

## 2006 AVF Viticulture Research Survey Score Summary

ISSUE	2006 Priority Rank	2003 Priority Rank	Percent Change
Vine Mealybug	2.62	2.40	8%
Rootstock Improvement (breeding rootstocks for pest/disease resistance & viticulture characteristics)	2.61	2.36	10%
Pierce's Disease	2.59	2.66	-3%
Sharpshooters (e.g., glassy-winged and blue-green)	2.49	2.55	-2%
Nematodes	2.46	2.17	12%
Influence of Plant and Soil Water Status on Vine Performance and Fruit Composition	2.45	2.50	-2%
Impact of Viticultural Practices on Fruit Composition and Flavor	2.44	2.51	-3%
Eutypa and Other Cankers	2.43	2.34	4%
Rootstock Selection and Evaluation	2.41	2.14	11%
Nutrient Requirements and Critical Levels	2.40	2.30	4%
Integrated Soil Health Management (use of organic amendments - composts, cover crops)	2.38	2.38	0%
Influence of Canopy Management Practices on Vine Performance and Fruit Composition	2.37	2.38	0%
Grape Mealybug	2.37	2.11	11%
Scion Improvement	2.36	1.95	17%
Cultivar and Clonal Selection and Evaluation	2.35	2.22	6%
Beneficials (e.g., spiders, wasps)	2.33	2.28	2%
Methods for Monitoring Fruit Ripening and Maturity	2.32	2.33	0%
Powdery Mildew	2.30	2.33	-1%
Regulation of Fruit Development, Ripening, Composition and Flavor	2.28	2.26	1%
Monitoring Plant Nutrient Status	2.28	2.25	1%
Mites	2.26	2.19	3%
Crop Load Management	2.26	2.09	8%
Bunch Rots	2.26	1.70	25%
Integrated Weed Management/Non-Chemical Weed Control	2.25	2.28	-1%
Improved Pesticide Application Technology	2.23	2.09	6%
Canopy Management	2.22	2.03	9%
Development of Pest Economic Injury Thresholds for Timing of Pesticide Applications	2.20	2.17	1%
Methods for Monitoring Plant and Soil Water Status	2.19	2.25	-3%
Young Vine Decline	2.18	2.09	4%
Cultivation and Weed Control	2.18	2.25	-3%
Scion x Rootstock Interactions on Plant Nutrient Status	2.17	2.04	6%
Yield Forecasting	2.16	2.07	4%
Integration and Modeling of Pest and Disease Management Techniques	2.16	2.10	3%
Regulation of Bud Fruitfulness and Fruit Set	2.13	2.08	2%
Evaluation of Vine Training and Trellising Systems	2.13	2.03	5%
Phylloxera	2.12	1.99	6%
Pruning	2.10	2.06	2%
Environmental Effects on Fruit Development and Composition	2.08	2.01	3%
Vineyard Fungicide Effects on Fermentation and Wine Defects	2.07	2.09	-1%
Use of Weather Data and Models for Integrated Disease Management	2.06	2.06	0%
Soil and Climate Evaluation Methods	2.05	1.97	4%
Fanleaf Virus	2.05	1.91	7%
Canopy Development and Vine Phenology	2.05	1.94	5%
Harvesting	2.03	1.88	7%
DNA-Based Diagnostics of Vine Diseases and Stresses	2.03	1.79	12%
Leafhoppers	2.02	2.01	0%
Determining Optimum Pruning Levels (balanced pruning)	2.01	2.11	-5%
Alternatives to Methyl Bromide	2.00	1.82	9%
Graft-transmissible Agents (GTAs)	1.99	1.81	9%
Measles	1.97	1.86	6%
Latent Viruses	1.97	1.89	4%
Vineyard Design and Row Orientation	1.91	1.91	0%
Yield Monitoring and Spatial Fruit Composition Monitoring	1.90	1.74	8%

Crown Gall	1.90	1.71	10%
Organic Farming Systems/Practices	1.89	1.95	-3%
Vertebrates (e.g., gophers)	1.87	1.94	-4%
Integration of Viticultural Practices within the Watershed (riparian vegetation management)	1.87	1.84	2%
Oakroot Fungus	1.86	1.79	4%
Assessing Vineyard Variability	1.85	1.85	0%
Regulation of Photosynthesis and Carbon Partitioning	1.83	1.77	3%
Variable Rate Applications	1.81	1.75	3%
Omnivorous Leafroller/Orange Tortrix	1.80	1.68	7%
Viroids	1.79	1.66	7%
Site-Specific Planting - GPS / GIS Applications	1.76	1.57	11%
Vertebrates (e.g., deer, rabbits, voles, birds, pigs)	1.62	1.75	-8%
Average Level of Importance - All Questions Considered	2.15	2.06	4%

Biotechnology Model System Support (90% favorable support)

Biotechnology - Support Using Genetically Enhanced Products (75% favorable support)

The Priority Rank for the Biotechnology Issues Stated Above Scored 2.24 in 2006 vs. 2.02 in 2003