## California Pistachio Research Board 2013 Projects

Proposal Title	Principal Investigator	Amount Awarded
Developing a Growing Season Phenology Model for Pistachio Cultivars	Louise Ferguson	\$16,525.00
Analysis of volatiles from aspergilli contaminated pistachios	John Beck	\$15,000.00
Effect of Hedging and Topping on Pistachio Alternate Bearing	Robert H. Beede	\$8,500.00
Determining the route of detoxification of insecticides used to control navel orangeworm in tree nuts	May Berenbaum	\$45,000.00
Impact of sex, age, and mating status on flight behavior of the navel orangeworm	Charles Burks	\$17,930.00
Comparison of OMRI approved fungicides for Botryosphaeria and Alternaria control in Pistachio	David Doll	\$5,000.00
Performance of five pistachio rootstock selections in a sandy location with high counts of plant parasitic nematodes and low quality groundwater	David Doll	\$9,500.00
Determining the Whole Plant and Intracellular Location of Sodium and Chloride in Pistachio Rootstocks and Their Effects on Growth and Cold Tolerance	Louise Ferguson	\$35,003.00
Subcellular to whole plant level analysis of uptake, translocation, and accumulation of sodium and chloride in three pistachio rootstocks: P. atlantica, P, integerrima and P. atlantica X P. integerrima	Louise Ferguson	\$44,110.00
Effects of post-emergence herbicides on glyphosate-resistant weed seed production and viability in California pistachio orchards	Brad Hanson	\$13,474.00
Precocious Pistachio Seedling Evaluation, 2013-14	Craig Kallsen	\$9,800.00
Evaluation of pistachio breeding selections	Craig Kallsen	\$10,000.00
Reducing Winter Juvenile Pistachio Freeze Damage	Craig Kallsen	\$4,050.00
Monitoring and improving the efficacy of the atoxigenic strain AF36 in commercial orchards and aflatoxin contamination of closed shell nuts	Themis J. Michailides	\$81,120.00
Understanding Alternaria Late Blight Development, Disease Management, and Effects in Reducing Nut Mold and Staining of Pistachio	Themis J. Michailides	\$56,537.00
Susceptibility of Pistachio Cultivars to Botryosphaeria & Botrytis Blights, Disease Management, and Susceptibility of Pruning Wounds to Infection	Themis J. Michailides	\$62,990.00
Responses to Changes in Calcium and Potassium Supply in Three Pistachio Rootstocks	Louise Ferguson	\$25,500.00
Large-Scale Utilization of Saline Groundwater for Development and Irrigation of Pistachios Interplanted with Cotton	Blake Sanden	\$28,640.00
Effect of Pre-plant Tillage on Pistachio Development Under Drip Irrigation	Blake Sanden	\$2,816.00
Interaction of soil salinity, sodicity, and texture on apparent freeze damage of 3rd to 7th leaf pistachios: is there a definite threshold?	Blake Sanden	carryover
In-season insecticide control of navel orangeworm: assessment of application coverage	Joel Siegel	\$70,000.00
In season control of navel orangeworm, assessment of insecticide timing and investigating novel properties of the newer insecticides	Joel Siegel	\$70,000.00
Integrated navel orangeworm control, resistance management, insecticide fate- transport, and MRL mitigation	Spencer Walse/Joel Siegel	\$27,500.00
Pistachio (Pistacia sp. L.) in dynamic environment – quantifying species resistance to abiotic stresses (freezing, salinity and drought) – step one freezing tolerance	Maciej Zwieniecki	\$50,000.00
Optimizing chemical control programs for Gill's mealybug, Ferrisia gilli, in Pistachios	David Haviland	carryover
Monitoring the Adult Navel Orangeworm Moths with Pheromone and Host-Plant Volatiles	Ring Cardé	\$37,677.00
Optimizing the Use of Groundwater Nitrogen for Nut Crops	David Smart/Patrick Brown	\$164,495.00
Analysis of sex pheromone-based mating disruption mechanisms in Navel Orangeworm	Bas Kuenen	\$34,757.00
Monitoring, molecular characterization, fitness costs assessment and management of fungicide resistance in populations of Alternaria spp. and Botrytis cinerea from California pistachio orchards	Michailides/ Avenot	\$54,650.00
Genetic Profiling and Variability Study in Representative Pistachio Germplasm and Different 'Kerman x Peters' Populations	Bushoven/Cheng	\$40,000.00