University of California Cooperative Extension • Tulare County

Citrus Notes

April 2003

SPRING CITRUS MEETING

Tuesday, April 22, 2003

9:00 to 11:15 A.M.

Agricultural Building
4437 South Laspina Street, Tulare CA

Sponsored By UC Cooperative Extension, Tulare County

8:30 A.M.	**Registration**
9:00	**Welcome** *Jim Sullins, Director, UC Cooperative Extension, Tulare County*
9:15	**New Citrus Varieties for California's San Joaquin Valley** *Dr . Tracy Kahn. University of California, Riverside*
10:00	**Pest Management Demonstration for Tulare County** *Neil O'Connell, UC Cooperative Extension, Tulare County*
10:30	**Break**
10:45	**Yield & Size Response to Pruning in Navel Orange** *Craig Kallsen, UC Cooperative Extension, Kern County*

One half hour of continuing education requested

Navel Rind Quality/Fruit Drop

Puff and crease have been significant problems in this navel crop. Preharvest fruit drop is of concern as well, and most recently rind staining has been a problem in packed fruit. All of these conditions result from rind and fruit stem aging. This season, particularly the rind conditions (puff, crease) developed at an accelerated rate and were a significant problem early in the harvest season. Winter weather conditions did not pose a significant threat from frost and the winter has been considered warm. In fact, a review of temperatures beginning in the fall shows that maximum temperatures were above a ten-year average from October through February: 1.5 + for October, 0.6 + for November, 3.34 + for December, 2.32 + for January, and 1.0 + for February. In spite of growth regulator applications, rind problems and drop occur. Growth regulators have the potential to retard the aging of the rind and stem, but not to stop it entirely.

Leafhopper Damage

Significant damage to mature fruit from leafhopper feeding was observed in two blocks of navels, one in the Woodlake area in October and one in the Springville area in February. Many of the fruit had multiple feeding sites. Movement of leafhoppers into citrus typically occurs in the fall when summer hosts for the insect become less attractive as feeding sites and the insects migrate into citrus. Feeding on the fruit results in bleached areas that are apparent at time of harvest and often lower grade during packing. Application of lime in the fall prior to movement of the insect into the orchard is generally sufficient to prevent the invasion of the leafhopper. Leafhopper damage has not been a significant problem in the county for some time, although it has been a more consistent problem in foothill areas and in areas of Kern county. The leafhopper involved is a small pale-green insect. It typically will move to the back side of fruit during monitoring, or fly to a nearby tree as you approach or disturb its current site, making its detection more difficult As preferred hosts become more attractive at this time of year, the insect will leave the orchard.

Rainfall

Winter rainfall totals in some locations to date have not replaced the amount of water used by large full canopied trees. With increasing spring temperatures daily water will increase. A quick soil moisture check in the orchard at this time might be in order to ensure that there is ample moisture in the top 24" where most of the roots are located. Soil moisture measuring instruments such as tensiometers can be helpful in this regard as can a simple soil auger or probe.

Nitrogen Management

These results were included in the November Citrus Notes; they are repeated here because of the potential impact of nitrogen on yield, fruit quality and environmental quality.

Results from recent research by Drs. Lund and Arpaia on the impact of nitrogen application to citrus provide some guidance on fertilizer application for this crop. Results indicate an increase in yield with an increase in applied nitrogen up to 1 - 1½ lbs. of N per tree. Leaf N levels increased with increasing levels of nitrogen applied. Treatments included foliar only, soil only (fertigation using single, split or continuous with each irrigation) and a combination of foliar and soil. Nitrogen moving below the root zone tended to increase with increasing amounts of applied nitrogen. Lowest leachate was obtained with foliar only treatments, highest leachate with soil only applications. With soil only application, the highest leachate was obtained when the total nitrogen was applied in a single application. Foliar only applications tended to have lower yields. Analysis of the data is still being conducted, at which time additional interpretations may be possible.

Citrus Peelminer

An intensive research program continues on this pest yielding information that will assist in effective management. DNA investigations of specimens from the San Joaquin Valley and Coachella determined that the two were the same species. Exploration into Mexico for peelminer parasites is being conducted, where peelminer is present in some areas but not a major problem. Investigation into peelminer pheromone is continuing with several components having been identified; testing of various ratios is being conducted to optimize attractiveness. Significant peelminer mortality in the field was observed late last summer for a second year. The factor involved has not been identified, but screening for a pathogen such as a virus is being pursued.

FIELD DAY

Thursday, May 1st, 2003

Lindcove Research & Extension Center
22963 Carson Avenue, Exeter CA

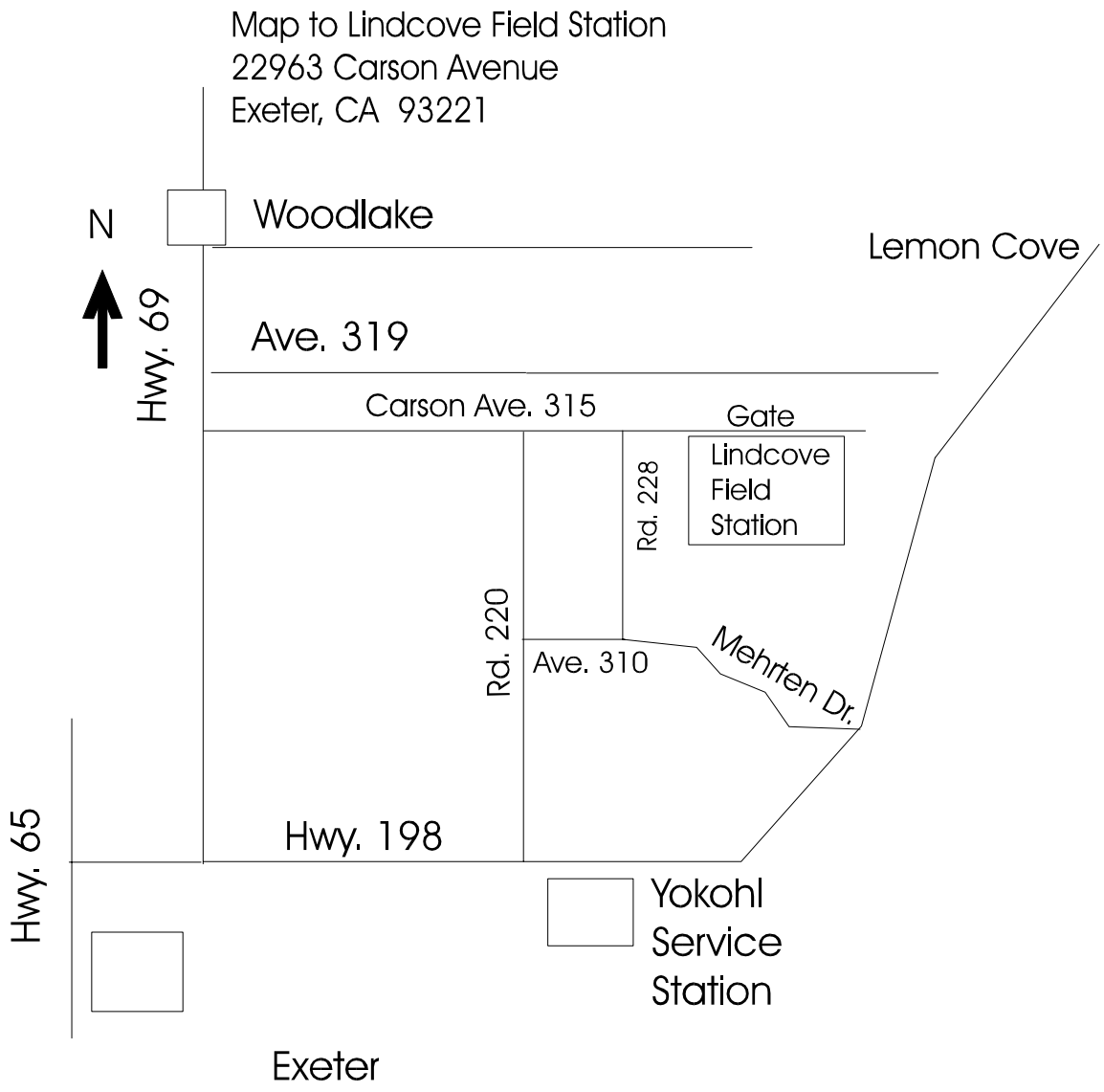
Sponsored By
Lindcove Research & Extension Center
The Citrus Research Board
UC Cooperative Extension, Tulare County

THE FOLLOWING FIELD DAY IS TO BE HELD AT

10:00 A.M. – 11:00 A.M
How to Tell Citrus Thrips From Flower Thrips
Dr. Beth Grafton-Cardwell, IPM Specialist, Kearney Research & Extension Center

11:00 A.M. – 12:00 noon
Economic Impact of Citrus Tristeza Virus
Louis Whitendale, UC Lindcove Research & Extension Center

Two hours of continuing education approved


Map to Lindcove Field Station
22963 Carson Avenue
Exeter, CA 93221
N
Woodlake
Lemon Cove
Hwy. 69
Ave. 319
Carson Ave. 315
Gate
Lindcove
Field
Station
Rd. 228
Rd. 220
Ave. 310
Mehrten Dr.
Hwy. 65
Hwy. 198
Yokohl
Service
Station
Exeter

Cooperative Extension
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54
Official Business
Penalty for Private Use $300

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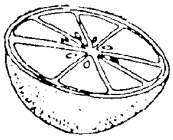

Citrus Notes

Spring Citrus Meeting

Tuesday, April 22, 2003

Citrus Field Day

Thursday, May 1st, 2003

Neil O'Connell
Farm Advisor