive monitoring dates, the biofix is the first of those two dates.

Biofix Date:

Additional information: [Pest Management Guideline](#)

Navel Orangeworm (NOW) egg counts and degree day calculation-2016

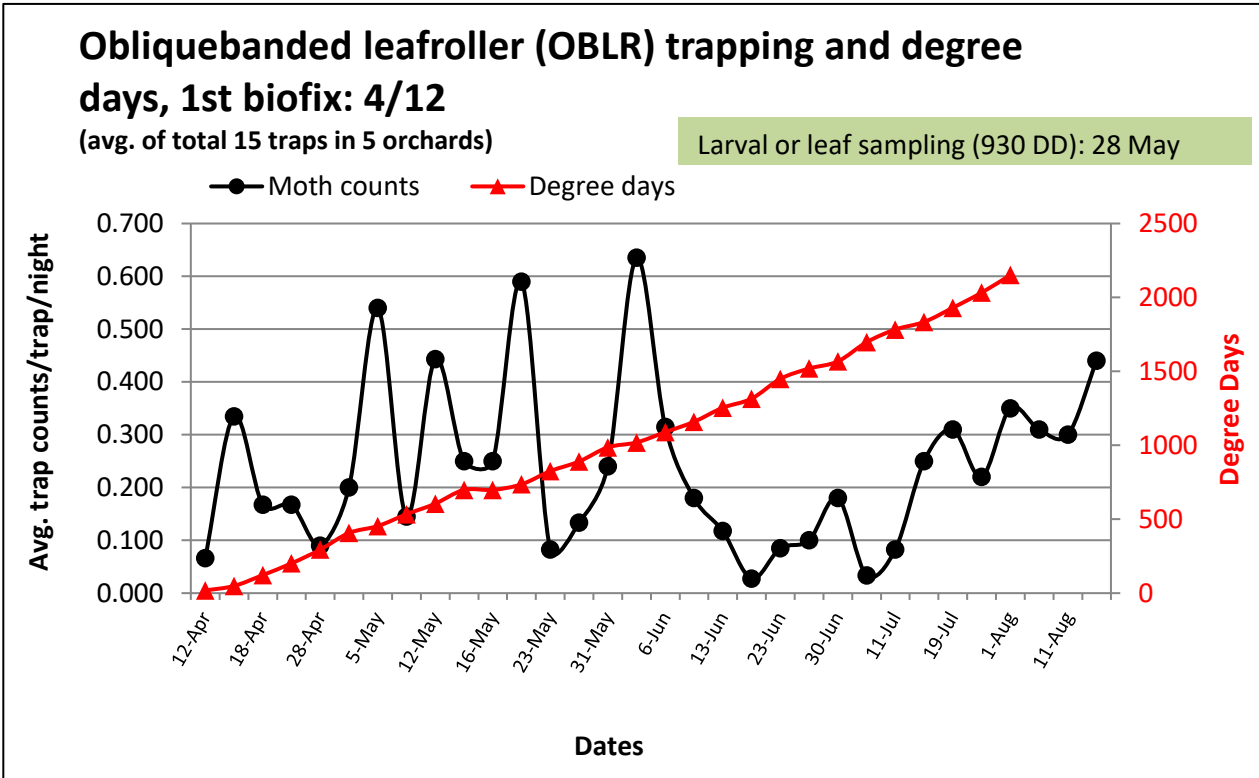
Traps were placed in almond orchards

Date	Avg Eggs per trap/night	Degree-days
4-Apr	0.00	
7-Apr	0.06	
12-Apr	0.13	
18-Apr	0.28	15
25-Apr	0.19	76
3-May	0.05	155
5-May	0.09	177
9-May	0.06	210
12-May	0.33	254
19-May	0.22	354
23-May	0.16	378
26-May	0.10	410
31-May	0.24	498
2-Jun	0.09	542
6-Jun	0.00	633
9-Jun	0.00	683
16-Jun	0.02	773
23-Jun	0.125	908
27-Jun	0.025	990
30-Jun	0.083	1062
5-Jul	0.076	1164
7-Jul	0.335	1197
11-Jul	0.413	1260
14-Jul	0.042	1318
19-Jul	0.250	1411
25-Jul	0.052	1535
1-Aug	0.1	1705
4-Aug	0.12	
11-Aug	0.11	
18-Aug	0.40	

Egg biofix (spring)

Obliquebanded leafroller (OBLR) trap catch and degree day calculation-2016

Jhalendra Rijal, IPM Advisor,
UC Cooperative Extension-Stanislaus
rijal@ucanr.edu; 209-525-6800



Degree days were calculated by using UC-IPM Degree days calculation link:

<http://www.ipm.ucdavis.edu/calludt.cgi/DDMODEL?MODEL=OBLR&CROP=almonds>

The weather station used to calculate DD is CIMIS Station #206 (i.e. Denair II)

Navel orangeworm model

Lower/upper threshold: 43/85°F

Calculation/upper cutoff method: single sine/vertical

Biofix: The biofix is the first date that moths are caught consistently in pheromone traps.

Biofix Date:

Additional information: [Pest Management Guideline](#)

Obliquebanded leafroller (OBLR) trap catch and degree day calculation-2016

Traps were placed in almond orchards

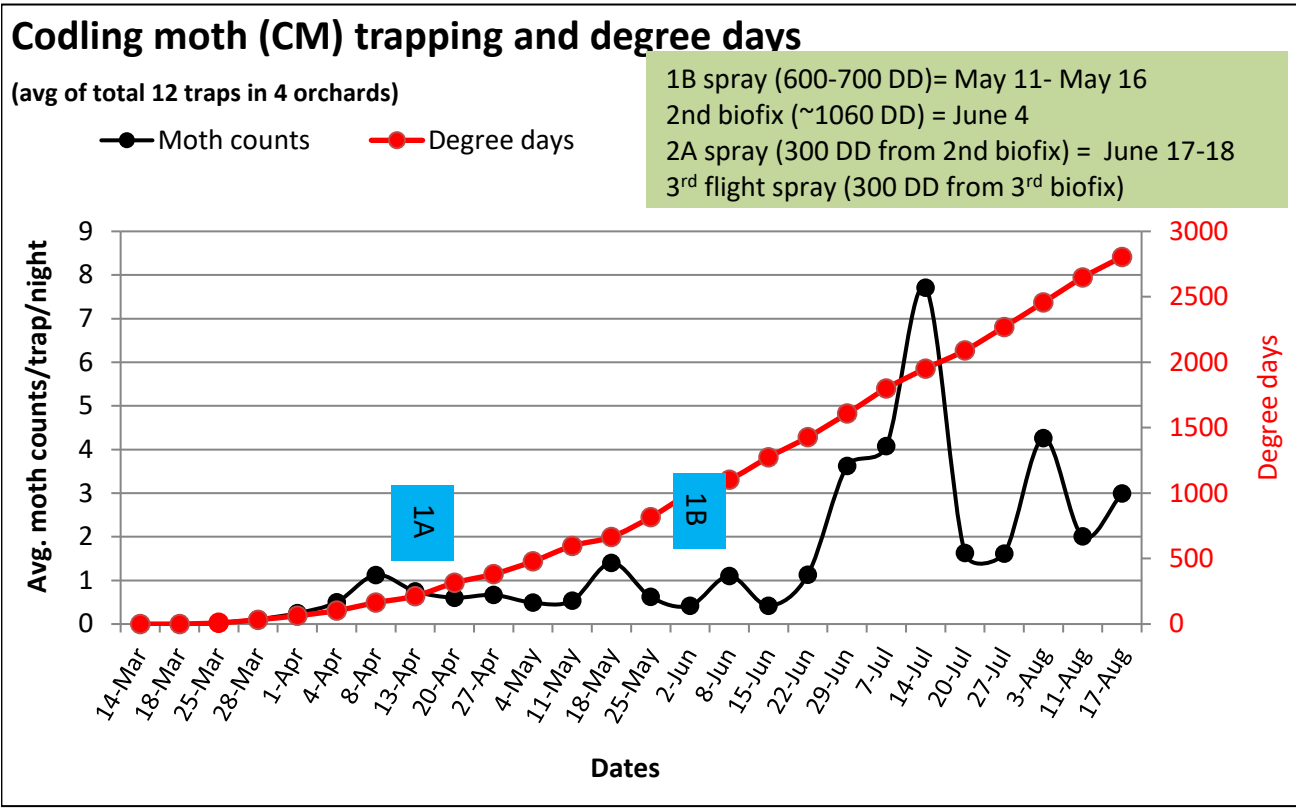
Date	Avg OBLR per trap/night	Degree-days
12-Apr	0.066	18
14-Apr	0.335	49
18-Apr	0.168	122
22-Apr	0.168	201
28-Apr	0.090	294
3-May	0.200	407
5-May	0.540	453
9-May	0.145	533
12-May	0.443	605
16-May	0.250	698
16-May	0.250	698
19-May	0.590	736
23-May	0.083	825
26-May	0.133	890
31-May	0.24	986
2-Jun	0.635	1019
6-Jun	0.315	1089
9-Jun	0.18	1159
13-Jun	0.118	1254
16-Jun	0.028	1315
23-Jun	0.085	1449
27-Jun	0.1	1519
30-Jun	0.18	1567
7-Jul	0.0335	1697
11-Jul	0.0825	1783
14-Jul	0.25	1834
19-Jul	0.31	1930
25-Jul	0.22	2032
1-Aug	0.35	2151
4-Aug	0.31	
11-Aug	0.3	
18-Aug	0.44	

1st biofix

Begin sampling for larval feeding or for leaves that are tied together at 930 degree-days from the biofix

Codling moth trap catch and degree day calculation-2016

Jhalendra Rijal, IPM Advisor,
 UC Cooperative Extension-Stanislaus
 jrijal@ucanr.edu; 209-525-6800



Degree days were calculated by using UC-IPM Degree days calculation link:

<http://www.ipm.ucdavis.edu/calludt.cgi/DDMODEL?MODEL=CM&CROP=walnuts>

The weather station used to calculate DD is CIMIS Station #206, Denair II

Codling moth model

Lower/upper threshold: 50/88°F

Calculation/upper cutoff method: single sine/horizontal

1st Biofix Date: 25 March

Additional information: [Pest Management Guideline](#)

Typical generation periods and spray timing

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

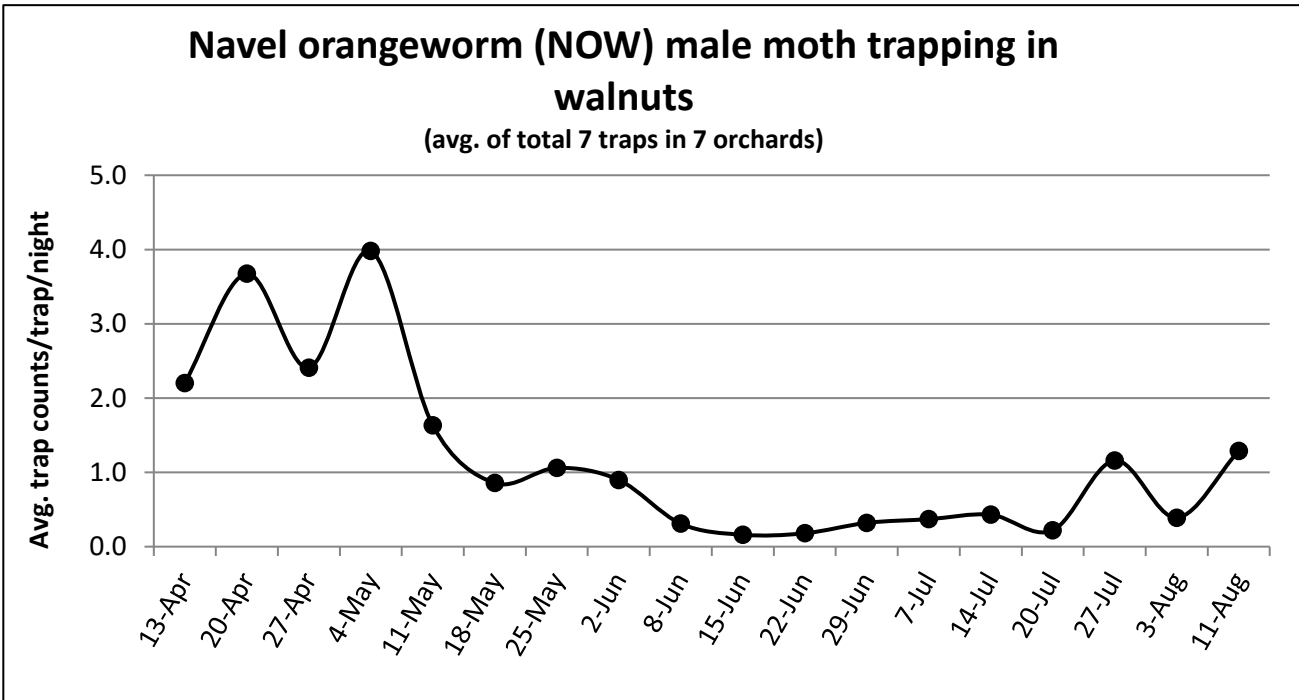
Codling moth trap catch and degree day calculation-2016

Traps were placed in walnut orchards

Date	Avg CM per trap/day	Degree-days accumulated		
14-Mar	0	0		
18-Mar	0	0		
25-Mar	0.03	9	biofix	
28-Mar	0.11	33		
1-Apr	0.25	63		
4-Apr	0.50	103		
8-Apr	1.13	163		
13-Apr	0.75	214	Apr 9-10 all day rainy (0.5-1 inch rain total)	
20-Apr	0.60	315		
27-Apr	0.67	381		
4-May	0.49	479		
11-May	0.54	598		
18-May	1.40	665		
25-May	0.62	816	2nd biofix: June 4	
2-Jun	0.42	996	DD2 (2nd flight)	
8-Jun	1.1	1103	125	
15-Jun	0.42	1274	252	
22-Jun	1.13	1428	405	
29-Jun	3.62	1608	586	
7-Jul	4.08	1800	777	
14-Jul	7.71	1952	929	
20-Jul	1.63	2090	1067	
27-Jul	1.61	2270	1067	3rd biofix: 27 July
3-Aug	4.26	2458		215
11-Aug	2.01	2647		404
17-Aug	2.99	2805		563

Navel Orangeworm (NOW) moth catch and degree day calculation-2016

Jhalendra Rijal, IPM Advisor,
UC Cooperative Extension-Stanislaus
rijal@ucanr.edu; 209-525-6800



Additional information:

