

Oregon Wine Advisory Board Research Progress Report

1991 - 1992

Personnel Support and Development in Viticulture

Project Leaders: Porter Lombard and Steve Price, Department of Horticulture

Funding History: Year Initiated: 1983 Funding for 1991-92: \$20,46-7

Significant Findings:

1. Wrote a proposal with Barney Watson for a CAAR grant, was awarded another CAAR grant, and supervised two CAAR grants and a site selection study grant.
2. Surveyed and evaluated the December 1990 freeze damage.
3. Coordinated the Roseworthy College-OSU student exchange, student visitors from Beaujolais, and student interns from Australia and France.
4. Wrote and reviewed articles and chapters for the WAB Newsletter and Research Report, OWA Grapevine and Winegrape Grower's Guide, and the Oregon Horticultural Society Proceedings.
5. Contributed to workshops, tours, and meetings, specifically on freeze damage, phylloxera, irrigation, weed control, cluster thinning and research goals.
6. Hosted and contributed to the International Symposium on Nitrogen in Grapes and Wine, and reviewed papers for the proceedings.

Objectives:

- To find basic personnel needed for viticultural research.
- To communicate viticulture research information to the advisors and industry.

Results and Discussion:

1. Steve Price and Barney Watson wrote a CAAR proposal for an industry trial on a method of crop adjustment to maintain consistent yields on Pinot noir for \$9,650 on a matching basis with WAB. The grant was not awarded.
2. Steve Price and Porter Lombard were awarded a matching grant of \$13,924 to sample and analyze clusters and petioles for ammonium and nitrates from various rootstocks in 11 trials in California and one trial from British Columbia. This task took a week in California and a day in Summerland, B.C. to sample, and several weeks to process and analyze the samples this summer. It is summarized in the viticulture production report under Inflorescence Necrosis.
3. Steve Price ordered 640 grafted vines each of Pinot noir on 6 rootstocks, 3309, 5C, Harmony, 420A, 101-14, and 44-53 from Sunridge Nursery in Bakersfield, California. Scionwood of the Wadenswil clone of Pinot noir was pruned from David Lett's vineyard in Dundee and shipped to the nursery. The rooted grafts were trucked from Napa Valley and planted in Wayne Andersen's nursery in Corvallis for further growth. Three node cuttings of the same clone and source of Pinot noir were also planted for rooting and growth in the same nursery for self-rooted vines. The vines

will be available for 20 cooperative plots throughout the state during March and April 1992. We have received matching moneys from 16 vineyards so far. CAAR will contribute \$12,045 for the rootstock plots while grower cooperators will contribute \$400 each.

4. Anne Connelly has taken weather data from various sites throughout Linn and Benton Counties during the season plus phenological data and has started to write a publication on site selection for the Linn-Benton Economic and Development Council. The publication will be published in spring 1992.
5. Porter Lombard worked with Bernadine Strik and Anne Connelly on assessing damage from the December 1990 freeze throughout the state, particularly in eastern and southern Oregon. The new variety trial at the Southern Oregon Experiment Station was also assessed for freeze damage and the results are reported by David Sugar under new wine grape cultivars for southern Oregon.
6. Porter Lombard coordinated the Roseworthy College, Australia student exchange for the second year with Greg Stucky of Food Science from OSU who left February 3, 1992 for a year of wine science. Sue Mellonie from Roseworthy spent the 1991-1992 year at OSU in Natural Resources. Since Roseworthy is now part of the University of Adelaide, viticulture and wine science will be operating from the Waite and Wine Institute campus in Adelaide and will be of considerable advantage in our exchange. The Department of Rangeland Management and Resources of OSU is also interested in the exchange and wants to send students to the Roseworthy/University of Adelaide Natural Resources program.
7. Libby Tassie of Charles Sturt University, Wagga Wagga, Australia worked with Steve Price from June to August 1991 on anthocyanin development on exposed berries of Pinot noir. OSU presently has an ongoing student exchange with Charles Sturt University, therefore students interested in viticulture and enology at OSU are eligible for the CSU wine science program. We have also coordinated CSU's first intern to work in an Oregon vineyard in 1992.
8. Porter Lombard coordinated and placed intern students: Alex Fouque from the Lycee Viticole de Beaune, France; Marie-Eve Gilla from the University of Dijon, France (with Alan Bakalinsky); Pascal Valadier from the University of Montpellier, France; Tony Davis from Roseworthy College, Australia; and Murray Edmonds of Charles Sturt University, Australia. Six students from Beaujolais were placed in five vineyards during harvest 1991. Visa rules are changing in 1992 and may be more stringent and require a substantial fee for the interns.
9. Porter Lombard will work with Alan Bakalinski and Steve Price in coordinating the intern program and student exchanges in the coming years. The caliber of the students has been excellent and we hope this will be a continuing program. Visa rules are changing in 1992 and may be more stringent and require a substantial fee for the interns. We will keep you posted about interns who want to come, but let us know if you are interested.
10. Porter Lombard and Steve Price helped plan the OHS Winegrape Section for 1992. We presented the Review of 1991 Season report on the program and helped in the wine tasting session. We have participated in the research goals meeting with OSU and WAB personnel. We will be participating in the OSU Grape Day program February 28, 1992 and in the research proposals in spring 1992. 9) Porter Lombard arranged for Dr. Ben Bravdo of Israel to present a seminar on drip irrigation and to consult in several vineyards on irrigation in the Willamette Valley September 19, 1991.
11. Porter Lombard and Steve Price reviewed several chapters for the OWA's Oregon Winegrape Growers Guide. We also wrote several articles for the WAB Research Newsletter and the Research Report.
12. We visited several vineyards including southern Oregon and eastern Oregon concerning the estimation of cluster size and yield prediction to assess cluster thinning because of the excessive crops in most vineyards. Written assessments of the freeze damage on an eastern Oregon vineyard and a possible site for a large vineyard were made, also.
13. Porter Lombard and Steve Price were part of the convening committee for an International Symposium on Nitrogen of Grape and Wine held in Seattle June 18-19, 1991. Several graduate

students: Sanliang Gu, Alfonso Gardea, Antonio Ibacache, and Glen Creasy, gave papers at Seattle for either the symposium or the ASEV meetings held afterwards. We hosted several German, Australian, and New Zealandian researchers after the symposium in Oregon.

14. Porter Lombard and Steve Price reviewed all invited publications for the Proceedings of the International Symposium on Nitrogen in Grape and Wine. This involved several weeks work in spring 1991, particularly in the evenings after work.
15. Porter Lombard and Steve Price have prepared several papers for the 3rd International Symposium on Cool Climate Viticulture and Enology at Geisenheirn, Germany June 8-12, 1992 and Vine Physiology Meeting at Turino, Italy May 11-15, 1992. We hope to attend both meetings.
16. We purchased a 486 computer to upgrade data acquisition and analysis for the laboratory.
17. Porter Lombard continued the vineyard survey collecting information and data from about 20 growers on bud, flower, and fruit development and cluster sizes, maturity, and yield of 8 varieties. We have lost a few vineyards from attrition and, therefore, want to add a few more in 1992. The survey will be continued in 1992 by Porter for the time being.

Publications:

For WAB Research Report:

Lombard, Porter and Steve Price. Is inflorescence necrosis another bloom time hazard to berry set?

Price, Steve, Porter Lombard, and Bernadine Strik. Boron research trial-final report.

Price, Steve. Growth diversion using disposable canes to reduce vegetative growth.

Strik, Bernadine. Grower cooperative rootstock trials.

For Oregon Horticultural Society 1992 Annual Report:

Lombard, Porter, Bernadine Strik, Anne Connelly, and Steve Price. Review of the 1991 winegrape season in Oregon.