

# Oregon Wine Advisory Board Research Progress Report

1993 - 1994

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## Pinot noir and Chardonnay Clonal Wine Production 1993 Season

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The 1993 vintage was the first year we obtained sufficient fruit from the Woodhall Vineyard (WHV) Pinot noir and Chardonnay new clonal trial to produce small lots of experimental wines for analysis and industry tastings. Wines were produced from UCD 4 (Pommard), UCD 2A (Wadenswil), UCD 17 (Mariafeld), and Dijon 113, 114, and 115. Lot sizes were very small, in some cases no more than one gallon, and the wines were used for analysis and an industry tasting at our OSU Winegrape Research Day.

Must and new wine analysis of the Pinot noir clones is shown in Table 1. The clones were all harvested on October 5. The relative level of maturity was similar for all the clones with young vines and small crops resulting in high degrees Brix. The highest titratable acidity and lowest pH were for UCD 2A and UCD 17 both before and after completion of malolactic fermentation. The total anthocyanin content of the new wines was greatest for the Dijon clones and UCD 17.

Color intensity, a measure of the absorbance at 520nm + 420nm which is more closely related to the color we perceive visually at the pH of the wine, was greatest for UCD 17 followed by UCD 2A, and Dijon 115. All the wines had excellent color intensity, however. The total phenolic content of the new wines was greatest for Dijon 115, UCD 17, and Dijon 114. The differences in color intensity and phenolic content in the new wines is affected both by clone and by yield. In the case of UCD 17 a Mariafeld type with loose clusters and well exposed berries, we observe higher color and phenolic content than the other clones even at higher yields. In any given clone we tend to observe more color and phenols in fruit and wine at lower compared to higher yields.

Must and new wine analysis of the Chardonnay clones is shown in Table 2. The clones were all harvested on October 18. Like the Pinot noir clones the relative level of maturity was similar for young vines with low crops. UCD5 ("Martini 108") had the highest yields of all the clones, however, and was approximately one degree Brix lower at harvest. The titratable acidity was also highest for UCD 5 and the pH at harvest the lowest. The titratable acidity in the new UCD5 was also the highest. The Esp 352 and Dijon 75, 76, 78, and 96 all were similar in relative maturity with lower titratable acidity and higher pH at harvest than UCD5. Comments from the industry tasting at the OSU Winegrape Day were that the UCD5 had a typical and different aroma and flavor profile than the other clones exhibiting more citrus and grapefruit character typical of this clonal selection.

The 1994 vintage will be the second year that the new Pinot noir and Chardonnay clonal trial will be monitored and experimental wines produced. The vines are now six Years old and will be bearing yields closer to commercial levels. Wines will be produced from all the clones of both varieties where there is sufficient fruit.

Table 1

**1993 Pinot Noir  
Clonal Trial  
Woodhall Vineyards**

|           | Must |            |      |       | New Wine |      |                |                       |                 |
|-----------|------|------------|------|-------|----------|------|----------------|-----------------------|-----------------|
|           | Brix | TA*<br>g/L | pH   | Alc.% | TA*      | pH   | Anth**<br>mg/L | Color***<br>Intensity | Phenols<br>mg/L |
| UCD 4     | 23.8 | 6.68       | 3.19 | 13.6  | 4.45     | 3.80 | 425            | 5.52                  | 1470            |
| UCD 2A    | 23.4 | 8.15       | 3.05 | 13.1  | 5.03     | 3.65 | 828            | 6.77                  | 1467            |
| UCD 17    | 24.3 | 7.65       | 3.01 | 12.6  | 5.40     | 3.45 | 588            | 10.80                 | 1856            |
| Dijon 113 | 24.1 | 6.55       | 3.13 | 13.1  | 4.50     | 3.91 | 762            | 5.49                  | 1543            |
| Dijon 114 | 24.3 | 6.44       | 3.24 | 13.9  | 4.25     | 3.88 | 845            | 6.10                  | 1702            |
| Dijon 115 | 24.7 | 6.24       | 3.16 | 13.1  | 4.45     | 3.91 | 880            | 6.55                  | 1872            |

\* titratable acidity  
 \*\* Anthocyanin content  
 \*\*\* color intensity

Table 2

**1993 Chardonnay  
Clonal Trial  
Woodhall Vineyards**

|          | Must |            |      | New Wine |      |      |
|----------|------|------------|------|----------|------|------|
|          | Brix | TA*<br>g/L | pH   | Alc.%    | TA*  | pH   |
| UCD5     | 23.0 | 8.64       | 2.96 | 13.8     | 7.23 | 3.22 |
| Esp. 352 | 24.3 | 7.20       | 3.07 | 15.0     | 5.83 | 3.36 |
| Dijon 75 | 24.2 | 7.14       | 3.06 | 14.8     | 5.93 | 3.24 |
| Dijon 76 | 24.1 | 6.63       | 3.02 | 14.6     | 5.53 | 3.38 |
| Dijon 78 | 24.9 | 6.67       | 3.02 | 14.7     | 5.47 | 3.24 |
| Dijon 96 | 24.0 | 6.11       | 3.10 | 14.7     | 4.77 | 3.38 |

\* titratable acidity