

Report of the Research Committee

The encouragement of research to find answers to some of the problems confronting the avocado industry is an integral part of the stated purpose of your Society: "...to improve the culture and production and to promote the advancement and general welfare of the avocado and other subtropical fruits as a horticultural industry."

To this end, the Research Committee has brought to the attention of researchers problems confronting the grower and the industry. It has also reviewed research proposals and made recommendations to the board of directors for appropriate action.

During the past year, funds were provided for research to determine the salt tolerance of the several *Phytophthora cinnamomi*-tolerant rootstocks now being used. Tolerance to the root rot fungus is of primary importance in the selection of rootstocks. The degree of salt tolerance in these stocks, however, has not been determined and is of growing concern among growers faced with limited water supplies, possible lower water quality, and soil salinity increases. Under the direction of Dr. J.D. Oster, Extension Soils and Water Specialist, University of California, Riverside, and with the cooperation of Brokaw Nursery, Saticoy, a trial has been established. It is comparing the salt tolerance of eight rootstocks, all with Hass scions, in three levels of salinity. We look forward to some meaningful and useful information from these investigations.

Through your Society's scholarship program, grants in the amount of \$1,000 each are awarded to qualified graduate students to assist them in their research on avocado. This year, a grant was awarded to a graduate student at the University of California, Riverside, to further his research on the graft incompatibility of the genus *Persea*. The graft incompatibility between some species of the genus *Persea* which are highly resistant to or immune to the root rot fungus and scions of the commercial varieties has been one of the roadblocks to producing a truly root rot-resistant tree. We feel any research to try to solve this problem is well worth the effort.

The Research Committee, in 1982, has looked into possible investigations to determine the cause or causes for poor growth of root rot-tolerant rootstocks in some locations. Any one or more of several factors may be involved. In November, at the behest of the Research Committee, the board of directors approved the making of a gift of \$8,500 for research into improved approaches to establishment of clonal rootstocks in land infested with *Phytophthora cinnamomi*. The project will be led by Dr. Michael D. Coffey, University of California, Riverside.

Another area of research in which your Society has been active is that of investigations into the feasibility and practicality of using dry weight of the fruit as a measure of maturity under California conditions. Initiated and supported by the Society, and with additional support by the California Avocado Commission, research was carried out by the late Dr. Roy Young and completed by Mr. Seung-Koo Lee, Department of Botany and Plant Sciences, University of California, Riverside.

Respectfully submitted, Robert G. Platt, Chairman