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'Hawthorne' Peach

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'Hawthorne', a mid-season Death [*Prunus persica* (L.) Batsch.] for fresh marketing, matures $\approx$ 20 days before 'Elberta'. Fruits are freestone with melting yellow flesh. The degree of resistance to bacterial spot [*Xanthomonas campestris* pv *pruni* (Smith) Dye] is good.

Origin

This selection first fruited at the Idlewild Research Station in 1976 and was designated L73-A10-10. It was selected by P.L. Hawthorne from a group of open-pollinated seedlings of L1-27-13, an open-pollinated selection of L9-10-40, which was selected out of a group of open-pollinated seedlings of 'Southern Glow'.

Description

Fruit characteristics. 'Hawthorne' produces heavy crops of large freestone fruits (70 mm in diameter) of good quality, firmness, and texture as determined by our subjective evaluations. Fruit are nearly round with equal halves and a non-prominent suture. The primary surface color is medium yellow, with $\approx$ 90% red over-color (Fig. 1). The flesh is yellow with some red near the pit.

Bud and blossom characteristics. The flower bud set is heavy in most years, with about 20 to 25 fruit buds per 30 cm of fruiting wood. Blossoms are large, showy, and self-fertile.

Tree and foliage characteristics. Trees are vigorous, strong, and productive. No tendency toward excessive solar injury or cold damage has been noted. Cold requirement to break rest is $\approx$ 500 to 600 hr at 7C or below. Leaves have two to four reniform glands.

Disease ratings. 'Hawthorne' has been evaluated among trees severely infected with bacterial spot. No fruit symptoms and "only slight defoliation have been observed, making it comparable to standard cultivars.

Recommendations

'Hawthorne' has performed well in experimental plantings at three research stations and in grower orchards in Louisiana (Table 1). These trial plantings have shown 'Hawthorne' to have good potential for commercial use in areas that receive 500 to 600 hr of chilling.

'Hawthorne' is recommended for areas of central and southern Louisiana and other areas with similar growing conditions. Although production of high-quality fruit of this cultivar has been documented in north-central Louisiana (Ouachita Parish) and extreme southern Louisiana (Plaquemines Parish), trial plantings should be made in these areas since

Fig. 1. 'Hawthorne' peach grown at Clinton, La.

they are outside the region of best adaptability. The round shape and firmness of the fruit are well-suited for production and handling of peaches. This selection will ripen between 'Harvester' and 'La Feliciana' (Table 2), which will help fill a gap in production.

Trees are available from commercial nurseries and a limited amount of budwood is available from the Calhoun Research Station, P.O. Box 539, Calhoun, LA 71225.

Table 1. Mature fruit characteristic ratings for 'Hawthorne' peach grown at three locations in Louisiana.

Characteristic ^a	Clinton	Port Sulphur	Calhoun
No. years evaluated	10	3	5
Fruit set	8	7	9.5
Size (mm, diameter)	64	70	76
Shave	8.5	7.5	9
Pubescence	7	9	7.5
Skin color (redness)	9.0	9.5	8.5
Flesh color (yellowness)	8	9	8.5
Firmness	8	7.5	8.5
Freestone	9	10	8
Texture	8	9	8.5
Quality (flavor)	8	8	7
Average maturity date	26 June	29 June	28 June

^aAll ratings, except size, are based on a scale of 1 to 10.1 = completely unsatisfactory; 10 = excellent (commercially acceptable = 7).

^b1 = cling; 10 = completely free.

Table 2. Comparison of mature fruit characteristics of 'Hawthorne' with 'Harvester' and 'LaFeliciana' peaches at Clinton, La., 1981-85.

Cultivar	Maturity date	Fruit set ^a	Fruit diam ^b	Shape	Pubescence	Over-color (red)	Texture	Firmness	Freestone	Quality
Hawthorne	28 June	6.9	58	7.3	7.4	8.3	8.3	8.4	8.6	8.2
Harvester	14 June	7.1	61	7.2	8.0	7.8	8.0	7.8	7.8	7.8
LaFeliciana	5 July	6.4	48	7.1	7.4	6.8	7.4	7.4	7.6	7.4

^aAll ratings, except size, are based on a scale of 1 to 10. 1 = unsatisfactory, 10 = excellent (commercially acceptable = 7).

^bDiameter of fruit in millimeters.

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