

Oregon Wine Advisory Board Research Progress Report

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Varieties, Clones, and Rootstocks

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INTRODUCTION AND OBJECTIVES

The introduction and evaluation of new planting material for the Oregon wine industry has been one of the top priorities of OSU and Oregon Wine Advisory Board (OWAB) for many years. The emphasis at OSU has been on two main objectives: to facilitate the introduction of new material into commercial Oregon vineyards and to evaluate the plant material options of Oregon growers. These are very broad goals and they require an integrated program. There are several groups on campus working on vine improvement and OSU is working with several other groups both in and out of Oregon. The OWAB has worked actively on these issues through its Winegrape Improvement Committee and by funding of programs at OSU.

Introduction of new material. New material for Oregon vineyards has come from several sources. From the mid-1970s through 1990 OSU had an import license for importing and virus testing grape plant material from outside of the United States. The most important contribution of this program was the introduction of new clones and varieties from France. Clones and varieties from Colmar, Espiguette, and Dijon came to Oregon via this program. With the retirement of Ron Cameron, OSU no longer has an importation license. Foreign material coming into Oregon must now come through virus-testing programs in New York, California, or Canada.

The primary source of new material coming into Oregon is now the Foundation Plant Materials Service at the University of California (FPMS). FPMS has recently received significant federal funding to upgrade its facility. Bringing plant material into Oregon from FPMS has been difficult at times.

Virus certification rules in California were more rigid than Oregon rules. Material infected with Rupestris stem pitting was not allowed out of quarantine. This virus is common in Oregon vineyards and does not appear to cause economic damage. The Oregon Department of Agriculture (ODA), OSU, and the OWAB decided that Rupestris stem pitting should not be considered a quarantinable disease and the USDA concurred. We were able to work with the ODA and USDA to allow the release of some stem pitting infected material in Oregon. Partly due to our efforts, the State of California has just changed the quarantine regulations to allow release of grape plant material infected only with Rupestris stem pitting. This ruling will allow the release of eighty new varieties and clones from quarantine. The list of new material includes many clones and varieties that may have promise for Oregon. These new regulations should make FPMS more viable as an avenue for introducing new material into Oregon.

We have also been working with FPMS in reevaluating the leafroll status of the OSU mother block.

New leafroll tests have found infected vines in the FPMS foundation vineyard. Release of registered material from OSU will be delayed until material from the OSU Mother block can be retested for leafroll.

The Foundation Seed Project (FSP) at OSU is the primary vehicle for the initial distribution of new grape material within Oregon. FSP ships cuttings, graft sticks, and mist-propagated plants to nurseries and growers in Oregon. They are also the primary source for distributing plant material released by OSU. Much of this material is shipped out of state. In the 1992 growing season, FSP shipped 3,787 dormant cuttings and 3,325 mist propagated plants to 52 growers and nurseries. The OSU mother block was expanded this year to make room for new clones and varieties.

New material evaluation. New plant material is being evaluated in several trials around the state. There is a large trial for evaluating Pinot noir and Chardonnay clones at Woodhall Vineyard, a rootstock trial also at Woodhall, a trial evaluating new Italian, Spanish, Rhone, and Bordeaux varieties at the Southern Oregon Experiment Station. Phylloxera resistant rootstock trials have been established at 17 sites around the state in commercial vineyards. The Southern Oregon trial is described in a separate report in this publication.

The Pinot noir and Chardonnay trials were in their third leaf this last summer. We had hoped to get a half crop this season, but the dry weather conditions resulted in less growth than we had anticipated and the vines were cropped lightly. Clonal differences in Pinot noir were readily apparent. The unique growth habit of upright types such as UCD 22 and ESP 374 were clear as was the unique cluster morphology of the Mariafeld types UCD 17 and UCD 23. The high yielding clone ESP 236 had distinctly larger clusters. The low crop and early season resulted in very few differences in Brix, TA, and pH, however. Differences in the Chardonnay trial were less apparent and no must analysis of fruit was done this year.

The rootstock trial at Woodhall was trained to the wire this season and should have its first small crop next year.

Seventeen rootstock trials were planted in commercial Oregon vineyards in May, 1992. The scion was Pinot noir clone UCD 2A and the rootstocks were 3309, 5C, 420A, 101-14, 44-53, Harmony, and self-rooted. These trials are intended to be the growers' trials, however we hope to be able to work with many of the growers in evaluating the response of Pinot noir. We would like to select several trials in diverse conditions for long term evaluation.

We have also worked with a commercial nursery to design a second set of trials. These trials are being offered for sale to Oregon growers and will use Chardonnay as scion and have a slightly different set of rootstocks. The plot plan for these trials will be similar to the Pinot trial. We would like to continue to work with growers in designing and managing on-site experiments. As the industry shifts to a rootstock based vineyard, there will be many questions that can be best answered by a cooperative approach.