Cultivar and Clone Trials at SWMREC, NWMES and Fenn Valley Vineyards

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Executive Summary

I. Resistant Hybrids at SWMREC

The 2002 report continues our emphasis on the selection of cold hardy, disease resistant varieties for the Michigan industry. While both Chardonel and Traminette continue to perform well with excellent yield and wine quality (see Enology Research Report) we were also impressed with the Geisenheim release GM 322.58. This is a very aromatic selection that possesses both good yields and excellent fruit composition and wine quality assessment.

Two new selections were planted into the SWMREC trial in 2000. These releases from the Geilwerlerhof Research Station in the Rhinpfalz are a red called Regent (much like Pinot noir, but more color) and Phoenix (much like Riesling, but more cold and disease resistant).

Note the absence of data on NY 62.122.1 from SWMREC in 2000 and 2001. That selection has very pleasant muscat character and the concern about it was erratic growth and yield of vines on their own roots. Vines grafted to 5-BB were planted in 1999 and a very light crop taken in 2001. Vine performance suggests that this grafted situation should be very desirable.

We were gratified to see excellent yields of Chardonel (6.5 T/A) and Traminette (7.6 T/A) in 2001 with quite acceptable fruit composition values. The average yield for these since 1994 has been 6.7 T/A for Chardonel (range: 5.5 low to 7.7 T/A high; very consistent and 8.0 T/A for Traminette (range: 5.5 low to 12 T/A high). Likely the 12.0 was excessive, but consistent, good quality fruit has been possible at 8.0 T/A yields.

II. Resistant Hybrids at NWMRES

The performance of named cultivars Seyval and Vignoles was as previously reported. As the local standards for white resistant hybrids their performance serves as a useful “yardstick” against which others selections maybe compared. The young Traminette vines continue to perform well as does NY 62.122.1 in terms of vine yield, fruit composition and vine growth.

III. Vinifera Varieties at SWMREC

Yields in 2001 were considerably reduced except for Ortega, Pinot gris, Riesling, Scheurebe and Pinot Meunier. This was likely a response to the larger crop in 2000. The big crop in 2000 was particularly damaging to Merlot which had no crop in 2001.

IV. Vinifera Varieties and Clones at NWMRES

Yields were slightly lower in 2001 than 2000, but were still quite acceptable to high. Based on 10’ row widths and 5’ between vines in the row a vine number of 870/acre is reached. Given that yield ranges of 2.0 kg/vine = 2.0 T/A 3kg/vine = 2.9 T/A; 4kg/vine = 3.8 T/A and 5kg/vine = 4.8 T/A. Based on these numbers the Chardonnay was the lowest yielding variety under test produced 2.7 while Riesling 239 produced 3.8 T/A and Pinot Meunier at the highest yield in the plot was at 5.23 T/A/ All the Pinot noir clones were above 3.0-3.5 T/A range.
V. Clones of Cabernet Sauvignon at SWMREC

The 2001 yields were very low ranging from slightly above 0.5 T/A to 1.7 T/A. The primary factor influencing the reduced yields was reduced cluster number per vine and reduced number of berries per cluster. It is interesting to note the smaller berry size of UCD-6 at 1.24 g for C. Sauvignon. This is a most desirable characteristic.

VI. Clones of Chardonnay at SWMREC

Chardonnay yields were also reduced in 2001 after the big yields in 2000 and the poor fruit-set condition of the 2001 spring. UCD 14 and 15 continue to perform in a desired manner and produce most impressive wines. The yields of UCD 14 and 15 were 3.16 and 3.5 T/A respectively.

VII. Clones of Pinot noir at SWMREC

Yields of the 14 clones were reasonably consistent and ranged from 1.3 to 1.5. Of greatest interest to us are clones UCD 4 (Pommard clone), 9 (Jackson clone), 29 (another Jackson clone) to be used for still red wine and Clone 31 (Espiguette) for sparkling. The yields of these clones are 5.2, 5.9, 5.6 and 2.5 T/A respectively. These, except for Clone 31 are high (excessive?) yields for Pinot noir but the fruit composition values were excellent.

Of particular note is the berry and weight of clone 29 at 1.34g/berry it is considerably smaller than other clones and for a low pigmented variety like Pinot noir that is very important.

VIII. Resistant Hybrids at HTRC on MSU Campus

We continue to be favorably impressed with the Minnesota release Frontenac. It yielded 6 T/A in 5th leaf and we anticipate a much larger yield in 2002. It attains very high sugar (23.2 in 2001 and already above 25.0 in 2002 and not yet harvested), but does possess very high acidity. It will require must adjustment pre-fermentation.

In 2001 additional plantings were made and included Regent and Phoenix from the breeding program at Geilwelerhof, Germany. This location should provide a strong hardiness adaptation challenge for these varieties that have very strong Pinot noir and Riesling characteristic, respectively.