

French-American Hybrids as Table Grapes

By EMMETT H. SCHROEDER, Hutchinson, Kansas

Not many growers of fruit, either amateur or commercial, realize that they can now grow grapes in the East and Central States that are equal or superior in quality to the vinifera varieties one commonly buys in the eastern markets, such as Emperor, Flame Tokay, Cornichon, Almeria, Malaga, etc. Grapes that are of the same types—sweet, crisp and delicious, a delight to the eye as well as the palate. Grapes that in color range from glowing golds, translucent pinks, ruddy roses, to brilliant blues and velvety, sooty black. Clusters from the small berried tightly compact wine types to big berried compound bunches weighing 2½ lbs. Round berries, ovoid, oblate—every conceivable shape, with delicate flavors that are a delight to savour, smooth and subtle. Berries one can put his teeth into, not swallow like a raw oyster. Berries with an edible skin and seeds that separate easily from the flesh. In short, grapes with pure vinifera characteristics but borne upon vines that are sufficiently hardy and disease resistant to be grown in the eastern two-thirds of the United States.

This may seem to many like a "Grape-nut's" pipe dream, since just such a fruit has been the goal of American grape growers since this country was settled. Many readers are familiar with the history of viti-

culture in the Colonies—the sad story of continual failure with the old world varieties—the first ray of hope that appeared with the planting of the so-called Cape grape. This was followed by the finding of the Catawba, introduced into general cultivation about 1823; the Delaware, about 1849, and the introduction of the Concord in 1854. From 1858 to 1859 a group of varieties known as "Rogers Hybrids" were disseminated for testing, this event marking the real beginning of grape breeding as such in this country. But here we are, a century later, still trying to grow the same old stuff. Now I grant that the Delaware, in spite of its small berries and clusters, is very good to eat and that it and the Catawba make excellent wines when well grown, but I certainly can find very little to say for the Concord, the mainstay of our eastern viticulture. Its wine is undrinkable (including those sugar sweetened and fortified concoctions foisted upon an unwary public), its unfermented and pasturized juice, in most cases, just as bad. And as for calling it a table grape—well, I like to eat my grapes. Not just let a sweet coated mass of tough pulp slide down my throat for my stomach to wrestle with, while the leathery and bitter skins have to be ejected from the mouth. But I admit the variety enjoys much popularity—after all—

if one knows no better, there is no better. If I were brought up on a diet of seaweed, I expect I'd think it was fit to eat! I think the reasons for the beginning of the Concord's popularity were, first: it could be planted practically anywhere and bear some sort of a crop without too much attention, and second: they had no better varieties. But now that we have varieties that are everything the Concord is not, I fail to see any valid reasons why these should not be extensively tried.

There are undoubtedly places where the Concord is grown to perfection, but no amount of perfection can alter the physical makeup of the berry itself. With the great success it has enjoyed, it has been used in innumerable hybridizations, as have others of it predominantly native species. And that in a word is the trouble with our viticulture of the area east of the Rockies—it is based on *labrusca*-*vinifera* hybrids, most of which are slip-skin varieties.

By now you will be saying to yourself—"Ah ha! Here is a fanatic of the first water!" Possibly this is true but it comes from practical observations and experience. We have several hundred varieties in our vineyard, from the oldest to the newest. Naturally our opinions are colored by the behavior of these varieties as they grow side by side. We are impressed by the vigor and productiveness of some, the disease resistance and high quality of others. While at first we were attracted to

the rank "foxy" flavors of our older American hybrids, because we were brought up on them, before long we could hardly stomach them.

The fruit described so glowingly in the first paragraph comes from a group of hybrids known collectively as "French-American hybrids." Like the Catawba, Delaware and almost every other American variety, they are hybrids between *Vitis vinifera* (the old world grape) and one or more American species. But with this big difference—*V. labrusca*, mainstay of American hybridization, was avoided as though it were a plague. Others, with pure vinous flavors, such as *Vitis riparia*, *V. rupestris*, *V. lincecumii*, *V. bourquiniana*, *V. aestivalis* and *V. berlandieri* were used in combination and recombination with *V. vinifera* to create these fine varieties. Many of our American varieties are predominantly *vinifera* and consequently, in the main, fairly susceptible to disease. Too many of them are direct crosses between *labrusca* and *vinifera*. Some of the French-American hybrids are as much as $\frac{5}{8}$ American—such as Couderc 13. Generally they are in the neighborhood of half and half, although as many as eight species (only one of which is not native to the United States) may be represented in the parentage of a variety.

These varieties were bred by a group of private workers and carry no fancy names, being known only by the name of their breeder and

his seedling selection number. The most amazing part of the whole thing is that this work was begun nearly 80 years ago. Biggest strides have been made in the past 30 years, but it is only very recently that these varieties have been brought to the United States. It is hard to understand why this is so—one might whisper darkly of a California plot to keep the eastern grape market under its thumb, but I guess we will have to lay it to our own inertia.

At any rate, most of these fine hardy varieties are now in the country, many of them still under trial. Importing plants is a ticklish and expensive business at best and with the quarantines now in effect, almost an impossibility.

Our experimental planting is located within the city limits of Hutchinson, Kansas, in the Arkansas River Valley. The soil is a deep sandy loam, with heavier clay loam subsoil and at 14 to 16 feet the gravel beds carrying the underflow of the river. Temperature extremes have ranged from -27° F. to 116° F. Since planting the bulk of these varieties, a low of -21° was experienced following their first growing season. Practically no damage resulted. At the present time, this planting is in its fourth year, very young as vineyards go and not really old enough to base an opinion upon. Yet these varieties have been thoroughly tested in France for many years, and as their performance here has run true to the very complete

descriptions given in the current French literature, I feel their present performance can be accepted at face value.

Primarily, these French-American hybrids were created as wine grapes, but it was inevitable that among them would appear many varieties suited for the table. It is the best of these, and mainly those which have been or are fruiting in our vineyard, that we will describe.

Seibel 2653. A midseason gold with very large oval berries. Its production seems below medium and irregular. Clusters are small to medium, quite loose. While the texture of the berry is good and it is quite juicy, it is too flat in taste. Vine vigor is medium, its disease resistance is of the same order. With all these faults, it is still better than most of our native varieties. We describe it because it was one of the first really successful French-American hybrids for the table and was given the name "Flot d'Or" or "Flood of Gold." To name just one, the S. 9110 is manifestly superior.

Seibel 9110 is a beautiful gold, ripening in early midseason. It has firm, crisp, sweet berries, somewhat pointed in fairly loose clusters weighing up to a pound. Quite juicy, with small seeds. The vine is of medium vigor. Its buds start late in the spring and are very resistant to frosts. If caught by such a frost it will bear nearly a normal crop. Its fruit stands shipment quite well. It should be pruned to short spurs

of two or three buds. I do not have this variety in bearing but saw it at an experimental planting last year. It was easily the best table grape on the place. (See cover picture.)

Seibel 11803. This grape in color resembles the Flame Tokay. It has long cylindrical clusters, strongly shouldered, with large round berries. These are very firm, crisp and sweet. It ships well in spite of its rather compact clusters. It is a very heavy producer, carrying as many as four clusters to the shoot. Production in France runs as high as 11 tons to the acre and I believe, from the appearance of my vines, that relatively high yields could be obtained here. It must be pruned to spurs and not too many of them. Its vine vigor is only medium and it matures its wood badly. But since one prunes to spurs, this last is of no consequence. Fruit matures just after Concord, although this varies considerably, depending upon the crop carried by the vine.

Seibel 14664. This is a gold ripening in midseason. It has large loose clusters of pointed berries. On the vines carrying a relatively small amount of fruit, the flavor is decidedly muscat, more neutral on those heavily laden. The quality is very high—sugar content may run 30% and over. It must be pruned to spurs. Our vines were trained to bilateral cordons and have too much fruit on them.

Seyve-Villard 5-276. Here is a gold ripening in early midseason.

Its compact cluster and small to medium berries prevent it from being a true table grape—nevertheless it is very delicious. It produces very heavily on short spurs, is extremely vigorous, and comes into bearing the second year. We measured the growth on two vines the first season. From buds on wood the size of a match-stick, the main cane reached a length of 22 feet; there were 9 laterals of seven and eight feet and many shorter; the trunk increased to three-quarters of an inch. The second season these vines averaged 12 pounds, the third, about 25 pounds. It makes an excellent wine which falls clear and bright quickly. It runs to 25% sugar easily.

Seyve-Villard 12-309. Here is a beautiful translucent pink which ripens in late midseason or later. The clusters are sometimes enormous, weighing up to 2½ pounds. Production is heavy and regular. Its loose clusters of medium ovoid berries pack and ship well and keep for a long time. Table quality is high and it makes an excellent wine. The vines are very vigorous and disease resistant.

Seyve-Villard 12-364. Here is a late gold with extremely large compact clusters of large pointed berries, which are crisp, sweet and excellent to eat, although so compact that they are unsuitable for the market. Vine characteristics are good but it is clearly a variety for long growing seasons with low rel-

ative humidity. (It winterkills in central Illinois.—Ed.)

Seyve-Villard 12-375. This is one of our favorites. The vine is very vigorous and erect in growth. Canes are long and straight with few laterals, which usually are quite strong. The clusters are very large, compound, fairly loose. Berries are medium to over medium, ovoid, gold at maturity, which is late mid-season. Heavy regular production, although fairly light at first, it increases rapidly until maturity at 7 or 8 years (according to the French—ours are in their fourth season). This is borne out by behavior so far. This variety is one of the most beautiful and has the easiest handled growth of all the hundreds in our vineyard. The fruit is easily gathered because of the open aspect of the foliage, and the long cluster stems. Berries are crisp, sweet and most delicious. This variety is ideal for arbors and as it appears to be somewhat self-determinate in bearing, should capture a place for itself in this country with little effort. Clusters will hang long after ripening without rot. These occasionally reach 1½ lbs. Considering all the characters involved, we believe this variety has a great future in this country, for not only is it perfectly suited for the table and market, but it also makes an excellent white wine. Last year (first bearing year) sugar content was about 22%.

Seyve-Villard 23-657. Here is an early midseason black which is quite

similar to 12-375 in a lot of characters. It has a faint blue bloom, but generally is so sooty black that it looks like velvet. Unusually attractive. Our only bearing vine is a graft "sur place" on a two year old *Rupestris* St. George made in 1948. In 1949 this graft bore over 10 pounds and this season is carrying about twice that weight. The clusters are long and tapering, quite large and loose. Berries are medium, oval, crisp, sweet. Sugar content easily reaches 26 to 30%. Its wine is excellent, according to the French. Its growth habits are similar to 12-375. About a dozen self rooted vines planted in 1949 are remarkably vigorous and very even in growth.

As a tentative selection for commercial production, we have chosen, from a comparison of all the characters involved the following: Seibel 11803, rose; S.V. 12-375, gold; and S.V. 23-657, black. These varieties, in addition to being table varieties of high quality, make excellent wines. That of S. 11803 is probably the best. Each packs and ships well and is probably as near to an all-around variety as one could choose. Human nature being what it is, and the risks of commercial production considered, I would not hesitate to try these three commercially in any area of sufficiently long growing season.

There are a great many other varieties which are excellent for the table, but because they have medium to small berry, or because the

cluster is too compact, or because we have not fruited them, we will not describe. Among these are Seibel 5409, 5813, 6468, 8365, 8616, 8745, 10076, 10173, 14117, 15062, Rudelin 3, S.V. 20-365, 20-366, 20-347, 20-473, etc. However, many of these varieties will bear this season and we should be in a position to form some sort of an opinion of their quality very shortly.

(Some of the last-mentioned varieties have been fruited by an Illinois experimenter who gives us the following notes: Seibel 5813 is a good wine variety, but late. S. 6468 is susceptible to black rot. The fruit of S. 8365 is black, a little small. S. 8745 is not a table variety. S. 10076 is too small. Seyve-Villard 20-365 is white, with beautiful long oval berries. S.V. 20-366 is a muscat. S.V. 20-347 is a large black variety, the vine deficient in vigor. S.V. 20-473 is a good table variety, muscat flavored.—Ed.)

By a judicious selection of varieties, one will be able to enjoy fine grapes, at least in this part of the United States, from the first of August to frost. Common storage of some of the best keepers will extend this period to late winter.

It seems strange, but many people expect to find in one variety a grape suitable for every purpose under

the sun—table, market, juice, jelly and wine. It seems only logical that it could excel in one purpose only. But as I have indicated previously, commercially one must subjugate the ideal to the most practical. However, the amateur is under no such restrictions. He should choose his varieties for the exact purpose for which they are to be used. It is just as easy to care for a vineyard of several varieties on a small scale as it is a single variety, and the results will certainly be more satisfying.

An interesting factor that favors the French-American hybrids is their capacity for bearing on short spurs. This allows one to eliminate the trellis, training each vine to a sturdy stake and allowing mechanical cross-cultivation. However, if one wishes to grow fancy table grapes, it is probably better to use a trellis, prune to longer wood and thin to only the very best formed clusters within the capacity of the vine to mature them.

These French-American hybrids open a vast new frontier in this fine fruit and it is up to the amateur growers to show the way. It is regrettable, but as far as most of the eastern commercial grape growers are concerned, they are still back in the days of the prairie schooner.

