Field Evaluation of Almond Varieties

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PROJECT SUMMARY

Objectives:

To assess the characteristics of the most promising almond varieties developed in the almond breeding program in the orchard.

- Continue to collect data on bloom, maturity, and harvest at the Billings Ranch, near McFarland in eastern Kern County, the site of almond regional variety trial planted in 2004.
- Continue to analyze and summarize the data collected from the McFarland trial, so that the information can be prepared for dissemination.
- Initiate planning for the next round of almond Regional Variety Trials.

Background:

Regional almond variety trials provide both almond growers and researchers with a valuable information resource.

This ongoing research project, conducted at McFarland, involves the long-term evaluation on an annual basis of newer almond varieties. A comparative study, it includes eight varieties and eight Nonpareil clones, with replications of each.

The study looks closely at time of bloom and hull-split, yield potential, nut quality characteristics, and tree growth. It also ascertains susceptibility to noninfectious bud failure and pests and diseases, including hull rot.

Studies are also relating yield and production efficiency by using new technology and equipment (lightbar) that measures light intercepted by tree canopies.

Planning activities for the next round of regional trials will include consideration of locations, collaborators, and potential varieties and selections. In the previous two generations of trials, there has been a series of three plots planted at the same time. Locations included Chico, Manteca and Kern County.

The planners also will consider replication versus single rows of each variety/selection, plus recommended pruning strategies. Because all varieties and Nonpareil clones are planted in a replicated layout in the current McFarland trial, the data generated is being used to assess variability in order to determine the value of replication in future trials.

Planting for the new variety trials will probably occur in 2014.

Project Cooperators: Joseph H. Connell, UCCE - Butte County; Paul S. Verdegaal, UCCE - San Joaquin County; David Haviland and Mario Viveros, UCCE-Kern County; Tom Gradziel, Mary Ann Thorpe, and Sam Metcalf, University of California, Davis

For More Details, Visit

- Poster location 3, Exhibit Hall A & B during conference; or on the web (after January 2013) at www.almondboard.com/researchreports
- 2011.2012 Annual Report CD (11.HORT2.Lampinen); or on the web (after January 2013) at www.almondboard.com/researchreports
- Related project: 12.HORT1.Gradziel, 12.HORT13.Lampinen