Blue Orchard Bee Demonstration Project

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PROJECT SUMMARY

Objectives:

- Demonstrate the critical management practices and their timing for practical use of Blue Orchard Bees (BOB) as almond pollinators in the presence of honey bees.
- Refine the summer and fall handling of BOB progeny with regard to proper timing of pre-winter cool down
- Anticipate or address the practical problems that arise when these bees are put in the hands of attentive almond growers

Background:

Hands-on practical expertise and conceptual understanding of Blue Orchard Bee (BOB) management was delivered by USDA Logan Bee Lab personnel to UC Cooperative Extension personnel, particularly Sara Goldman-Smith. Thus trained, she was able to take over adult BOB observation, management, interpretation, and guidance for cooperating growers.

Bee performance in 2010 in 5 Sacramento Valley demonstration orchards was mixed as expected, given the poor weather for bee flight and pollination, although nonetheless, some BOB populations in some orchards did increase in numbers.

BOB populations flown for the first year in almonds do not always synchronize well with the almond bloom. Flight synchrony and population sustainability is more attainable with the second flight (or later) generations of BOB used in almond pollination. In previous years, with good weather during almond bloom, we reliably increased BOB populations at every site.

Two BOB management/training workshops for interested growers were organized by the UCCE personnel and held in December 2009 near Modesto and Chico, led by Logan Bee lab personnel.

Flowering quince, *Chaenomeles japonica*, is being evaluated as an additional pollen foraging resource for BOB. Flowering quince blooms just before almonds and can be used to feed early emerging BOB.

Project Cooperators and Personnel: Sara Goldman-Smith, University of California Cooperative Extension, Sutter/Yuba Counties; Glen Trostle, USDA/ARS Bee Biology and Systematic Lab, Logan, UT

For More Details, Visit

- Poster location 51, Pollination Pavilion, Session 3; or on the web (after January 2011) at AlmondBoard.com/AlCposters
- 2009-10 Annual Report CD (09-Poll8/8A-Pickel/Cane/Pitts-Singer); or on the web (after January 2011) at AlmondBoard.com/ResearchReports