



**Washington State Grape and Wine Research Program
FY23 Projects**

Principal Investigator	Project Title	New/Cont. Duration	Awarded \$
Cheeke, Tanya	Effect of Mycorrhizal Inoculants on Grapevine Growth and Nutrient Uptake – No Cost Extension	C (3 of 2 yrs)	\$0
Collins, Tom	Assessment of Risk to Grape and Wine Quality from Smoke Exposure	N (1 of 3 yrs)	\$49,683
Edwards, Charles	Enological Application of non-Saccharomyces Yeasts	C (2 of 3 yrs)	\$29,958
Edwards, Charles	Use of Non-traditional Lactic Acid Bacteria to Induce Malolactic Fermentation in Grape Musts and Wines	C(1 of 3 yrs)	\$27,866
Harbertson, Jim	Research Winemaking	C (4 of 3 yrs)	\$114,913
Harbertson, Jim	Predictive Modeling Development using Surface Enhanced Raman Spectroscopy Coupled with Machine Learning to Facilitate Enological Analysis	N (1 of 3 yrs)	\$31,559
Harbertson/ Waterhouse, A.	Advancing Condensed Tannin Understanding (WSU portion)	C (2 of 3 yrs)	\$91,234
Jacoby, Pete	Optimizing Irrigation Efficiency with Soil Water Sensor-based Systems (Second year funding from NW Center for Small Fruits Research grant program)	C (2 of 2yrs)	\$0
Jacoby, Pete	Advancing Sensor-based Irrigation Scheduling	N (1 of 2 yrs)	\$24,805
James, David	Grape Leafrollers: Determining Economic Impact Levels and Action Thresholds	C (3 of 3 yrs)	\$8,160
James, David	Eugenol (Clove Oil) as Attractant and IPM Monitoring Tool for Anagrus Parasitoids of Grape Leafhopper Eggs	N (1 of 1 yr)	\$7,355
Karkee, Manoj	Mobile App for Crop Estimation, Lag Phase Detection and Viral Symptom Detection	C (2 of 2 yrs)	\$25,400
Keller, Markus	Optimizing Sampling Protocols for Efficient Vineyard Nutrient Management	C (3 of 3 yrs)	\$226,147
Keller, Markus	Support for Vineyard Maintenance for Wine Grape Research	C (4 of 3 yrs)	\$5,000
Moyer, Michelle	Alternative Preplant Strategies for Nematode Management in Washington Wine Grape Vineyards	C (3 of 3 yrs)	\$60,662
Moyer, Michelle	Fungicide Resistance Monitoring and Alternative Management Strategies for Grape Powdery Mildew	C (3 of 3 yrs)	\$56,051
Piao, Hailan	Impact of Yeast and Malolactic Bacteria on Wine Flavor Precursors	C (3 of 3 yrs)	\$66,435
Rayapati, Naidu	Innovative Strategies for Management of Grapevine Leafroll Disease – No Cost Extension	C (3 of 3 yrs)	\$0
Rippner, Devin (USDA)	Establishing a Vineyard to Study Effects of Traditional and Novel Viticultural Practices on Soil Health Metrics	N (3 of 3 yrs)	\$30,000



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Walsh, Doug	Grape Mealybug Management: New Control Measures	C (2 of 2 yrs)	\$33,700
Walsh, Doug	Monitoring and Managing Grape Phylloxera in Washington State Vineyards	C (3 of 3 yrs)	\$35,010
Waterhouse, A. (UCD) Harbertson, J. (WSU)	Advancing Condensed Tannin Analysis – No Cost Extension	C (2 of 3 yrs)	\$0
Harbertson, J.	Impact of Acid Timing on Sensory Perception	N (1 yr)	\$4,000
UAV-IQ/ James, David	Using Drones and an Attractant to Improve Biological Control of Mealybugs and Spider Mites in Washington Wine Grapes	N (1 yr)	\$36,246
Keller, Markus	Irrigation Sensors in Smart Vineyard	N (1 yr)	\$30,000
Total Wine Research Funded			\$994,184