

CTRI ANNUAL RESEARCH FUNDING: FINAL 2024 PROJECT LIST

2024 TOTAL AFTER FINAL BOARD DECISIONS: ~\$680,000

Broomrape Containment, Control and Management		Research Lead	Institution
2020 Start	Broomrape: Devt. of Long Term Mgmt. Options: CA Commercial Field Conditions & Contained Research Facility Ongoing Work	Brad Hanson	UC Davis
2020 Start	Broomrape: Devt. of Long Term Mgmt. Options: Chilean Commercial Field Conditions *	Juan Carlos	UC Davis - Chile
2021 Start	Developing best equipment sanitation practices for broomrape and other high-profile soil borne pathogens; to mitigate field-to-field spread*	Cassandra Swett	UC Davis
2022 Start	Determining the population structure of Phelipanche ramosa and Orobanchae aegyptiaca field detections in California	Adam Schneider	UW-LaCrosse
2022 Start	Developing Tomato Lines Resistant to Branched Broomrape, a Critical California Pest*	Neelima Sinha	UC Davis
2022 Start	Inducible Suberin for Tomato Drought Tolerance (root architecture)	Siobhan Brady	UC Davis
2023 Start	Detection of Broomrape Infestations with Remote Sensing*	Alireza Pourezza	UC Davis
2023 Start	Screening of a VOC Sensor to Identify Broomrape Infestations*	Cristina Davis	UC Davis
Agronomic/Water/Nutrient Management			
2022 Start	Adapting the 'CropManage' weather-based irrigation decision-support tool – Further Investigation	Zheng Wang	UC Extension
2023 Start	Evaluation of materials to mitigate negative effects of salinity and high temperatures on yields of processing tomatoes	Tom Turini	UC Extension
2023 Start	Climate Smart Mgmt. Innovations for Improved Soil Quality, and Productivity of CA Processing Tomatoes	Amelie Gaudin	UC Davis / UC Extension
2023 Start	KPAM in Soils with RKN AND Fungal Challenges - Impacts on Yield and Disease Severity	Patricia Lazicki	UC Extension
2024 New	Assessment of Novel Transplanter Performance and Economics	Patricia Lazicki	UC Extension
Germplasm and Variety Development			
1991 Start	C. M. Rick Tomato Genetic Resource Center	Roger Chetelat	UC Davis
2024 New	Leveraging germplasm resources for genetic discovery and deployment of salt stress resilience	Greg Vogel	Cornell
2021 Start	Marker-assisted breeding for polygenic tomato spotted wilt resistance in tomatoes*	Reza Shekasteband	NCSU
Insect & Invertebrate Management			
2024 New	Decoding Resistance-Breaking Root-Knot Nematodes: A Statewide Survey and the Path to Diagnostic Tools in California's Tomato Fields	Shahid Siddique	UC Davis
2011 Start	Evaluation of Alternative Nematicides for the Control of Root-Knot Nematodes of Processing Tomatoes - with addition of novel biocarriers *	Jaspreet Sidhu	UC Extension
Pathogen Management			
2017 Start	Disease diagnosis, pathogen movement / emergence monitoring, new pathogen ID and F4 monitoring for the CA processing tomato industry	Cassandra Swett	UC Davis
2018 Start	Developing an integrated mgmt. strategy for F. falciforme vine decline in processing tomato, including co-management with Fusarium wilt	Cassandra Swett	UC Davis / UC Extension
2020 Start	Developing an integrated mgmt. strategy for F. falciforme vine decline in processing tomato, including co-management with Fusarium wilt	Brenna Aegerter	UC Extension
2024 New	Evaluation of Insecticide Programs in Processing Tomatoes for the MGMT of BCTV and TSWV Vectors and Viruses	Tom Turini	UC Extension
2017 Start	Viral Diagnostics*	Robert Gilbertson	UC Davis / UC Extension
Weed Control and Management			
2023 Start	Evaluation of new automated weeders in processing tomatoes	Scott Stoddard	UC Extension
2024 New	Controlling in-row weeds with post plant applications of pre-emergent herbicides	Scott Stoddard	UC Extension

* Denotes a project which is ongoing with the review and confidence of the CTRI, but with 100% outside funding