

# Almond Culture and Orchard Management

## Overall Project Leader: Tom Gradziel

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### CURRENT PROJECT ACTIVITIES SUMMARY

The Almond Board provides of funding for farm advisors to conduct research projects, including the following four almond-related efforts:

#### **Nematicide Trials in a First Leaf Orchard Infested with Plant Parasitic Nematodes**

*Project Leader: David Doll, UCCE – Merced County*

This experiment will determine the impacts of three commercially available post-plant nematicides on populations of parasitic nematodes of almond roots. The plot was established in a sandy soil with confirmed presence of ring nematode (*Mesocriconema xenoplax*), but no history of *Prunus* sp. Five treatments were applied and will be compared to an untreated control. Growth and nematode populations will be followed for the next three years.

#### **Understanding the Variability in Salt Uptake and Accumulation Among Different Almond Cultivars - Year 1**

*Project Leader: Gurreet Brar UCCE – Fresno/Merced Counties*

The objective of this project in the first year will be to understand the variability in salt uptake among different almond cultivars and the accumulation of sodium and chloride within different tree parts. Extensive tissue sampling will be done from different tree parts during the season and these samples will be analyzed and compared for sodium and chloride localization.

#### **Can Spring Foliar N+K Sprays Increase Almond Yield in Sacramento Valley?**

*Project Leader: Franz Niederholzer, UCCE – Sutter/Yuba Counties*

Significant spring rains are not uncommon in the Sacramento Valley and may affect almond production in a variety of ways, particularly through cool and wet soil conditions which may limit fertigation practices and nutrient uptake during this period. As an alternative, application of significant amounts of foliar nitrogen and potassium fertilizer soon after bloom may allow growers to increase yield and manage the potential leaching risk from early season soil N application.

#### **Efficacy Trials of Registered and Developmental Insecticides for Navel Orangeworm**

*Project Leader: Brent Holtz, UCCE – San Joaquin County*

Considering the economic scale of the significance of the significance of navel orangeworm as a pest of almonds in California, including both the effect on percentage offgrades and aflatoxins, it is essential that we learn more about how newly registered and developmental insecticides work and might contribute to improved control in the field. An insecticide efficacy screening trial will be conducted at Kearney Agricultural Research & Extension Center in 2014.

#### **For More Details, Visit**

- Poster locations 71-72, Exhibit Hall A + B during the Almond Conference; or on the web (after January 2015) at [Almonds.com/ResearchDatabase](http://Almonds.com/ResearchDatabase)
  - 71: Brar – Managing Salinity Issues in Almonds; Doll – Nematicide Trials in First Leaf Orchards
  - 72: Holtz – NOW Insecticides; Niederholzer – Foliar N & K Sprays
- 2013-2014 Annual Reports CD (13-HORT3-Duncan); or on the web (after January 2015) at [Almonds.com/ResearchDatabase](http://Almonds.com/ResearchDatabase)