

California Red Scale

Most of the citrus growing region of the San Joaquin Valley is now seeing the third CRS crawler emergence of the season. In the Madera region, the current degree-day accumulation is around 2400 to 2500, which should correspond to crawler activity just beginning. In Kern county, the accumulation is 2700 to 2800, and crawlers should have been active during the week of August 17 and continuing until now. We expect to see the fourth flight of males in the Fresno - Tulare - Foothill areas occur during the second week of September (figure 1), although in many cases it will be difficult to distinguish from the prolonged third male flight. Many growers and PCAs are reporting low male trap catches for the third flight. This may have several causes, but is especially visible where Knack or Applaud have been used. We have seen that both of these materials have had a profound effect on the second and third male flights after having been used at first crawler emergence. Also, we find that *Aphytis* and *Comperiella* activity has been very good this summer, and there have been reports of up to 80 percent parasitism in some blocks.

**California Red Scale Degree-Days
Foothill Region**

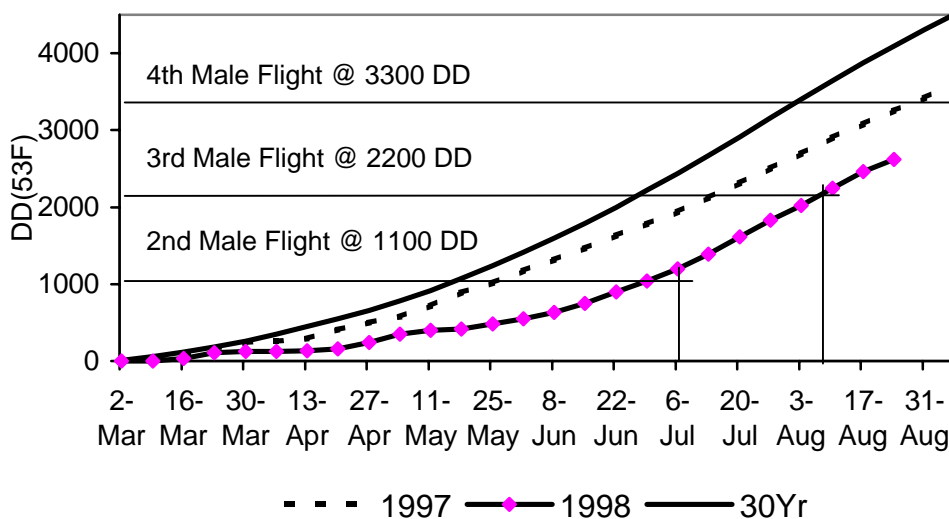


Figure 1

Knack and Applaud Treatments: Growers and PCAs report that in blocks where Knack or Applaud was used in the first generation, control of CRS has ranged from acceptable to excellent. Many PCAs reserved the use of Knack for their worst-case scenarios, and have been very pleased with the results. We have seen that a few scale do survive through an application and settle on the fruit, but these scale tend to be sickly and undersized, and produce few crawlers if they survive to be an adult female. We expect that these scale will eventually die and flake off or be brushed off during packing. While there is still much concern about the effect of Knack and Applaud on Cottony-cushion scale, the consensus is that CCS is on the increase in both treated and untreated blocks. At this time, Vedalia beetle activity is low in most areas but is expected to increase again in the fall months.

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