VITIS VINIFERA X AMURENSIS HYBRIDS

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(Editor's note: The following handout was presented to the 1986 Midwestern Wine Seminar, and was prepared by Dr. Daniel Vasey, Divine Word College, Epworth, Iowa 52045)

A partial list of varieties identified as "European-Amur" hybrids in the literature: Soviet Ananasnvi [Pineapple] Artrashati Karm. Burmunk, Charents, Dimatskun, Fioletovyi Rani [Early Purple], Kaberne Severnyi Northern Cabernet], Kryulyanski, Lernatu, Megrabur, Merdzavan, Liana, Michurinets (Michurnitz or the Polish Miczurinowiec in Canada), Misket Donskoi (Don Muscati, Moldova, Muromets. Nerkarat (Norakert Canada). Pamyat in Negrulya, Saperavi Severnyi (Severnyi or the Polish Severnii in Canada), Shasia Severnyi [Northern Chasselas], Sev Lernatu (probably the same as Lernatue), Vishnevyi Cherry], vos. twi Ustoichivyi, in Rani [Early [Delight], Zolotistvi Zovun. Dalnievostoznyd Canada, has been identified as Vinifera x Amurensis.

Further information:

The following are identified in the literature as reds: Fioletovyi Rani, Kaberne Severnyi, Michurinets, Nerkarat, Saperavi Severnyi, and Vishnevyi Rani. Dalnievostoznyd Rani is a red.

Whites include Ananasnyi, Burmunk, Lernatu, Megrabur, Misket Donskoi, Shasla Severnyi, and Vostorg. Color of the remainder is uncertain, but the majority of hybrids, including all the F_i generation, are supposedly reds.

<u>Ananasnyi</u> is regarded as hardy to -30° C. (-22°F.), and in Soviet trials yielded 11.9 metric tonnes per hectare (5.3 short tons/acre). Wines from this variety have been shown with good results in judgings in eastern Europe. Sugar in must – 15%.

<u>Burmunk</u> is potentially valuable since it is a hardy (to some degrees less than -30° C.) white muscat of excellent quality. In Soviet trials yields were 6.9 tons/acre, sugar 22.7%, and acid 0.58% (Note: Acid in must is in the USSR usually expressed as sulfuric; as tartaric this level would be over 0.8%). It is described as "early", along with, say, Chardonnay or Pinot Noir.

Fioletovyi Rani is regarded by soviet authorities as the best of these hybrids, and some say one of the best grapes for quality wine, period. The judgment is especially significant in light of the fact that this is not a high-yielding variety, a quality usually given much weight in soviet judgments. The vine is classed as extremely hardy, the crop "very early", which means in the USSR at least as early as Perle of Csaba, Madeleine Angevine, or Foch Acidity is described as high. Reported trial results list yields of 4.0 tons/acre, 19% sugar. Commercial plantings are extensive, and the wine is bottled as a varietal.

Kaberne Severnyi in trials yielded irregularly, an average of 3.6 tons/acre, but up to 9.4. Sugar was 19–22%. Varieties termed "Severnyi" are understood to be hardy and usually very early.

<u>Lernatu</u> in Armenian trials was hardy to -28 to -30° C. and yielded 9.9 tons/acre. Sensory ratings of the wine were good. It may be a musque type.

<u>Megrabur</u> in Armenia gave yields nearly as high as Lernatu and sugar averaged 26.9%. It is recommended in Armenia for dessert wines. Hardy to -28 to -30° C.

<u>Michurinets</u> is planted commercially in Nova Scotia and Ontario and has been tried elsewhere in Canada. Grand Pre in Nova Scotia is propagating 75000 plants per year. Soviet and Canadian wines are highly regarded. High acid, medium sugar. The vine is regarded as very hardy in the USSR and in Nova Scotia trials was hardier and earlier than Foch. The variety may be Fioletovyi Rani renamed in honor of the breeder Michurin.

<u>Misket Donskoi</u>, a muscat from the name, in Soviet trials yielded 2.9 tons/acre but gave a must averaging 27% sugar.

<u>Nerkarat</u> is another star. In Armenia the vine was hardy to -28 to -30° C. Yields averaged 7.7 tons/acre, sugar 26.3%. The wine was rated very highly and new plantings are extensive in Armenia and some other Soviet areas. Wines have turned up overseas and are excellent. The crop does not appear to mature as early as that of most European-Amur hybrids.

<u>Saperavi</u> Severnyi has been the most widely planted of these varieties in the USSR. Commercial plantings are in Nova Scotia and Ontario, but no commercial propagation there as yet. Reported mean yields in Soviet trials were 5.9 and 6.1 tons/acre, while sugar in the former averaged 21.5%. The vine is described in Soviet sources as very hardy and very early. In Nova Scotia trials, hardiness was about the same as Foch, while the crop was the earliest of all varieties tested. In the Soviet Union, the wine is left on the skins for some time, and the result is a wine of extremely intense color (the pigment is chemically the same as that of viniferas) and powerful aroma, a mixture of muscat and other flowery perfumes. The owner of Grand Pre presses it right off the skins but still obtains a red wine, which is blended down a bit. he likens the wine to a good Gamay.

<u>Zolotistyi Ustoichivyi</u> is very early and yields a must of 18–22% sugar and 0.8 to 0.9% acid (as sulfuric?).

<u>Dalnievostoznyd Rani</u> has in Nova Scotia produced wine regarded as excellent. It is very early but the vine is less hardy than Foch.

In general, the European-Amur hybrids are hardy or they probably would not be released. Besides trials mentioned above, other trials specifically for hardiness have found Burmunk, Nerkarat, Karmreni, Dimatskun, and Nerkarat to be hardy to -30° C.

Resistance to downy mildew and Botrytis is found in many, but susceptibility to powdery mildew is a common problem. In Canada and in Soviet plantings about which I have any information, vines are grown on their own roots, although many of the areas are definitely in fested with phylloxera.

Aside from the Soviet breeding program, Saperavi Severnyi has been used as a parent in breeding work at Geisenheim, West Germany. According to Roger Dial of Grand Pre, who inquired in person in Germany, GM-6495-4 is a white, Saperavi Severnyi x (Forster's White Seedling x Prachtraube), GM-6495-5 a blue grape, Saperavi x San Lorento.

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