MEMO TO: Lynne Epstein
Bill Olson
John Edström
Rocky Teranishi

FROM: Louise Ferguson
Extension Horticulturist

RE: 1988 Pistachio Proposals

Enclosed are 1988 cooperative proposals. I will be calling soon to discuss details of each. Also, we will discuss the same at Pistachio Work Group meeting on 1/13/88.

LF: jc

Enclosure
Problem and Its Significance:
In the past five years, three new pistachio rootstocks, all with some tolerance of verticillium wilt have been introduced in California; these rootstocks are rapidly replacing the former verticillium susceptible industry standards, _P. atlantica_ and _P. terebinthus_. Thus far, there have been no statewide rootstock trials comparing these three new rootstocks, _P. integerrima, P. integerrima X P. atlantica_, and _P. integerrima X P. lentiscus_. Since verticillium wilt poses to pistachios, the susceptibility of these three rootstocks should be determined. Also, little is known about the scion cultivar compatibility, adaptability, and growth and bearing characteristics of these rootstocks. Therefore, we propose a multi-site, statewide rootstock trial of these three rootstocks.

Objectives:
OVERALL
To evaluate: _P. integerrima; P. integerrima X P. atlantica; P. integerrima X P. lentiscus_.
In: Butte County with Bill Olson & Dan Hutfless; Colusa County with John Edstrom and Rick Strain; Madera County with Mark Freeman, Rocky Teranishi, and Jerry Allen; Kings County with Bob Beede, D. Rose, and Jerry Allen; and Kern County with Joe Maranto and TBA.
For: cold hardiness; growth characteristics (alternate bearing); yield; quality (blanking, splitting); and susceptibility to verticillium wilt.
1988: To establish 5, 2-acre plots of the three aforementioned rootstocks.

Plans and Procedures:
Soil samples to establish soil textural characteristics, pH, nutrient levels (particularly N, P, K) and soil verticillium microsclerotia levels will be done spring of 1988. Water samples to establish water quality will also be taken at this time. This testing will be supervised by Dr. Lynne Epstein and the cooperating farm advisors.
1988: 2-acre plots of 3 different rootstocks nursery-budded to _P. kerman (_♀_), and _P. peters_ 02-16 and 02-18 (_♂_) will be located in the 5 counties as early as conditions permit. Cooperators have been secured. Spacing will be 15x22 (132 trees/acre) with _P. integerrima_ or _P. integerrima X P. atlantica_ alternating with _P. integerrima X P. lentiscus_. The _♂_
BUDGET REQUEST

Funding Source: California Pistachio Commission

Salaries and Benefits
- Postdocs/RA's
- SRA's
- Lab/Field Assistance: $5,076.00

Employee benefits

Supplies and Expenses
- Trees & budding

Equipment

Operating Expenses and Equipment
- Travel (Davis campus only)

Travel

Department account number: 

(continued from front)

pattern will be every 3rd row, every 3rd tree (1:8). Irrigation will be low volume (drip or sprinkler). Louise Ferguson and the cooperating farm advisor will supervise the establishment of the plot.

Trees will be purchased (330 P. integerrima, 330 P. integerrima X P. atlantica) or provided (660 P. integerrima X P. lentiscus) by nurseries to whom free seed was placed with in February, 1987 for this express purpose. Nursery budding of the trees will be purchased. Plot preparation, establishment costs, irrigation system costs, and general production costs will be borne by the cooperators. Soil, water and verticillium analysis costs will be covered by grant funds.

During this first growing season (1988-89) the trees will be trained and monitored for precocity, growth (trunk girth), compatibility with scions, and survival (with emphasis on cold hardiness and verticillium wilt).

It is expected this trial will last 20 years and funding, though not at this initial level, will be required through 2008.