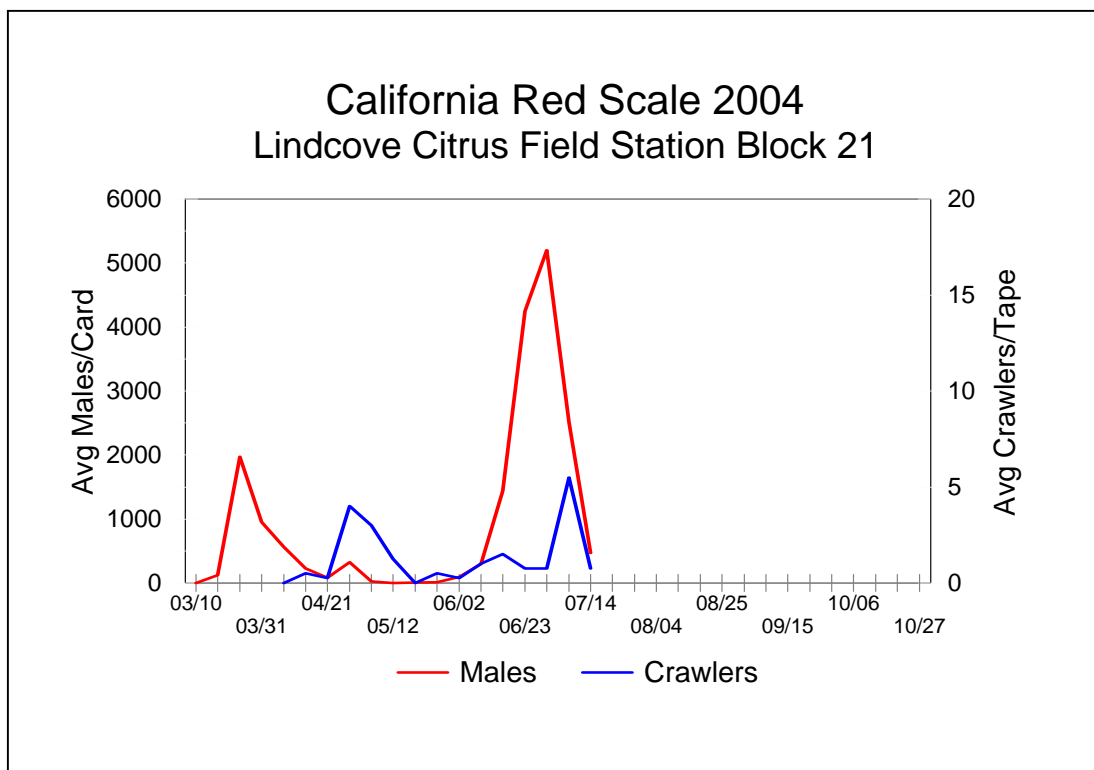


### California Red Scale – The Third Flight is Underway

	1st male flight	1st gen. crawlers	2nd male flight (predicted)	2nd gen. crawlers	3rd male flight	3rd gen. crawlers	4th male flight	4th gen. crawlers	5th male flight
Estimated Degree Days	biofix	550 DD	1100 DD	1650 DD	2200 DD	2750 DD	3300 DD	3850 DD	4400 DD
Kern	Mar 8	Apr 26	May 31	June 28	July 13				
Tulare	Mar 15	Apr 26	May 31	July 5	July 19				
Fresno	Mar 22	May 3	June 7	July 12	July 27				

**Current DD (as of June 21) - Kern: 2330, Tulare: 2200, Fresno: 2080**

The third flight of California red scale is expected to begin this week in the Tulare and Foothill regions, and should be underway for the Kern citrus growing area. From monitoring the scale populations at the Lindcove Field Station, we see that the second crawler emergence has declined sharply and we are expecting the next surge of males in the immediate future. For the San Joaquin Valley, we are seeing degree-day accumulations ~250 DD above last year. This means that scale (and many of the other pests) are 2 weeks ahead of last year. Remember that most insecticide treatments are more effective when they are applied after the crawlers have settled rather than when the males are flying. Degree-day calculations for CRS are maintained on our website: <http://citrusent.uckac.edu/DegreeDay.htm>.



## **Citricola Scale**

Citricola scale is very heavy in many blocks this year and similar to the other insect pests, it is developing faster than usual. At this time of year, the females have already laid 1,000 eggs each and the crawlers have moved out onto the leaves. I suggest that growers wait to treat until all the eggs are hatched. This usually occurs around August 1, however this year, because of the warm temperatures, they will probably have completely emerged by mid July. Lorsban is still the best control agent, probably because of its fuming action. Other organophosphates and carbamates are also effective. The foliar neonicotinoid Assail can be effective in reducing their numbers and has a good fit in the early season (March-May) since it will kill the adult females, but it does not last as long as Lorsban. Applaud will control citricola scale, although slowly because it has to affect them as the eggs hatch or the nymphs molt. Biological control is ineffective for this pest and so pesticides are necessary. Do not let the populations build up to high numbers or you will see fruit production reduced in the next year.

## **Citricola Scale Field Day**

**Dr. Beth Grafton-Cardwell**

University of California

Citrus IPM Specialist and Research Entomologist

**August 26, 2004**

**10:00 am – Noon**

**Lindcove Research & Extension Center**

22963 Carson Ave, Exeter CA

(559) 592-2408

**Please follow directions and signs for parking  
and the location of the field.**

Field monitoring of citricola scale will be demonstrated including recommended treatment threshold densities for the fall and spring periods. Treatment options for citricola scale will be outlined as well.

We will be bringing the mobile teaching lab to this orchard in order to demonstrate through microscopes the details of the lifecycle of the pest and it's parasites.

*2 hours of continuing education credits have been requested.*

## Citrus Peelminer

We have experienced about 250 more degree-day units this year than previous years. This means that both plants and insects are developing faster than usual. In 2001-2003 we observed the peelminer begin to attack grapefruit and pummelos around July 1. This year, it began attacking them during the second week of June. Usually we see the peelminer attacking susceptible orange varieties (Fukumoto, TI, Atwood) beginning in August. This year these varieties are being attacked by peelminer in mid-July.

We have a web site in which you can enter your peelminer sampling data to let us know about the level of peelminers in your orchard: [http://gis.uckac.edu/Peelminer/CalRef\\_Plmnr.htm](http://gis.uckac.edu/Peelminer/CalRef_Plmnr.htm). If you would like to be trained to sample peelminer and/or enter your data on the computer, call Greg Montez at Kearney (646-6597) or Janet McClain at Lindcove (592-5910) and ask for assistance.

Dr. Beth Grafton-Cardwell  
IPM Specialist  
University of California  
Kearney Agricultural Research Center  
(559) 646-6500  
[bethgc@uckac.edu](mailto:bethgc@uckac.edu)

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](mailto:gregm@uckac.edu) or call (559) 646-6597