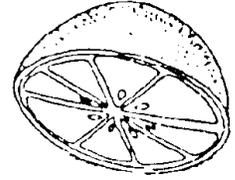




# Citrus Notes



April 2002

## Spring Citrus Meeting

Friday, April 26

8:30 - 11:30 A.M.

Agricultural Building  
4437 South Laspina Street, Tulare

8:30 **Registration**

9:00 **Pesticide Efficacy Screening**

*Dr. Beth Grafton Cardwell, Kearney Agricultural Center*

9:45 **Decline in Several Beck Navel Orchards**

*Dr. Lawrence Marais, UC Riverside*

10:15 **Parasite Evaluation for Citricola Scale**

*Dr. Robert Luck, UC Riverside*

10:45 **Rootstock Evaluations**

*Dr. Michael Roose, UC Riverside*

Continuing education credit has been requested.

## **Lemon Decline**

In the spring of 2000 a mature lemon orchard was examined for dying back of portions of the tree canopies. The decline was later determined to be the result of a wood rotting fungus. This organism had never been reported as responsible for dieback in citrus. Subsequent to this initial discovery, additional lemon orchards with declining trees were detected in the county as well as in Ventura and Riverside Counties.

The organism is thought to gain entrance into the tree at sites of freeze damage, pruning sites or tissue weakened by sunburn. Sites of infection often display gumming, with affected branches eventually dying back as the infection progresses. Salmon colored fruiting bodies may be associated with the site of entry of the organism. Dieback is often the first symptom of declining trees. Declining trees may appear to be affected by brown rot gummosis. Gum production as a result of *Phytophthora* invasion is generally restricted to areas near the bud union of the tree, while in the case of this new decline, gumming occurs in any portion of the canopy often starting well up in the canopy and progressing down a scaffold branch to the trunk. Pruning away infected wood after spring rains and removal of the prunings from the orchard is recommended. When infected branches are pruned, a staining can be seen in the affected tissue. Pruning must extend beyond this stained area and into healthy wood for the pruning to be effective. When infection extends into the trunk, there is little to be done, except remove the tree. Research is scheduled to begin this summer to screen for materials that have some efficacy on this organism.

## **Fukumoto Decline**

Calls were received to examine declining trees in several instances from October to February. In each instance the affected trees were exhibiting a yellowing of the canopy, some leaf shredding and a starvation pattern on some of the foliage. The tree age ranged from 4 to 8 years among the affected

orchards. Examination of the bud union showed an overgrowth of the scion over the rootstock. In three instances the rootstock was C35. In another block with similar symptoms, the rootstock was Swingle citrummelo. The condition of the canopy suggested a girdling of the trees was occurring. It appears that there is some incompatibility between the scion and rootstock in these orchards. The exact cause of the condition is under further investigation at this time.

## **Citrus Peelminer**

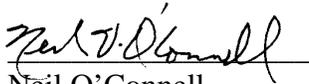
Research is progressing on the identification of a pheromone for the peelminer. Once the chemical components are identified, the attractancy of various ratios of the components will have to be tested, as well as the longevity of the attraction in the field. Various trap designs may have to be evaluated. The pheromone trap will be a critical tool in adding to our knowledge of this pest and our ability to manage it.

## **Fruit Size in Next Navel Orange Crop**

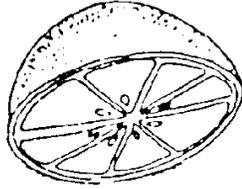
Fruit size in the current navel crop has been impressive, with a preponderance of larger sizes. This size distribution is related to the number of fruit set per tree. Historically, the trend is for the next crop following a "light crop", that is, one with below average number of fruit per tree, to have a greater than average number of fruit. When the number of fruit set is large, there is generally a corresponding loss in fruit size. The greater this trend the greater the number of fruit and the smaller the size. Under this crop condition, larger size can produce a premium in the marketplace. Recent research suggests that the application of one foliar spray of urea in early July or two sprays of potassium phosphite, one in mid-May and the second spray in early July, may result in increased fruit size in navel orange.

## Soil Moisture

With the last storm system on the 23<sup>rd</sup> of March, rainfall to date has amounted to about 10 inches. After the early rainfall in November, there wasn't much until March. With these recent storms, water in the soil profile and root zone should be close to field capacity in many orchards. That's assuming that all the rainfall that we've received has been "effective" and a portion has not run off. Soil moisture instruments such as tensiometers or soil tubes are useful in this regard giving an idea on depth and amount of moisture in the root zone. Having the soil profile filled to capacity is the preferred condition to start the irrigation season.



Neil O'Connell  
Farm Advisor



# Citrus Notes

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**Spring Citrus Meeting**  
**Friday, April 26, 2002**

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