

Nickels Soils Laboratory 2001 Season Summary

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Detailed information on the cultural practices used at the Nickels Soil Lab for the year 2001 is provided at the end of this report in Appendix 1. Some inputs were reduced this year during this time of low returns. Note that some reductions were made in fungicides and nitrogen/potassium fertilizers. In early August a heavy outbreak of spider mites required treatment in both almonds and walnuts. Hot spots and roadways were sprayed first but ultimately the entire orchard was treated. In general, we do not get much mite suppression from predatory mites in this area. Six spotted thrips is the primary mite predator locally, but often does not control mites until after damage has occurred.

Almond production this year was up slightly from last years levels due to young acreage coming into production. Nonpareil continued to show disappointing bloom, set and yields while Ruby and Monterey yields actually declined. Carmels showed one of the strongest blooms in memory resulting in yields 23 % above last seasonly very good with Carmel yields the highest since 1987. Yields of Price, Mission, Butte and Padre were significantly lower than average, while Nonpareil, Ruby, Monterey and Neplus yields were about average.

The walnut set a new production was also up and nearly equaled the record figures of 1999. Both Chandler and Howard varieties produced well this year at about 3 tons/acre. Average production in this block, which includes all the weak trees on Northern California Black rootstock, yielded 2.8 tons/acre.

In Appendix (2) are data for precipitation and evapotranspiration (E_t) which show seasonal rainfall 20% below normal and seasonal E_t demand at 96% of historical average. The seasonal trap data for the six primary insect pests monitored, Peach Twig borer, Navel Orangeworm, San Jose Scale, Omnivorous leaf roller, Codling Moth and Walnut Husk fly, are also available in Appendix 3.

The Nickels Soils Lab has installed an automated weather station for use by local growers, pest control advisors and researchers. Information can be accessed via the UCIPM website at www.ipm.ucdavis.edu. We are also exploring new ways to take advantage of the full capabilities of the weather station and make it more useful to area growers.

This year's annual report includes sixteen individual summaries of the research and demonstration projects conducted at NSL. We have included two maps, Green Bay and Marine, which show the locations of all trials. Visits to the Lab are encouraged and very helpful in interpreting the reports. An annual field day is conducted each May featuring NSL projects. Individual visits are also available. Contact John Edstrom (530) 458-0570, or, email jpedstrom@ucdavis.edu