



California Red Scale – Second Flight

The peak of the first flight at the Lindcove Research and Extension Center occurred during the week of May 11, with the peak of first crawler activity occurring the week of May 25, closely following predictions.

The second flight of California red scale males is predicted to begin the week of June 8 for Kern County and the warmer parts of Tulare County, with the rest of Tulare County and southern Fresno County beginning their flights the week of June 15.



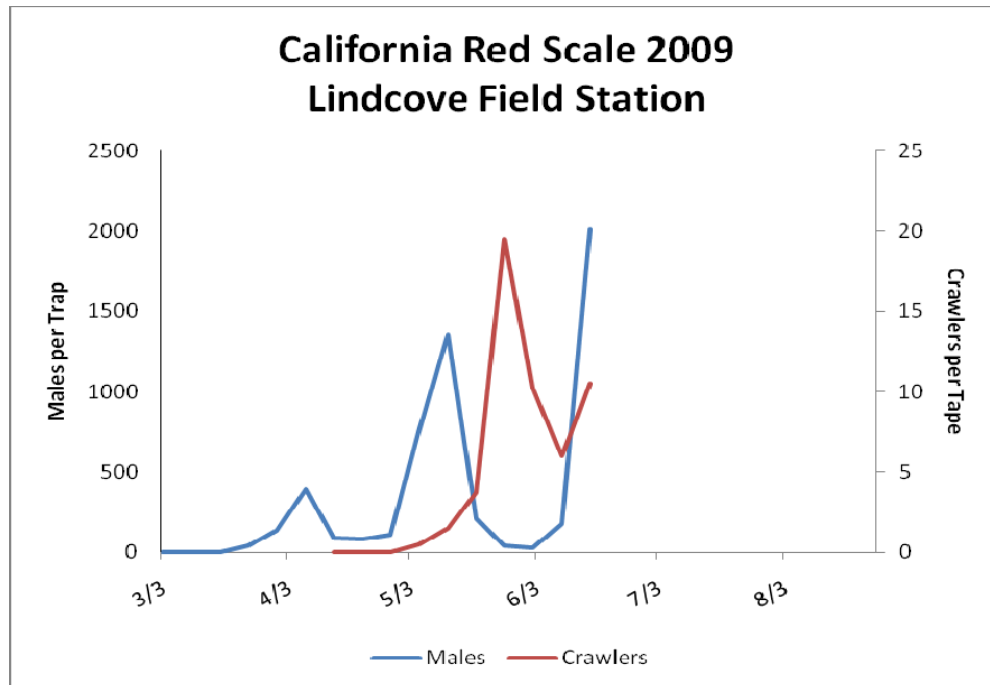
After 550 degree-days have accumulated from the start of this next flight, second generation crawlers will begin to emerge. Typical mid-June weather generates 25 to 30 degree-days per day for Kern and Tulare Counties. We are predicting second crawler activity to begin four weeks from now or the week of July 6, with Fresno County starting a week later. Growers choosing to use a conventional insecticide need to target the crawler stage, which is most susceptible. Growers opting for an insect growth regulator can wait a little longer, as the chemical affects the scale as they transition between instars. Third instar scale from the second generation will develop after 800 degree-days have accumulated, and this is good timing for *Aphytis* parasite releases where growers use this strategy. *Aphytis* wasps prefer later instar scale as they provide enough body mass to support the developing parasite larva.

Predicted California Red Scale Development

California Red Scale Lower Developmental Threshold: 53°F

Current DD accumulated from the biofix as of 6/15 - Kern: 1230 DD, Tulare: 11190 DD, Fresno: 1110 DD

	1st male flight (observed)	1st gen. crawlers (observed)	2nd male flight (observed)	2nd gen. crawlers (predicted)	3rd male flight	3rd gen. crawlers	4th male flight	4th gen. crawlers
Estimated Degree Days	Biofix	550 DD	1100 DD	1650 DD	2200 DD	2750 DD	3300 DD	3850 DD
Kern	March 23	May 11	June 8	July 6				
Tulare	March 23	May 11	June 8	July 6				
Fresno	March 30	May 18	June 15	July 13				



Citrus Peelminer Third Flight

The date when citrus peelminer will begin to attack pummelos and grapefruit is approaching. Citrus peelminer completes a generation every 580 degree-days, and as the second flight occurred during the week of June 1, the next flight is predicted to begin four weeks later, or the week of June 29.

Growers need to be alert for early peelminer activity in their grapefruit and pummelos at this time as the larvae become more difficult to control as they get older. Treatment guidelines as well as weekly degree-day accumulations can be found on our website: http://citrusent.uckac.edu/citrus_peelminer.htm

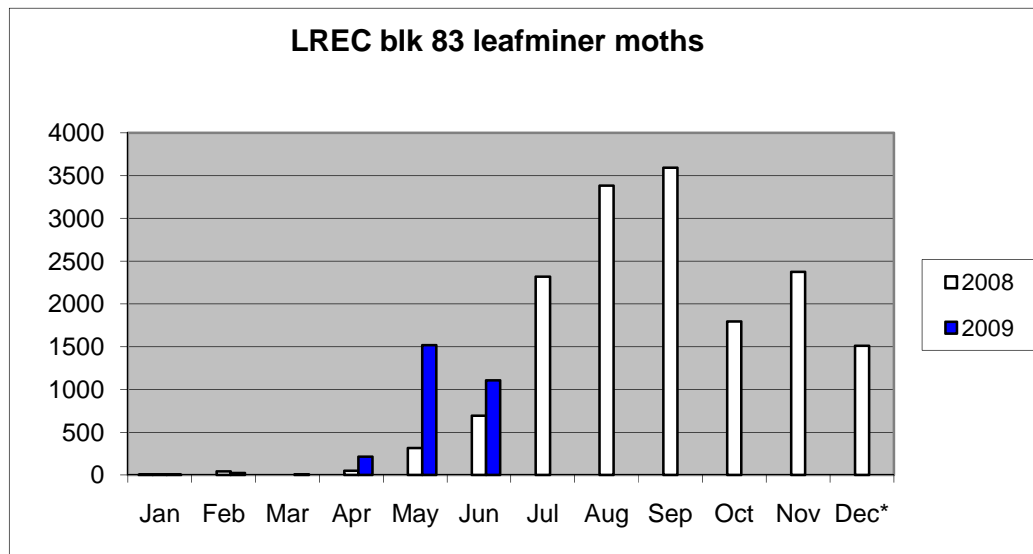
2009 Citrus Peelminer Flights

	1 st Male Flight	2 nd Male Flight	3 rd Male Flight	4 th Male Flight	5 th Male Flight	6 th Male Flight	7 th Male Flight	8 th Male Flight
Estimated Degree-Days	Biofix	580 DD	1160 DD	1740 DD	2420 DD	3000 DD	3580 DD	4160 DD
Host Plant	Willow / oleander stems	Walnut stems	Pummelo and Grapefruit	Pummelo Grapefruit Susceptible Oranges	Pummelo Grapefruit Susceptible Oranges	Oranges	Oranges	Oranges
Tulare County	April 7	June 1	June 29 (predicted)					

Citrus Leafminer

We are seeing heavier populations of citrus leafminer moths in the pheromone traps at Lindcove Research and Extension Center compared to 2008. This is likely due to the cool, wet spring temperatures in 2009 that favor their development. While the numbers are higher, and there may be some new flush damage, we continue to recommend that you do not treat for this pest in most situations. In mature citrus, allow the natural enemies to establish and avoid insecticide treatments to encourage natural enemy activity for all citrus pests. In new plantings, nurseries, and frequently flushing varieties such as lemons on the coast, treatments may be required. See the UCIPM guidelines for management details.

<http://www.ipm.ucdavis.edu/PMG/r107303211.html>



Citricola Scale

The Citrus Entomology Laboratory at the Kearney Agricultural Research Center needs samples of citricola scale from throughout the Central Valley to perform insecticide resistance assays. Any grower or PCA that is aware of a population of Citricola scale and would like to have an assay performed is encouraged to contact Greg Montez at 559 646 6597 or gregm@uckac.edu to schedule a day and time to collect a sample. Results will be returned in seven to ten days. Growers with orchards that have a perennial problem with citricola scale are urged to have the test performed as identifying a resistant population will help greatly in choosing an alternative management strategy and will save the cost of an ineffective insecticide application.

The Citrus IPM Newsletter is published by the University of California Citrus Entomology Laboratory at the Kearney Agricultural Research Center.

For information or to subscribe or unsubscribe please send an email to gregm@uckac.edu or call Greg Montez at (559)646-6597

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