

'Vanessa' Grape

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Additional index words. fruit breeding, dessert grapes, *Vitis*

Grape breeding was initiated at the Horticultural Research Institute of Ontario in 1913 (3). The objectives of the breeding program were to provide wine and table grapes adapted to Ontario growing conditions. 'Vanessa' (Fig. 1) was released by the Horticultural Research Institute of Ontario to fill the need for seedless table grapes hardy enough to withstand winter conditions in southern Ontario. This is the seventh cultivar released from this program.

Origin

'Vanessa' is the result of the cross of 'Seneca' pollinated by N.Y. 45910 (Fig. 2). The cross was made in 1965 by O.A. Bradt (1), and the original vine was selected from a population of 104 vines in 1972 and tested as Vineland 65164. It has been grown in test vineyards at Vineland since 1974 and has been tested at other research facilities in northeastern United States. Its adaptability to other regions is not known, but 'Vanessa' should be worthy of trial in areas where 'Concord' and 'Niagara' grapes will succeed.

Description

Vines are vigorous and moderately productive at Vineland Station, Ontario. Vigor is maintained on nonfumigated replant sites without grafting, indicating moderate resistance to phylloxera (*Phylloxera vastatrix* Planchon). 'Vanessa' is not resistant to powdery mildew [*Uncinula necator* (Schw.) Burr.]. A spray program designed to protect 'Concord' will be sufficient to protect 'Vanessa'. Other fungus diseases — downy mildew [(*Plasmopara viticola* (Berk. and Curt.) (Berl. and de Toni)] and black rot [Guignardia bidwellii (Ell.) Viala and Ravaz]] have not been troublesome at the Vineland locations.

The vines of 'Vanessa' are more winter hardy than 'Himrod', 'Interlaken Seedless',

and 'Lakemont', but are not quite as hardy as 'Canadice'. Vines at Vineland have survived -26°C with only 15% primary bud kill and no trunk damage (Table 1).

The fruit of 'Vanessa' is bright deep red with a moderate bloom. It ripens about 15 Sept. at Vineland, just after 'Fredonia'. Clusters are medium-sized (about 200 g) with a small shoulder (Table 1). Berries are spherical, medium-sized and firm with adherent skins. There are small vestigial seeds in the berry, but these have rarely shown signs of lignification (4% of seeds were hard). Rainy weather during harvest has not pro-

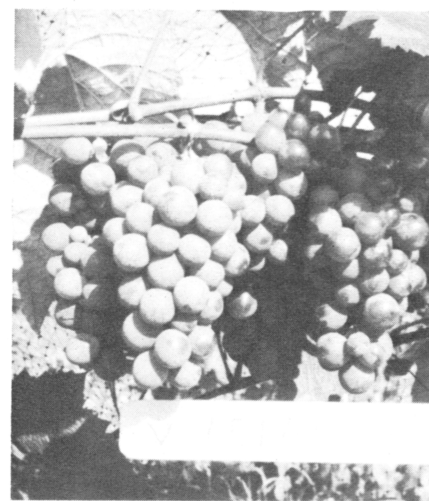


Fig. 1. 'Vanessa' fruit clusters. The label is 3 cm wide.

duced any significant berry splitting, and the clusters do not shell readily. Berries adhere

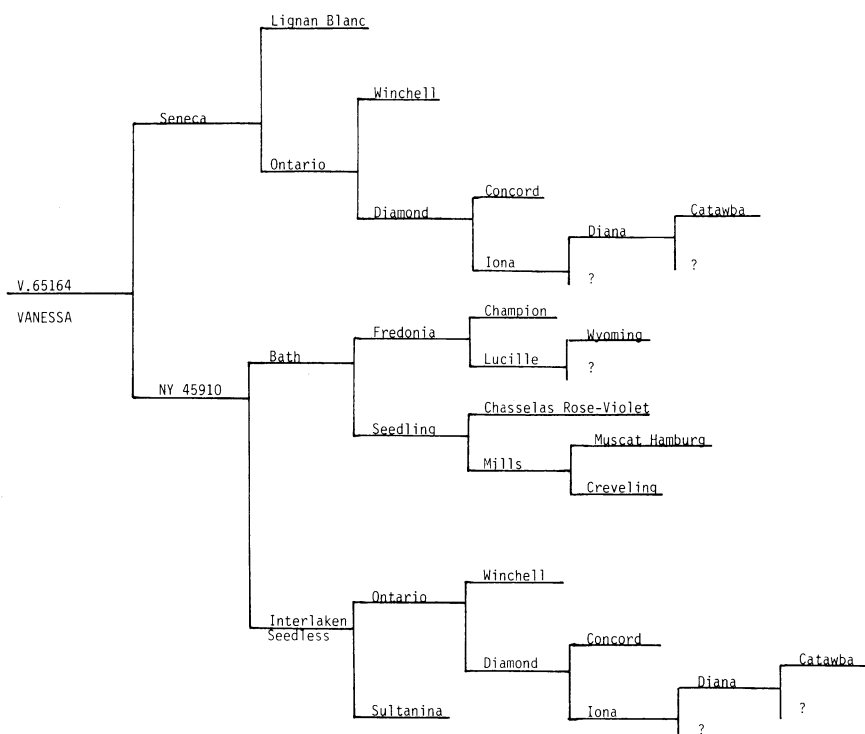


Fig. 2. Pedigree of 'Vanessa'.

Table 1. Comparative field data for various dessert grape cultivars.

Cultivar	Yield (kg/vine)	Hardiness		Avg. cluster wt. (g)	Avg. berries/cluster	Avg. berry wt. (g)
		Rating ²	Percentage of bud break ³			
Canadice	8.6	---	78	213	113	1.8
Himrod	6.8	3207	71	93	43	2.1
Lakemont	8.2	---	69	323	157	1.7
Remay	7.5	---	84	500	143	3.3
Suffolk Red	---	3760	56	217	83	2.5
Vanessa	7.7	7073	85	215	91	2.2

²Rating number is the average (Jan. 1982, Jan. 1983) accumulated score after artificial freeze tests (-10° , -15° , -20° , -25° , -30°C) of one-bud cuttings. Scores based on subsequent bud growth and rooting of cuttings. Perfect score = 15,000 (Concord = 7548, Riesling = 4440).

³Actual percentage of bud break in field vines at Grape Research Station, Beamsville, Ontario for 1982 and 1983.

Received for publication 12 July 1983. The authors thank R. Cobbleddick, O.M.A.F. marketing specialist; T. Fuleki, H.R.I.O. biochemist, and the Ontario Fresh Grape Growers' Marketing Board for marketing, analytical and field test data. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked advertisement solely to indicate this fact.

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tightly to pedicels during handling, making a bulk pack quite economical for wholesale/retail sales.

Analyses carried out on whole berries showed on the average 16.5 °Brix, 5.8 g/liter titratable acidity and pH 3.59. The average sugar/acid ratio is 30.4, indicating a sweet taste. The flavor of the ripe berries can be described as mildly aromatic, but generally not of labrusca type (V.G.F.I. = 1) (2).

Availability

'Vanessa' is being propagated by several Ontario and New York state nurseries. Further information on availability can be obtained from the senior author.

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HORTSCIENCE 20(1): 148-149. 1985.

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Grape breeding was initiated at the Horticultural Research Institute of Ontario in 1913 (3). The objectives of the program were to provide wine and table grapes adapted to southern Ontario climatic conditions. 'Vivant' (Fig. 1) was released by the Horticultural Research Institute of Ontario to help fill the need for hybrid grape cultivars with vinifera-like character for the active white wine market. This is the 8th cultivar to be released from this program.

Origin

'Vivant' is the result of a cross of Vineland 50154 pollinated by N.Y. 25481 (Fig. 2). The cross was made in 1963 by O.A. Bradt (1), and the original vine was selected in 1971 and tested as Vineland 63331. It has been grown in test vineyards in Vineland since 1973 and has been part of a large scale trial with 9 commercial growers since 1977.

Description

'Vivant' is vigorous, productive, and requires very little cluster thinning to maintain quality. Vigor has been good on nonfumigated replant sites without grafting, indicating moderate resistance to phylloxera (*Phylloxera vastatrix* Planchon). 'Vivant' is not resistant to powdery mildew [*Uncinula necator* (Schw.) Burr.], downy mildew [*Plasmopara viticola* (Berk. and Curt.) Berl. and de Toni] or black rot [*Guignardia bidwellii* (Ell.) Viala and Ravaz], but these diseases can be controlled with a regular spray program designed to protect most French hy-

brid cultivars. Cracking, deterioration, and bunch rot have not been a problem with this selection in commercial field tests. The vines of 'Vivant' are more resistant to cold than



Fig. 1. 'Vivant' fruit clusters. The label is 3 cm wide.

Vidal 256, equal to 'Seyval' and Seyve-Villard 23.512 but not as hardy as 'Veeblanc' or 'Ventura' (Table 1). 'Vivant' has survived temperatures of -26°C with 40% primary bud had and little trunk injury whereas Vidal 256 had 65% and 'Seyval' and 'Dutchess' had 76% the same season at the same location. Fruit yields in the past 5 years have been quite favorable, averaging 14.5-15 MT/ha as calculated at 2250 vines/ha. These values were extrapolated from 0.1 ha test plots at commercial sites. One row of 100 vines was experimentally machine harvested in 1981 with excellent recovery and very little vine damage.

The fruit of 'Vivant' is a translucent yellow-tan at full maturity. Berries are small, and bunches are medium-sized, well filled and cylindrical, frequently carrying 1 or 2 shallow shoulders.

'Vivant' ripens about 3 Oct. at Vineland, just before 'Concord'. The consistently sound grape condition, good juice yield, high sugar level (19.4°Brix), acceptable acid content (11.3 g/liter T.A.) and vinifera-like flavor character (V.G.F.I. = 2)(2) make it excellent for winemaking. Wine ratings, both at the Horticultural Products Laboratory of H.R.I.O. and at commercial wine tastings have been excellent. As a varietal, it can produce a delicate, fruity, crisp wine.

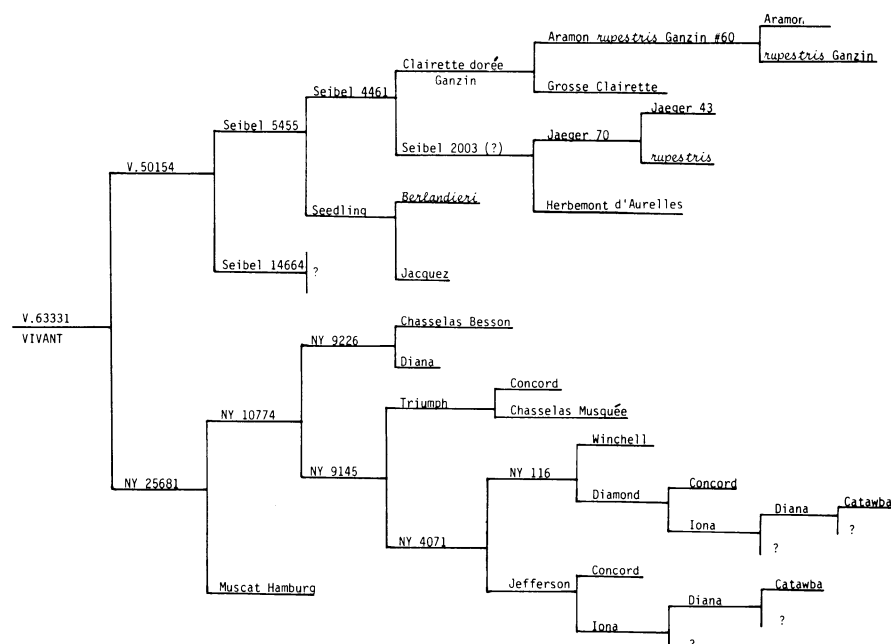


Fig. 2. Pedigree of 'Vivant'.

Received for publication on 12 July 1983. The authors thank T. Fuleki, H.R.I.O. biochemist, and T. Challen, H.R.I.O. wine technician, for analytical and winemaking data. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked advertisement solely to indicate this fact.

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