

# 'Vandalay' and 'Tehranivee' Sweet Cherry

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Sweet cherry breeding, an ongoing program at the Horticultural Research Institute of Ontario since 1915, has resulted in the naming of 13 cultivars: 'Victor', 'Velvet', and 'Vernon' (Dickson, 1948); 'Vista', 'Venus', and 'Vic' (Dickson, 1958); 'Valera' and 'Vega' (Bradt et al., 1968); 'Viva' (Tehrani and Dickson, 1973); 'Vogue' (Tehrani and Dickson, 1974); 'Viscount' (Tehrani, 1984) and now 'Vandalay' (Fig. 1) and 'Tehranivee' (Fig. 2).

'Vandalay' is a new self-fertile, early- to mid-season sweet cherry (*Prunus avium* L.) suited for the fresh market. It is productive, large-sized, wine-red in color, and of good quality. 'Vandalay' matures at the same time as 'Bing' and, with its kidney shape, resembles 'Bing' in appearance. The name 'Vandalay' was chosen by Dr. Ghassem Tehrani to recognize William Lay's 25 years of service to the cherry program at Vineland Station.

'Tehranivee' is a new self-fertile, mid- to late-season sweet cherry suited for the fresh market. It is productive, large-sized, mahogany in color, and of good quality. 'Tehranivee' matures slightly later than 'Hedelfingen' and, with its flat-round shape, it resembles 'Burlat' in appearance. 'Tehranivee' was selected by the late Dr. Ghassem Tehrani and, following his untimely death, was named in his honor by his colleagues.

Based on counts at fruit maturity, both 'Vandalay' and 'Tehranivee' are quite resistant to rain-induced cracking and are superior to 'Bing'. Both cultivars belong to Pollen Incompatibility Group 0 (Universal Donors).

## Origin

'Vandalay' and 'Tehranivee' are both products of the cross 'Van' x 'Stella' made in 1969 by G. Tehrani. 'Vandalay' was selected in 1980 and was assigned the advanced breeding selection designation V690618. It has been tested intensively at Vineland since 1982. 'Tehranivee' was selected in 1982 and was assigned the advanced breeding selection designation V690620. It has been tested intensively at Vineland since 1984.

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<sup>1</sup>Deceased.

self-fertile, like their male parent 'Stella'. Further tests have indicated that both cultivars are compatible with cultivars of all other incompatibility groups (Knight, 1969; Way, 1968); therefore, both 'Vandalay' and 'Tehranivee' belong to Group 0 (Universal Donors).

## Description and performance

All data presented are from a trial, using a randomized complete-block design, with five trees on each of three rootstocks ('Colt', 'Mahaleb', and 'Mazzard'). 'Bing' and 'Hedelfingen' were used as the standard cultivars for comparison. Sweetness and disease and insect reactions were assessed subjectively and compared with those of the standard cultivars.

The fruits of 'Vandalay' are medium-large

## Pollen compatibility status

Tests, in which flowers were isolated by bagging to prevent cross-pollination, confirmed that 'Vandalay' and 'Tehranivee' are



Fig. 1. Fruit clusters of 'Vandalay' at maturity.



Fig. 2. Fruit clusters of 'Tehranivee' at maturity.

Table 1. Fruit diameter, yield, and fruit weight of 'Vandalay' and 'Tehranivee' and of standard cultivars at Vineland Station, Ont.

Cultivar	Fruit diameter distribution (%) <sup>2</sup>				Cumulative yield (kg/tree) 1987-97	Mean fruit wt (g) 1991-95
	Category					
	1	2	3	4		
Vandalay	2.0 a <sup>y</sup>	43 b	50 b	5 c	268 a	7.8 e
Hedelfingen	2.4 a	71 a	26 c	0.6 d	229 b	8.5 c
Tehranivee	0.4 b	28 c	56 a	15.6 a	209 b	9.0 a
Bing	0.8 b	46 b	49 b	4.2 c	134 c	8.2 d
Viscount	0.8 b	44 b	47 b	8.2 b	129 c	8.7 b

<sup>2</sup>Data for 1990-95: 1 = ≤19 mm; 2 = 20 to 24 mm; 3 = 25 to 27 mm; 4 = ≥ 28 mm.

<sup>y</sup>Mean separation within columns by Duncan's multiple range test,  $P \leq 0.05$ .

(Table 1), kidney-shaped, and have a wine-red skin with indistinct light-colored dots (Fig. 1). They mature at the same time as 'Bing', 10 d before 'Hedelfingen', and have a mean width of 24.8 mm and weight of 7.7 g, compared with 'Bing' at 24.6 mm and 8.2 g. 'Vandalay' has dark red flesh with purple juice and is sweeter than 'Hedelfingen'. The pit is similar to that of 'Van' and semi-adherent to the flesh. The pedicel of 'Vandalay' is medium to long, with no leaves on the stalk.

The fruits of 'Tehranivee' are large (Table 1), flat-round in shape and have a mahogany skin with indistinct light-colored dots (Fig. 2). They mature slightly later than 'Hedelfingen' and have a mean width of 25.5 mm and a mean weight of 9.0 g, compared with 'Hedelfingen' at 23.3 mm and 8.5 g. 'Tehranivee' has dark red flesh with black-red juice and is considerably sweeter than 'Hedelfingen'. The pit is similar to that of 'Van', and adherent to the flesh. The pedicel of 'Tehranivee' is long, with no leaves on the stalk.

Trees of both cultivars are productive (Table 1) and vigorous. With respect to precocity,

accumulated yields (kg/tree) up to and including the fourth year were 5.2 for 'Tehranivee', 4.1 for 'Vandalay', 2.8 for 'Bing', and 2.1 for 'Hedelfingen'. There was no evidence of biennial bearing. 'Vandalay' exhibits a spreading growth habit, and 'Tehranivee' an upright habit. Both perform well on Mazzard rootstock, but marginally poorer on Mahaleb (Horticultural Research Institute of Ontario, 1996). 'Tehranivee' flowers profusely, whereas flowering of 'Vandalay' is less profuse. The average bloom date at Vineland Station was 2 May for 'Vandalay', 'Bing', and 'Hedelfingen' and 6 May for 'Tehranivee'. From 1990 to 1995, average fruit set from bagged flowers was 54% for 'Vandalay' and 37% for 'Tehranivee'. Rain cracking at maturity was 15% for 'Vandalay', 12% for 'Tehranivee', 15% for 'Bing', and 5% for 'Hedelfingen'. Both cultivars are moderately resistant to aphids and bacterial canker (*Pseudomonas syringae* Van Hall), and moderately susceptible to cherry fruit fly (*Rhagoletis* sp.), brown rot [*Monilinia fructicola* (Wint.) Honey], and blossom and spur blight (*Sclerotinia* sp.). 'Vandalay' and

'Tehranivee' have been tested elsewhere in North America, Europe, and Australia.

### Availability

'Vandalay' and 'Tehranivee' have been granted Plant Breeders' Rights in Canada. Trees are available through licensed nurseries in Canada, the United States, Australia, and France. Virus-tested budwood and scionwood for both cultivars is available for research purposes under a nonpropagation agreement from the Horticultural Research Institute of Ontario, Vineland Station, Ont., L0R 2E0, Canada.

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