POSTHARVEST PROJECTS

Project: **312 Studies on Fruit and Nut Quality and Safety Affected by Postharvest Management**

Project Leader: *Carlos Crisosto, Ph.D., Pomologist, Department of Pomology, UC Davis, Kearney Agricultural Center*

Objective: 1. Better define components of quality (appearance, texture, organoleptic traits or FOTs, nutritive value) and their interrelationships for various fruits, nuts and vegetables destined for the fresh market or for processing. 2. Develop objective and non-destructive methods for determination of appearance and textural quality and optimum maturity of fruits, nuts and vegetables. 3. Evaluate the effects of preharvest factors (genetic, environmental, and cultural) and postharvest procedures on organoleptic traits, nutritional quality, and physiological disorders of fruits and nuts.

Project: **658 Evaluating the Response of California Citrus to Postharvest Management Strategies**

Project Leader: *Mary Lu Arpaia, Ph.D., Extension Subtropical Horticulturist, Department of Botany and Plant Sciences, UC Riverside, Kearney Agricultural Center*

Objective: A) In collaboration with other UC researchers, conduct research to discern the effects of preharvest crop management on the postharvest storage life of navel oranges. Three collaborations have been established. B) In collaboration with other UC and USDA researchers continue our efforts on examining the utility of sensory evaluation as part of an overall fruit evaluation process. Two collaborations have been established. C) Establish new projects as identified by the CA citrus industry when appropriate.

Project: **950 Evaluating the Response of California Subtropical Fruit to Pre and Posthavest Management Strategies**

Project Leader: *Mary Lu Arpaia, Ph.D., Extension Subtropical Horticulturist, Department of Botany and Plant Sciences, UC Riverside, Kearney Agricultural Center*

Objective: A) To continue a postharvest evaluation program on the unreleased plant material from the breeding program. B) To continue collaboration with J. Smilanick and D. Margosan examing factors involved with postharvest decay of avocado. C) Initiate a collaborative study with A. Woolf to look at the effects of high temperature (>68F) and carbon dioxide on the ripening behavior and quality of “Hass” avocado. D) Establish new projects as identified by the CA avocado industry when appropriate.

Project: **0505 California Citrus Incubation Program for the Korean Export Market**

Project Leader: *Jim Adaskaveg, Ph.D., Associate Professor, Department of Plant Pathology, UC Riverside*

Objectives: Develop an incubation program for the certification of California oranges to the Korean export market.