

Table 1. Seven-year average fruit ratings for 'La White', 'Harvester', and 'La Feliciana' peach.

Characteristic	Fruit rating ^z		
	'La White'	'Harvester'	'La Feliciana'
Fruit set	8	8	10
Diameter (cm)	5.7-6.4	5.7-7.0	5.7-7.0
Shape	7-8 ^y	7-8	9
Pubescence	8	7-8	7-8
Red Skin Color (% of skin with red over-color)	80	80	70-80
Flesh color (freedom from red)	7-8 ^x	8	7
Attractiveness	8	8	8-9
Firmness	7	8	8-9
Freestone	7-8	8	10
Texture	8	8	8
Quality (flavor)	8	8	8-9
Avg. maturity date	18 June	15 June	5 July

^zRating, except size and skin color, are on a scale of 1 (completely unsatisfactory) to 10 (best). Three trees of each cultivar were evaluated.

^ySlight suture.

^xWhite flesh.

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'Harrow Beauty' Peach

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'Harrow Beauty' is a very attractive, medium-sized, firm-fleshed, cold hardy, freestone peach [*Prunus persica* (L.) Batsch] that ripens between 'Canadian Harmony' and 'Loring'. It was introduced in 1983 for the Ontario fresh market as a possible replacement for 'Loring' which is marginally adapted to all but the best peach sites in Ontario. The tree is of medium vigor, cold hardy, productive, and appears to have moderate field tolerance to perennial canker (*Leucostoma* spp.). The fruit seem resistant to bacterial spot [*Xanthomonas campestris* pv. *pruni* (Smith) Young et al.], brown rot [*Monilinia fructicola* (Wint.) Honey], split pits, preharvest drop, and flesh oxidation. The fruit are well suited for the fresh market including local sales and shipping. 'Harrow Beauty' is performing well in regional trials in Ontario and is adapted to regions where 'Redhaven' is successfully grown.

Origin

'Harrow Beauty' resulted from hybridizing 'Cresthaven' x 'Harken' at Harrow in

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1971. It was selected in 1976 and given the designation H 7120046. It was propagated by the Western Ontario Fruit Testing Association (WOFTA) and placed in regional trials as budded trees beginning in 1978 under the designation HW 231. Propagated annually by WOFTA for regional trials since 1976,

Table 1. Performance of 'Harrow Beauty' in comparison with its parents and 'Canadian Harmony' and 'Loring' (1980 to 1983).

Characters evaluated	Avg rating ^z				
	'Harken'	'Canadian Harmony'	'Harrow Beauty'	'Loring'	'Cresthaven'
Tree vigor	7.8	7.1	7.3	7.0	6.8
Winterhardiness	4.8	5.3	6.3	6.3	5.5
Perennial canker	5.5	4.6	6.4	5.5	4.5
Bacterial leaf spot	9.0	6.8	8.0	8.5	7.6
Bacterial fruit spot	9.0	6.5	8.1	8.5	7.4
Productivity	6.5	6.0	6.3	6.0	5.7
Uniformity of ripening	6.8	6.5	8.0	6.8	6.1
Fruit size	7.0	7.8	7.1	7.5	6.8
Attractiveness	7.8	7.0	8.0	6.0	6.0
Blush	8.0	7.0	8.1	4.5	5.5
Flesh firmness	8.0	7.1	7.9	7.3	7.1
Flesh adherence to pit	7.0	7.0	7.6	7.2	7.0
Red pigment in flesh	8.3	7.4	6.1	8.0	6.9
Flavor	6.8	6.6	7.0	6.3	6.1
Split pits	7.5	7.1	8.9	7.8	6.6
Total score (15 characters)	109.8	95.2	111.1	103.2	95.6
Avg. ripe date	17 Aug.	27 Aug.	28 Aug.	31 Aug.	8 Sept.

^zRatings were subjective on a scale of 1 (least desirable) to 10 (most desirable). All trees were propagated on Siberian C rootstock and tested in the same orchard.

White', 'Harvester', and 'La Feliciana' for 7 years is presented in Table 1.

Results of experimental plantings have shown that 'La White' is a consistent producer of large, attractive fruit that ripen 3 days after 'Harvester' and 17 days before 'La Feliciana'. This cultivar is recommended for limited commercial production in central and southeastern Louisiana and comparable areas with comparable chilling conditions.

'La White' has shown susceptibility to bacterial spot [*Xanthomonas campestris* pv. *pruni* (Smith 1903) Dye 1978], under growing condition in southeastern Louisiana.

Availability

A limited amount of budwood is available from the Idlewild Research Station, Clinton, LA 70722.

'Harrow Beauty' also was propagated in the United States beginning in 1980 by the New York State Fruit Testing Cooperative Association (NYSFTCA). In this report the performance of 'Harrow Beauty' is compared with its parents, and with 'Canadian Harmony' and 'Loring', the 2 most important commercial cultivars in Ontario that ripen in the last week of August.

'Harrow Beauty' was placed in 2nd test as budded trees at Harrow in 1978. Its performance from 1980 to 1983 was compared with 'Cresthaven', 'Harken', 'Canadian Harmony', and 'Loring' in a replicated orchard planting of 4 trees each at the Harrow Research Station (Table 1). The overall performance of 'Harrow Beauty' based on 15 rated characters was superior to its parents,

Table 2. Cold hardiness of dormant flower buds and shoot xylem of 'Harrow Beauty' compared with 'Redhaven' and 'Loring' in controlled freezing tests in 1980 and 1981.

Cultivars	T ^z		T ^z	
	Flower buds	Shoot xylem	Flower buds	Xylem injury ^y (1 to 5)
	1980		1981	
Loring	-23.5	-30.1	-23.5	3.0
Harrow Beauty	-23.6	-29.9	-24.4	3.0
Redhaven	-24.0	-30.0	-23.9	2.6
S _d ^x	0.291	0.429	0.343	0.252

^zTemperature (°C) required to kill 50% of the flower primordia or shoot xylem using a standard freezing test (2).

^yXylem injury rated on a scale from 1 = uninjured to 5 = dead (1).

^xS_d = SE of a difference between 2 means.

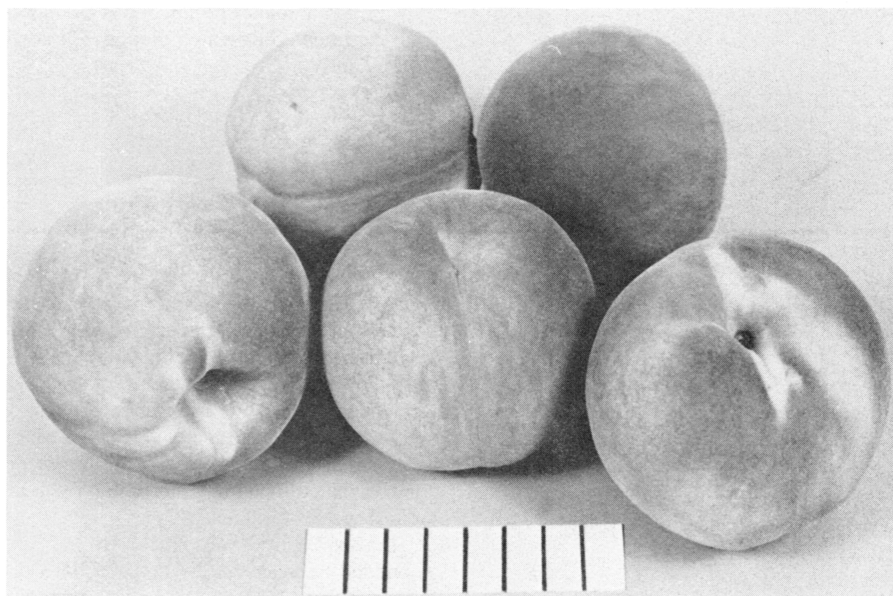


Fig. 1. Fruit of 'Harrow Beauty' peach (scale in cm).

'Cresthaven' and 'Harken', and also superior to the other cultivars compared. 'Harrow Beauty' had good performance ratings (scores ≥ 7) for 11 of the 15 characters evaluated and average ratings (scores > 5 to < 7) for 3 of the remaining 4 characters. In controlled freezing tests (Table 2), 'Harrow Beauty' was not significantly different from 'Redhaven' in bud hardiness in 1980 but was superior in 1981. It was less wood hardy than 'Redhaven' in 1981 and similar to 'Loring'. Similar results were obtained from natural freezing tests outdoors (1).

Description

Trees of 'Harrow Beauty' are of medium vigor, upright to spreading, and have me-

dium crotch angles. Trees seem more resistant to perennial canker, based on natural infection outdoors, than the other 4 cultivars being compared (Table 1). The fruit seem resistant to bacterial spot, brown rot, split pits and preharvest drop, thereby resulting in few culls at harvest.

Flowers are nonshowy, pink, and bloom 1 to 2 days earlier than the other cultivars being compared.

Leaves, lanceolate and wavy with serrulate margins, are typically 13.5 cm long and 3.3 cm wide at the widest point. There usually are 2 or more reniform glands on the leaf petiole near the base of the leaf blade.

Fruit, attractive in color and shape (Fig. 1), are smaller than 'Canadian Harmony' and 'Loring', and similar to 'Harken'. The fruit

are round and typically 5.7 to 6.4 cm in diameter when thinned about 15 cm apart. A smooth, bright red blush covers 80% or more of the skin surface and is superimposed on a bright yellow ground color. Pubescence on the skin is short and sparse, resulting in a smooth appearance to the fruit. The blossom end is dimpled, the suture distinct but shallow, and the stem cavity abrupt and deep. The fruit ripen about 28 Aug., which is one day after 'Canadian Harmony' and 3 days before 'Loring'. The fruit are uniform in size, ripen uniformly, and usually require only 2 pickings. The flesh is yellow, melting, fine textured, very firm, and does not adhere to the pit. There is heavy red pigmentation in the flesh around the pit cavity. On exposure to air the flesh is slow to oxidize and therefore does not brown readily. There is a good balance in flavor between acidity and sweetness. The fruit are not well suited for home canning and freezing. Shipping ability and shelf life are rated good and similar to 'Loring'.

Pits are of medium size, typically 3.2 cm long and 2.3 cm wide at the widest point with an acuminate apex and flattened base. The walls are deeply sculptured and pitted and there is a shallow keel on the ventral suture.

'Harrow Beauty' is being introduced for the Ontario fresh market because it seems better adapted to the peach growing regions of southern Ontario than 'Canadian Harmony' or 'Loring'. It tends to set more heavily than 'Canadian Harmony' or 'Loring' and requires early and heavy thinning to attain similar fruit size.

Availability

Budwood of 'Harrow Beauty' from virus-indexed trees is available from the Harrow Research Station and is distributed by the Western Ontario Fruit Testing Association (WOFTA), Harrow, Ontario NOR 1GO. Trees in limited quantity will be available from WOFTA and the New York State Fruit Testing Association, Geneva, N.Y. in 1984 and 1985 and from commercial nurseries beginning in 1986.

Literature Cited

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