2ND ANNUAL PISTACHIO FIELD TOUR & MEETING

June 24, 1986
8:00 a.m. - 3:30 p.m.

Itinerary

7:30 a.m. Meet at: Hacienda Hotel
2550 W. Clinton
Fresno, California

Refreshments will be served in the parking lot.

8:00 Board Buses for Field Tour

Madera County

Stop #1 - Nutrient Deficiencies in the Field
Water Budgeting

Stop #2 - General Pistachio Production
IPM

12 NOON Return to Hacienda for Lunch (Las Vegas Room)

1:15-2 p.m. Verticillium Wilt: I. Fertilization Project
III. Rootstock Breeding Project

DR. LEE ASHWORTH
Plant Pathologist
U.C. Berkeley

2-2:30 Pistachio Fungal Diseases

BILL KRUEGER
Farm Advisor
Glenn County

2:30-3:00 Pruning Mature Pistachios: Possible Approaches

DR. LOUISE FERGUSON
Extension Subtropical Horticulturist
U.C. Kearney Agricultural Center

3-3:30 Current IPM Approach for Pistachios

BOB BEEDE
Farm Advisor
Kings County
The results from 1985 have demonstrated what, logically, was expected. All three pruning treatments decreased yield substantially:

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Yield (dry, inshell, splits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>850 lbs/acre</td>
</tr>
<tr>
<td>Hedge</td>
<td>552 lbs/acre</td>
</tr>
<tr>
<td>Topped</td>
<td>510 lbs/acre</td>
</tr>
<tr>
<td>Hedged and topped</td>
<td>382 lbs/acre</td>
</tr>
</tbody>
</table>

In terms of tree growth the three pruning treatments decreased scaffold and trunk growth and increased the number and length of lateral shoots. Root growth, except for preliminary observation, was not measured in 1985.

It will not be known until 1987, the next off year, how effective this experiment will be. Then, if the initial hedging and topping were successful, these treatments (applied 2/85) will have produced new lateral growth which elongated and produced fruiting buds in 1986 to be harvested in 1987. If the 1987 harvest is significantly higher than the 1985 harvest, mechanical pruning may be a feasible alternative.

Thus far, hedging appears to be more effective than topping. Topping produced such a proliferation of top growth that re-topping was, and major thinning cuts may be necessary. Further, it may prove feasible to hedge only one side of a tree row alternate years. These treatments were done after the on year harvest; reasoning that it was better to cut back severely when there was less potential crop loss. However, there is the danger that decreasing an already low crop may increase the next heavy crop and, therefore, cause the alternate bearing to become more accentuated. Therefore, please regard this as an experiment in progress.

I wish to thank Blackwell Land Ranch, particularly Earl Surber, John Chidester, and Santiago Gaona for their cooperation. I also wish to thank the Pistachio Commission for funding.
***NOTICE***

Dr. Ashworth's hybrid seed will be available, pending University of California approval, through:

Foundation Plant Materials Service  
Attention: S. N. Kluk  
University of California  
Davis, California  95616

Notifying the above will place your name on an unranked list for the availability announcement. Price will be announced at that time.
The objective of this experiment was to determine if mechanical pruning could:
- Be used on pistachio trees to:
  - Maintain trees at a smaller size, therefore, (1) eliminating need to pull every other tree on closely spaced plantings; (2) continue the use of present harvesting equipment.
  - Promote vegetative wood for future production surface.
  - Decrease wide swings in alternate bearing.
  - Decrease pruning costs.

The experiment was started in February of 1985. The treatments were as follows:

<table>
<thead>
<tr>
<th># Trees</th>
<th>Treatment 2/85</th>
<th>Treatment 2/86</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 rows*</td>
<td>Mechanically topped</td>
<td>Re-topped</td>
</tr>
<tr>
<td>5 rows*</td>
<td>Mechanically hedged</td>
<td>Hand tipped</td>
</tr>
<tr>
<td>5 rows*</td>
<td>Mechanically hedged and topped</td>
<td>Re-topped</td>
</tr>
<tr>
<td>5 rows*</td>
<td>Control</td>
<td>Hand-tipped</td>
</tr>
</tbody>
</table>

*170 trees/row.

The following measurements were made (and will be continued).

- Measured
  - 1985 - nut yield and quality
    - girth and scaffold diameters, shoot extension and number

- To be measured
    - nut yield and quality
    - girth and scaffold diameter, shoot extension and number
    - root growth