

## Nickels Soil Laboratory Projects

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### PROJECT SUMMARY

#### Objectives for Current Phase:

In support of two of an ongoing series of projects,

- Continue to evaluate the economics and productivity of organic almond production methods that are suitable for California conditions and comply with U.S. Dept. of Agriculture and CCOF certification requirements, and compare the evaluation results with those for standard production methods.
- Continue to evaluate tree training/pruning methods that promote both maximum early production and sustained long-term yield in high-density almonds, with emphasis on standard pruned trees versus minimally pruned trees.

#### Background:

Like other food producers, more almond growers are shifting to organic production methods, thanks to growing market.

Making such a transition, though, would pose challenges for the growers. Among them would be how to deal effectively with such critical issues as disease prevention, pest control, and weed control, and provision of adequate nitrogen nutrition.

Furthermore, although anecdotal information abounds on organic growing practices, there remains a lack of science-based information relevant to organic almond growing.

To thoroughly and objectively explore what's involved in organic production using scientifically sound procedures, the Nickels Soil Lab is being used as the site of a special research / demonstration orchard.

Over a period of about five years, this orchard is being used to monitor and evaluate all aspects of producing organic almonds, including costs. The outcome will likely be a well-documented process—and possibly the basis for a viable commercial operation.

Another current and key topic of interest to almond growers is how best to train and prune their trees as the industry diversifies in terms of varieties and rootstocks, and pruning practices continue to evolve.

Those changes reflect the underlying rationale for an ongoing field trial at the Nickels Soil Lab. Several pruning methods are being evaluated, in terms of the effects not only on production but also on orchard management practices and cost. Updated pruning recommendations continue to evolve from these types of studies.

**Project Cooperators:** Bill Krueger, University of California Cooperative Extension, Colusa County; Bruce Lampinen, University of California, Davis

#### For More Details, Visit

- Poster location 8, Exhibit Hall, Session 3; or on the web (after January 2011) at [AlmondBoard.com/AICposters](http://AlmondBoard.com/AICposters)
- 2009-10 Annual Report CD (09-HORT6-Edstrom); or on the web (after January 2011) at [AlmondBoard.com/ResearchReports](http://AlmondBoard.com/ResearchReports)