

Kay Gray and Her Daughters: Winemaking and Tasting Results

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I wish I had a dollar for every time someone has badmouthed Kay Gray as a grape for wine. That said, I have tasted some quite excellent Kay Gray wines produced by the likes of Wilbur Thomas and Bob Williams in Minnesota, and Bob Cedergren and Rejean Gagnon in Quebec. For years, Robin Partch at Northern Vineyards Winery has used Kay Gray quite successfully in some of his white blends (and John Denny before Robin and Dave Macgregor before John Denny). Nonetheless, the controversy continues.

It is now 15 years after Kay Gray was named and released for sale. It's time to move on. Our lady now has a host of daughters, selections made by Elmer Swenson from his crosses of Kay Gray with more advanced hybrids. Most of these Kay Gray hybrids are vastly improved over the original Kay Gray in the size of their cluster, more orderly growth habit, and lack of tenacious tendrils. With the exception of E.S. 4-8-30, these hybrids tend to be less robust to winter cold than Kay Gray herself. However, hardiness is still quite good in several of them. That brings us to the question of wine. Did another generation of breeding with grapes more favorable for winemaking result in selections that are an improvement on Kay Gray for winemaking purposes. In 1997, I set out to explore that question.

Some years ago, I planted out 2-3 vines each of ten Kay Gray hybrids. They resulted from the following crosses:

Kay Gray X E.S. 2-12-13	=	E.S. 7-4-64 and E.S. 7-4-76
Kay Gray X E.S. 2-8-8	=	E.S. 4-5-20 and E.S. 4-5-21
Kay Gray X E.S. 2-12-13	=	E.S. 7-4-1 and E.S. 7-4-43
Eona X Kay Gray	=	E.S. 5-4-71
Kay Gray X Veeblanc	=	P.R.K. 13-32
E.S. 2-3-17 X Kay Gray	=	E.S. 4-8-30

In the fall of 1997 I harvested fruit from each of these selections and from my Kay Gray vines. The fruit was harvested when it had reached an average sugar content of around 19-20 °Brix on the refractometer. The fruit from each selection was treated in exactly the same way. The fruit was chilled, crushed and pressed while cold. The juice was then treated with sulfite and a touch of Polyclar to discourage oxidation, and refrigerated to settle out overnight. The next day, the clear juice was racked off the settled pulp and inoculated with an active culture of Premier Cuvee yeast. A very quick start of fermentation resulted in every

sample. The juice was fermented cool, racked and cleared. The samples were bottled for tasting in November.

I convened a panel consisting of Gordon Rouse, Bob Parke, and Wilbur Thomas to join me in evaluating these samples of Kay Gray and her hybrids. This event came to be known as 'Grayfest 97'. The tasting was done completely blind with identity of each selection and its winemaker masked from the evaluators. The order of samples was randomized. Each of the four tasters started with a different selection and continued on in order. Also, a number of 'ringers' were included in the tasting to keep us honest. These included some other (non-Kay Gray) Swenson selections, a sister seedling of Kay Gray (E.S. 1-67), a Kay Gray/Sauvignon blanc blend, and an 'old' (1992) Kay Gray. A 20-point scoring system was used: Color (1); Aroma and Bouquet (6); Total Acidity (1); Astringency (1); Flavor/Middle Mouth (3); Body and Finish (4); Overall Impression (4). Note that Aroma and Bouquet were weighted rather heavily in the scoring. More than any other, this factor tends to be an issue in Kay Gray wines. We thought that a six-point scale for Aroma and Bouquet would provide the evaluators with sufficient scoring range to clearly discriminate between samples on this attribute.

Table 1. Performance of Kay Gray and its hybrids in a blind tasting.

Selection	Average Score (out of 20 possible points)
E.S. 5-4-71	15.4
Parke 97 Kay Gray/ Sauvignon blanc	15.0
E.S. 4-8-30	13.9
80% E.S. 1-67/ 20% E.S. 6-11-4	13.9
E.S. 7-4-76	13.4
P.R.K. 13-32	12.5
Parke 97 Kay Gray	12.4
E.S. 4-5-21	12.1
E.S. 7-4-43	11.9
E.S. 7-4-1	11.8
E.S. 7-4-64	11.5
E.S. 12-6-96	11.5
Thomas 97 Kay Gray	10.8
Plocher 97 Kay Gray	10.2
E.S. 4-5-20	8.4
E.S. 1-67	5.8
Girardin 92 Kay Gray	2.5

So, what did we find? Table 1 summarizes the scores and rankings from the tasting. Out of 17 samples included in the tasting, no 100% Kay Gray wines ranked higher than 7th. The three '97 Kay Gray wines ranked 7th (Parke), 13th (Thomas), and 14th (Plocher).

However, blending Kay Gray with a bit of vinifera wine (Sauvignon blanc in this case) changes the wine significantly. This blend by Parke took second place out of the 17 samples. This reiterates what we have known for a long time. Blend Kay Gray with a small amount of high quality aromatic wine and you have something pretty good. Bob Cedergren figured this out years ago at Vignoble La Vitacee in Quebec when he packaged an excellent blend of 90% Kay Gray and 10% St. Pepin. This approach is still used at LaVitacee by Rejean Gagnon.

So what was the top wine of the 17 contestants? A Kay Gray hybrid, E.S. 5-4-71 (Eona X Kay Gray) took top honors. The impressions of this wine were very consistent- three of the four judges gave it the same score of 16. The wine was variously described as: nice clean aroma, floral, perfumy, nice fruit in the mouth, buttery, nice smooth finish.

Three other Kay Gray hybrids were rated more favorably than the highest ranking 100% Kay Gray wine. Third place went to E.S. 4-8-30, fourth place to E.S. 7-4-76, and fifth place to P.R.K. 13-32. A summary of tasting comments on these three selections is as follows:

- E.S. 4-8-30 Subtle floral nose, nice acidity
- E.S. 7-4-76 Muscat in the nose, nice acidity, a little weak in the finish
- P.R.K. 13-32 Clean nose, good fruit in the mouth, very light color

So, the daughters took first, third, fourth, and fifth places, all higher than the best wine from their momma.

This is only one evaluation. It is based on only one style of winemaking. For the sake of experimental control, all grapes were harvested at 19-20 °Brix. Maybe that is optimal for these Kay Gray hybrids and maybe not. We know that Kay Gray is best when harvested at a somewhat lower brix than this. But would that be true for its hybrids too? How would they have competed with Kay Gray if they had been harvested at 17 °Brix? Would the wines be better or worse? Someone needs to do these further experiments.

Table 2. Berry and cluster weights for Kay Gray and its hybrids.

Selection	Berry Weight in grams (Ave. of 20 berries)	Cluster Weight in grams (Ave. of 10 clusters)
Kay Gray	3.5	96 (70-120)
E.S. 7-4-64	4.0	94 (70-110)
E.S. 7-4-76	4.0	149 (100-250)
E.S.. 4-5-20	2.0	90 (70-130)
E.S. 4-5-21	4.0	94 (70-120)
E.S. 7-4-1	3.2	119 (100-160)
E.S. 7-4-43	3.5	150
E.S. 5-4-71	4.0	145 (80-260)
E.S. 4-8-30	3.5	104 (70-130)
P.R.K. 13-32	4.0	160 (120-250)

Some of these hybrids of Kay Gray may well be better than Kay Gray for winemaking. But they are improved in some other ways too. Table 2 compares the typical berry and cluster weights of these hybrids to Kay Gray. In particular, E.S. 7-4-76, E.S. 5-4-71, and P.R.K. 13-32 have much improved clusters. Winemaking aside, they are beautiful table grapes. E.S. 7-4-76 is especially tasty for fresh eating.

The three top performers for wine quality in this evaluation, E.S. 5-4-71, E.S. 4-8-30, and E.S. 7-4-76, are also probably the best performers of these hybrids in the vineyard. Here in Hugo these selections have been injured only in the most severe winters (-40 °C, when all but E.S. 4-8-30 suffer severe injury). In normal winters, however, with lows of -35 to -37 °C, their survival has been quite good. Elmer has described similar results to me. Also, these selections have a nice orderly growth habit and excellent mildew resistance.

So much for the Kay Gray controversy. It's old hat. In fact, it was old hat a decade ago. Let's get on with further testing of this new generation of Kay Gray hybrids and figure out how they can contribute to our Minnesota wine industry.

Author's Note circa February, 2003

Since this article was published in 1998, two of these Kay Gray hybrids have been named and released. E.S. 4-8-30 was named Louise Swenson in 2000. It is steady and productive in the vineyard. The wines have been high in quality and consistent from year to year. The floral-honey nose that was noted in this 1997 tasting has become a trademark of this variety. All of these factors make Louise a promising commercial variety for cold climates. In 2002, E.S. 7-4-76 was named Brianna. It is being widely planted in slightly milder winter climates than Minnesota (e.g. Nebraska) where it is finding an important niche both in winemaking and fresh juice production. What happened to E.S. 5-4-71? This one is still in evaluation. It has performed less well than Louise in the vineyard over the past five years and the wines have tended to revert back in the direction of Kay Gray. We continue to evaluate it.

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