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'Harrow Diamond' Peach

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'Harrow Diamond' peach, the sixteenth of Agriculture Canada's 20 peach introductions from the former peach and nectarine breeding program at Harrow (3), is now the most important one grown in Ontario that resulted from controlled hybridization. While grown to a limited extent in British Columbia and Nova Scotia, the only other provinces in Canada where peaches can be grown on a limited commercial scale, this 1984 peach introduction was the third most important peach cultivar in Ontario in 1999, the most recent year for which tree census information is available (1). In this census, 'Harrow Diamond' was the most important of the early ripening freestone cultivars, the third most important of all freestone cultivars, and comprised 9.5 % of the total number of trees (835,631). Only 'Redhaven' and 'Garnet Beauty,' at 14.4 and 9.6 %, respectively, of the total number of trees, exceeded 'Harrow Diamond' in importance. However, among young trees in the one to three year age group, 'Harrow Diamond' was in first place, and comprised 22.3 % of all trees (209,933) in this age group.

In 1984, the year that 'Harrow Diamond' was introduced (2), the two cultivars of importance for its ripening season in Ontario were 'Candor' and 'Earlired'. It was predicted then that 'Harrow Diamond' had the potential to compete with and ultimately replace these cultivars for the early season. This prediction was realized by 1999 when 'Earlired' was no longer listed among the freestone peach cultivars being grown, and 'Candor', while still being grown, had significantly decreased in importance during that time (1). Neither of these cultivars is being recommended any longer for Ontario (5), although 'Candor' was still grown to a limited extent and accounted for 1.8 % of all freestone trees in 1999 (1). Indeed, 'Harrow Diamond' replaced these cultivars in Ontario because it was better adapted to the region, more cold hardy, more productive, had fewer split pits, was more resistant to flesh browning, had less flesh adherence to the pit when the fruit was ripe, and was one day earlier in ripening than the other two cultivars (2). 'Harrow Diamond' is also being grown commercially in the United States, especially in the colder more northerly areas, and is listed in several of the major nursery catalogues. This cultivar is also being grown and/or tested in the colder peach growing regions of Western and Eastern Europe.

'Harrow Diamond' (2) was selected in 1975 from a progeny of 'Redskin' x 'Harbinger', the latest and earliest ripening, respectively, of adapted cultivars available at that time at Harrow and deemed suitable for the Ontario fresh market. It was regionally tested in Canada and the United States under the designation

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HW 213. Members of the former Western Ontario Fruit Testing Association and the New York State Fruit Testing Cooperative Association assisted in the testing of HW 213 beginning in 1977. Propagation by commercial nurseries began in 1984 when HW 213 was introduced as 'Harrow Diamond'. The name was chosen to commemorate the 75th anniversary of the founding of the Harrow Research Station.

'Harrow Diamond' is an attractive, good quality, cold hardy, productive, freestone peach that is suitable for the early fresh market in Ontario (2). The trees are of medium vigor, open, spreading and the branches have medium to wide crotch angles that allow the bearing of heavy crops without limb breakage. Leaves and fruit have exhibited good field resistance to bacterial spot [*Xanthomonas campestris pv. pruni* (Smith) Young et al.]. The fruit appear resistant to brown rot [*Monilinia fructicola* (Wint.) Honey], split pits, and pre-harvest drop, thereby resulting in few culls at harvest. Flowers are pink, showy, and bloom midway between 'Candor' and 'Earlired'. Leaves are lanceolate with wavy margins and have typically two globose-shaped leaf glands at the junction of the leaf blade with the petiole. Fruit are attractively colored with a bright red blush that covers about 60 to 70 % of the skin surface and superimposed on a bright yellow background color. Pubescence on the skin is sparse and short resulting in a smooth appearance. Fruit size is small to medium and requires heavy and early thinning to attain suitable size. If thinned early and spaced about 15 cm apart, fruit can attain 6 cm in diameter at harvest. The blossom end of the fruit is dimpled, the suture distinct but shallow, and the cavity deep and flaring. Flesh color is yellow, melting, medium firm, separates readily from the pit when fully matured and oxidizes slowly when exposed to the air. The flavor and texture are rated good for the early season. The fruit ripen in Ontario about July 27, a week before 'Garnet Beauty' and 20 days before 'Redhaven'. 'Harrow Diamond' requires 950 hours of chilling to break dormancy (4).

'Harrow Diamond' has been used successfully at Harrow as a parent in breeding and 16 breeder selections have been made where it was used as one of the parents. Of these, two (HW 274, HW 275) have been placed in advanced regional trials through the Ontario Fruit Testing Association. In this century, it is likely that some new cultivars will have 'Harrow Diamond' in their pedigrees.

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