Field Evaluation of Almond Varieties

Project Leader: Bruce Lampinen

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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.
- Complete 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. This allows separation of the effect of rate of growth from the amount of productivity per unit light intercepted.

Sites have been selected in Butte, Stanislaus and Fresno Counties for the next round of regional almond variety trials. Trees are currently being produced in a commercial nursery for a 2014 planting.

Each trial will be planted at an 18 x 21 foot spacing with four replications of each of 30 pollenizers. These 30 pollinizer test varieties will be compared against Nonpareil as the standard. Many of the pollinizer test varieties, both UC and from commercial nurseries, are self-compatible.

Project Cooperators: Gurreet Brar, UCCE -Fresno/Madera Counties, Joseph H. Connell, UCCE -Butte County; Roger Duncan, Stanislaus 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 72, Exhibit Hall A and B during conference; or on the web (after January 2014) at www.almondboard.com/researchreports
- 2012.2013 Annual Report CD (12-HORT2-Lampinen); or on the web (after January 2014) at www.almondboard.com/researchreports
- Related project: 13-HORT1-Gradziel, 13-HORT13-Lampinen