

Oregon Wine Advisory Board Research Progress Report

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Summary Report of the Recent Visit to Various European Wine Research Institutes

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The WAB granted me a travel grant of \$500 to spend two weeks visiting Helmut Becker at Geisenheim, Germany; Norbert Becker in Freiburg, Germany; Pierre Huglin and Christophe Schneider at Colmar, France; Raymond Bernard and Pierre Dupuy in Dijon, France; and Alain Carbonneau at Bordeaux, France. A full and quite detailed report is on file with WAB and is available from me upon request. Address requests to: Porter Lombard, Department of Horticulture, Oregon State University, Corvallis, OR 97331. Also, I am available to discuss the report and visit with grower groups this year. However, I'll briefly summarize the visit in this report to let you know the value of my findings.

The hospitality and availability of the European researchers really was very impressive as others who have visited them will testify. Some may have institutional funds available for hosting but I was most impressed with their generous time devoted to show us the tourist sights besides industry and research plots. Always they would include a visit to their tasting cellar or a winery's 'cav' to taste a range of wines particularly to demonstrate the effect of new varieties, clones, trellising methods, or vintage on wine quality. It was a very valuable learning process.

SUMMARY REPORT

- I. Breeding programs at Geisenheim, Freiburg, Colmar, and Bordeaux.
 - A. Geisenheim and Freiburg have hybrids that are very hardy cultivars without the labrusca parentage.
 - B. Geisenheim released two new rootstocks: Boerner and Sori.
 - C. Colmar has crossbred Auxerrois, Riesling, Pinot blanc, and Muscat to develop high quality white wines.
 - D. Bordeaux has released Paradise for a white table wine with better quality than the present table wine varieties.
- II. Clonal evaluations at Geisenheim, Colmar, and Dijon.
 - A. All tested clones are readily available to us, are generally clean of virus based on their techniques, and have no propagation restriction such as the hybrids may have.
 - B. The variability in growth, cluster size and condition, maturity, and wine quality is quite variable for the clones of Gewurztraminer and Pinot noir while those of Riesling are small.
 - C. High brix and wine quality of Gewurztraminer was related to those clones with lowest yield. This was not necessarily true for Pinot noir clones.
- III. Micro-macro climate studies in Germany.
 - A. Found that wind velocities in the vineyard of 4.5 miles/hour and greater decreased the heat balance and maturity. Recommended that rows should be perpendicular to the wind direction above 4.5 miles/ hour and avoid vineyards in regions with prevailing winds above

9 miles/hour.

- B. Site evaluation based on 10 factors are evaluated and updated annually by the Germans.
- C. Norbert Becker found that vine vigor delays maturity during years when the period between July 1 to August 15 has less sunshine and greater rainfall requiring more summer hedging. Slightly less important but still important in maturity was the heat summation and sunshine hours during the period from August 16 to October 15.

IV. Yield prediction method at Colmar.

Schneider at Colmar has developed a method of predicting regional yields from cluster samples taken 4-5 weeks after bloom. The method should be appropriate for vineyard yields and therefore, we plan to test the prediction model this year in several cooperative vineyards.

V. Training and canopy management research in France.

I was very impressed with Carbonneau's understanding and work in canopy management and I believe he should be considered a world leader. Also, we should acknowledge his general viticulture research in such areas as rootstocks, irrigation, sod, and mechanical pruning.

His primary priorities in evaluating canopy management are yield, maturity, and wine quality but he stresses wine quality. He has a good understanding of the interrelationship of light, spacial manipulations of the foliage and clusters, vigor, hedging, yield, maturity, and wine quality. There is a general interest in testing Carbonneau's system such as the open lyre, particularly in Colmar and Dijon besides Bordeaux. We will have the open lyre system in our trials at Corvallis.

VI. Educational opportunities.

There are several education levels in Germany and France available for student exchange either on a personal basis or through OSU. The student exchange program at OSU is investigating the possibility of exchanges with several institutions such as Geisenheim, Hohenheim, Lycee Ecole at Baune (high school and community college levels), University of Dijon, University of Montpellier, and University of Toulouse.

Vineyard Acreage in Oregon, 1984