



California Red Scale –Generation 1

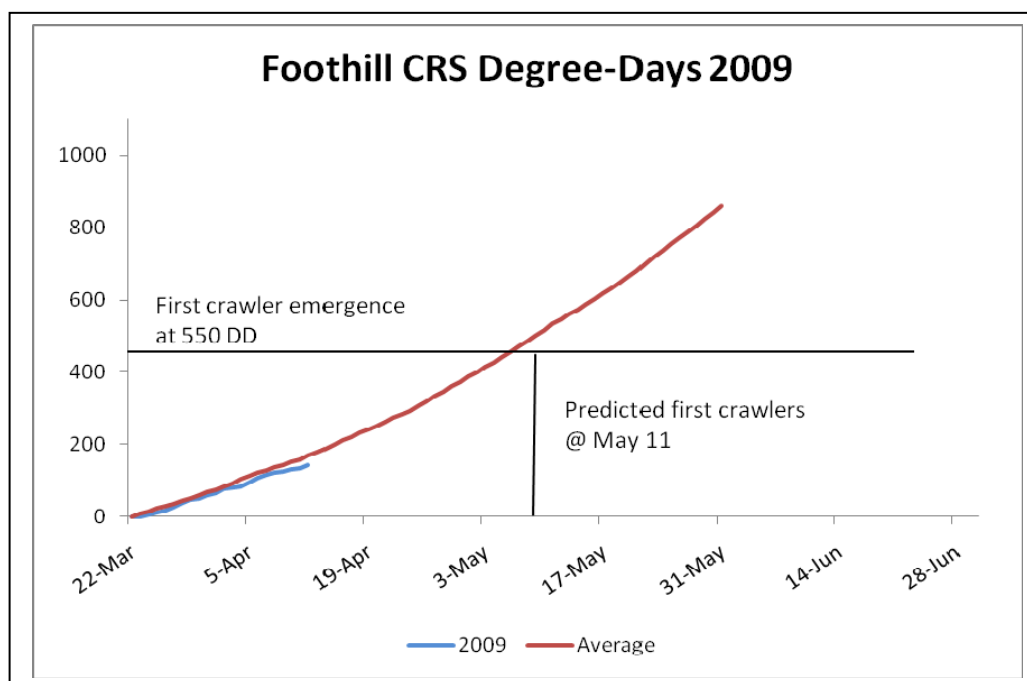
Cool weather through the first two weeks of April has slowed the development of California red scale. Forecasts predict a return to average temperatures later in the month. Cool weather causes a slight delay in crawler emergence. Growers need to monitor for crawler emergence in heavily infested blocks starting just before petal fall (predicted to be the first week of May if the weather warms up).



Monitoring for crawlers is done by wrapping double-sided cellophane tape around a 1-yr-old twig near the body of a female scale. Put the tape about 1 inch from the female towards the end of the branch. Crawlers will emerge from the female, travel down the twig towards the end of the branch, and become trapped on the tape. Crawlers can be identified and counted using a microscope or a hand lens.

If choosing an organophosphate, carbamate or oil insecticide for scale control, peak crawler emergence is the ideal timing for spray application (kill the crawlers as they move about and settle down). If choosing an insect growth regulator for scale control, wait until after peak crawler emergence has been completed (kill them as they try to molt from 1st to 2nd instars). Movento should be applied 2 weeks prior to the second generation of scale activity.

Weekly degree-day accumulations for Kern, Tulare and Fresno counties can be found on our website at <http://citrusent.uckac.edu>



First Citrus Peelminer Flight

Based on pheromone traps in Tulare County, citrus peelminer moths are began to fly in non-citrus crops (walnuts, willows and oleander) during the week of April 7 (biofix). Because we are experiencing lower than normal daily temperatures, degree-days are accumulating extremely slowly, but that accumulation will pick up as the weather warms. Basing the biofix on adult activity allows us to predict later moth flights. Citrus peelminer has a lower developmental threshold of 55°F, and completes a generation every 580 degree-days. The first two generations attack the willows, walnuts and other crops. The third flight attacks pummelos and grapefruit and the fourth or fifth flight attacks oranges. There is no need to apply insecticide treatments until the flights are targeting susceptible varieties of citrus. We will keep you informed of the degree day accumulation and the flights as the season progresses.

Weekly degree-day accumulations for Tulare County 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 grapefruit	Pummelo grapefruit susceptible oranges	Pummelo grapefruit susceptible oranges	Oranges	Oranges	Oranges
Tulare	April 7	June 1 (predicted)						

See our new publication: Citrus peelminer and citrus leafminer for more information:

<http://citrusent.uckac.edu/8321CitrusLeafminerAndPeelminer.pdf>

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

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