

California Pistachio Research Board 2020 Research Projects

Proposal Title	Principal Investigator	Amount Awarded
Education		
California Pistachio Research Board Event Facilitation	Julia Stover	\$15,000
California Pistachio Workgroup Website Development	Julia Stover	\$35,000
Entomology		
Improving Effectiveness and Sustainability of Gill's Mealybug Management in Pistachio	Raman Bansal	\$43,562
Orchard in a box. Raman Spectroscopy to Detect and Measure NOW Pheromones	Tiziana Bond	\$38,372
Use of Pistachio Mummy Volatiles as Lures for Navel Orangeworm	Luisa W. Cheng	\$40,000
Attraction and suitability of trap crops for large bug pests in pistachio	Kent Daane	\$51,092
Pheromonal or related attractants for leaf-footed bugs (<i>Leptoglossus</i> spp.) infesting California nut crops	Jocelyn G. Millar/Houston Wilson/Kent Daane	\$41,771
Identification, synthesis, and development of the sex pheromone of the mealybug <i>Ferrisia gilli</i>	Jocelyn G. Millar	\$48,114
Improve insecticide application, efficacy and timing for control of navel orangeworm in pistachio	Joel Siegel	\$80,000
Improving and verifying quality of mass-reared navel orangeworm for sterile insect technique	Houston Wilson/Chuck Burks	\$61,800
Influence of Pistachio Hull Degradation and Shell Split on NOW Egg Deposition and Infest	Houston Wilson/Chuck Burks	\$43,610
Food Safety		
Factors Affecting the Efficacy of AF36, Improvement of the biocontrol Agent, and Establishing an Area-wide Long-term Mycotoxin Management Program	Themis J. Michailides	\$65,826
A survey of fungi producing Ochratoxin A in California pistachios and management of contamination	Themis J. Michailides	\$63,005
Horticulture Agronomics		
Evaluation of Salinity, Boron, and Soil Hypoxia on Pistachio Tree Growth	Phoebe Gordon	\$69,124
Evaluating new training systems for pistachio	Bruce Lampinen	\$98,838
New CE Specialist Seed Grant	Giulia Marino	\$13,399
Pistachio Irrigation Training Module & Monitoring Demo Sites	Blake Sanden	\$37,246
Investigating the effects of winter cover crops on evapotranspiration, water productivity and soil-water functions of mature micro-irrigated pistachio orchards in the water-limited context of the San Joaquin Valley.	Daniele Zaccaria	\$96,950
Long Term Saline Irrigation Strategies for Pistachios on PGI Rootstock	Gary Banuelos	\$74,000
Horticulture Genetics		
Pistachio Improvement Program	Pat J. Brown	\$106,408
Phenotypic and genomic diversity of UCB-1 sub-clones	Pat J. Brown	\$25,986
Integrated Conventional and Genomic Approaches to Pistachio Rootstock Development	Pat J. Brown	\$130,787
Identification of Superior UCB-1 Rootstocks using DNA Markers: Phase 3, Year 2	Richard Michelmore	\$128,186
Horticulture Physiology		
Physiological and biochemical factors in pistachio hull maturity and shell split as a function of temperature and tree physiology	Barbara Blanco-Ulate	\$100,000
Cracking the Black-box of dormancy in Pistachios: Tracking biochemical changes in inflorescence buds from dormancy to bud break	Gurreet Brar	\$82,788
Morphological and cellular characterization of Pistachio fruit development, shell and hull splitting and kernel quality improvement	Georgia Drakakaki	\$61,975
Trait and marker evaluation for breeding salinity tolerance and climate adaptation in California pistachio rootstocks	Georgia Drakakaki	\$69,853
Development of Tree Carbohydrate Budget Based Methods for Sustainable Management of Pistachio Orchards under Variable Central Valley Climatic Conditions	Maciej Zwienicki	\$75,000
Pathology		
Strategies to lessen conducive conditions for <i>Alternaria</i> late blight and resistance management in California pistachio orchards	Themis J. Michailides	\$42,694
Epidemiology and management of <i>Colletotrichum fioriniae</i> , <i>Phoma fungicola</i> and <i>Botryosphaeriaceae</i> family members causing blight diseases on California and Arizona pistachio (4th year)	Themis J. Michailides	\$68,820
Evaluating pistachio rootstock tolerance to soil borne diseases	Florent Trouillas	\$74,110