

California Red Scale

Source of Information: Lindcove Research and Extension Center

Biofix: March 15-22, 2000 for Kern and Tulare Counties

Lower Developmental Threshold: 53°F

Current Accumulated Degree Day Units (August 2):

Kern: 2600 DD

S. Tulare: 2320 DD

N. Tulare: 2380 DD

Fresno: 2307 DD

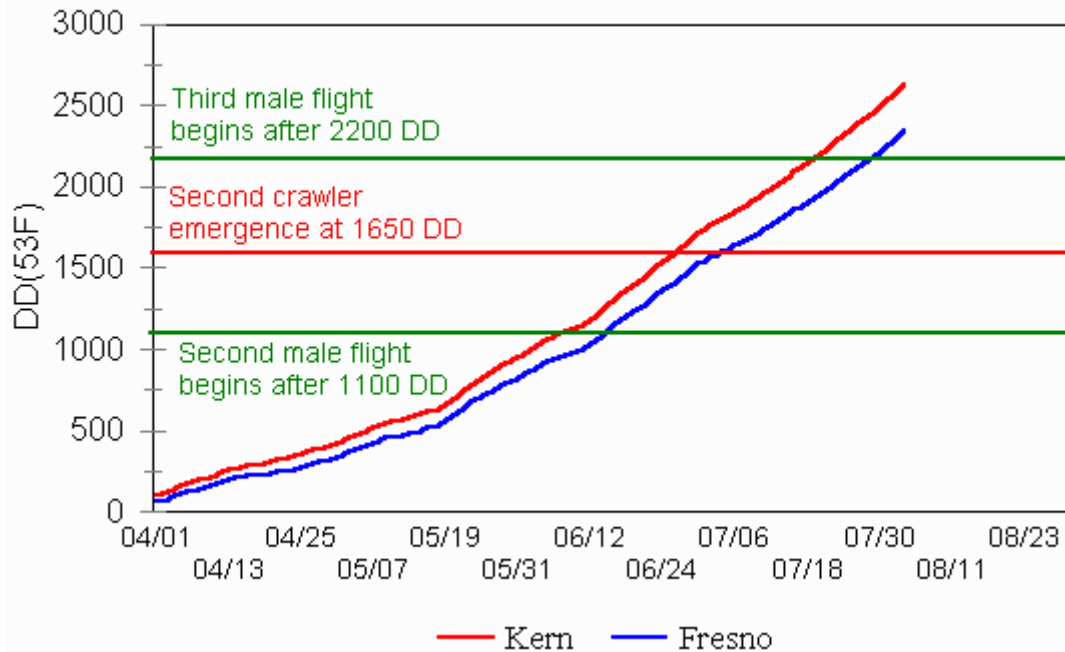
Madera: 1920 DD

Expected Third Male Flight: 2200 DD

Expected Third Crawler Emergence: 2750 DD

The third male flight should now be underway in most areas. In some local situations, however, the second and third flights have been later and more prolonged than was predicted. Commonly, the second and third flights merge together and can be difficult to distinguish from each other, and this will certainly be the case in many orchards this August. In the warmer citrus growing regions, we expect the third crawler emergence to begin somewhere between August 9th and 16th, and continue to build through August 23. Sticky tapes used for crawler monitoring will almost certainly continue to pick up crawlers from the second generation through this period also. Central and northern citrus regions are about 250 degree-days behind, which in this hot August weather translates to about a week to 10 days. See our web site for up-to-date degree day accumulations for the various regions at <http://www.uckac.edu/citrusent/DegreeDay.htm>.

California Red Scale Degree-Days 2000



If you plan to treat with Lorsban, Supracide, or Sevin: spray when the scale are crawlers. The insect is small, moving around and very susceptible to these insecticides. Spray during the 1st (550 DD) or 2nd generation (1650 DD) of activity to have the greatest impact on the population.

If you plan to treat with Esteem: Spray when the scale are white caps, just before they begin to molt and wait until the second generation of scale activity (1800 DD). Esteem is very toxic to eggs and pupae of the vedalia beetle. Vedalia beetle is the best natural control of the cottony cushion scale. We need to avoid spraying Esteem during March through June in order to allow the vedalia beetle time to finish cleaning up the cottony cushion scale problems. Esteem will very effectively control California red scale when applied in the second generation (July).

If you are releasing *Aphytis* for California red scale: Try to avoid using an insecticide for scale control. Oil is still the recommended insecticide for the *Aphytis* release program. Generally it is applied during July. However, even oil has a negative impact on *Aphytis* because it can synchronize the scale stages and leave the *Aphytis* without 3rd instar scale to lay their eggs in.

Citricola Scale Alert!

Citricola scale is very sensitive to that broad spectrum insecticides, Lorsban, Supracide, and Sevin that we used for California red scale for many years. We stopped using those insecticides for California red scale in 1997 because many populations of red scale were resistant to them. In 1998 and 1999 many growers used Esteem to control red scale and it did a great job on that pest. Esteem does not work very well on citricola scale. Esteem affects molting and citricola scale only molts twice per year. Here we are, 3 years later, and we haven't used the Lorsban, Supracide, or Sevin treatments in many orchards for 2-3 years. Citricola scale is popping up in quite a few orchards throughout the San Joaquin Valley. Be on the lookout for the gray bodies of citricola scale lining up on the twigs. They have matured into females and are releasing crawlers onto the leaves from May-July. If you have citricola scale in your orchard, Esteem will not help you and you need to go back to a Lorsban, Supracide, or Sevin treatment for scale control.

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