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Bradford

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(54) **NECTARINE TREE NAMED 'GRAND SWEET'**

(76) Inventor: **Lowell Glen Bradford**, 12439 E. Savana Rd., Le Grand, CA (US) 95333

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Primary Examiner—Bruce R. Campell
Assistant Examiner—Wendy A Baker

(57) **ABSTRACT**

The present invention relates to a nectarine tree, *Prunus persica*, and more particularly to a new and distinct variety broadly characterized by a medium sized, vigorous, self-fertile, productive and regular bearing tree. The fruit matures under the ecological conditions described approximately the third week in July, with first picking on Jul. 20, 1999. The fruit is uniformly medium in size, subacidic and sweet in flavor, globose in shape, clingstone in type, very firm and crisp in texture, and fully red in skin color. The variety was a first generation cross using Red Glen (U.S. Plant Pat. No. 7,193) yellow flesh nectarine as the selected seed parent and June Pearl (U.S. Plant Pat. No. 9,360) white flesh nectarine as the selected pollen parent.

1 Drawing Sheet

BACKGROUND OF THE VARIETY

In a continuing effort to improve the quality of fresh market and shipping fruits, I, the inventor, typically hybridize a large number of nectarine and peach seedlings each year. The present invention relates to a new and distinct variety of nectarine tree (*Prunus persica*), which has been denominated varietally as 'Grand Sweet'. The present variety was hybridized in 1992, grown as a seedling on its own root in the greenhouse, and transplanted to a cultivated area of my experimental orchard at Bradford Farms near Le Grand, Calif. in Merced County (San Joaquin Valley). It was developed as a first generation cross using Red Glen (U.S. Plant Pat. No. 7,193) yellow flesh nectarine as the seed parent and June Pearl (U.S. Plant Pat. No. 9,360) white flesh nectarine as the selected pollen parent. Subsequent to origination of the present variety of nectarine tree, I asexually reproduced it by budding and grafting, in the experimental orchard described above, and such reproduction of plant and fruit characteristics were true to the original plant in all respects. The reproduction of the variety included the use of Nemaguard Rootstock (unpatented), the standard of the stone fruit industry in central California, upon which the present variety was compatible and true to type.

The present variety is most similar to its sister cross, Grand Pearl (U.S. Plant Pat. No. 9,960) white flesh nectarine, by producing fruit that is dark red in skin color, very firm in texture, sweet and subacidic in flavor, medium in size, clingstone in type and that ripens in mid July during normal years, but is distinguished therefrom and an improvement thereon by producing fruit that is yellow instead of white in flesh color and that has less skin freckling.

The present variety is similar to its seed parent, Red Glen (U.S. Plant Pat. No. 7,193) nectarine, by producing very firm, full red, yellow flesh, clingstone nectarines, but is distinguished therefrom by producing fruit that is subacidic instead of acidic in flavor and that ripens about about 10 days earlier.

The present variety is similar to its pollen parent, the June Pearl (U.S. Plant Pat. No. 9,360), by producing clingstone nectarines that are subacidic in flavor, medium in size, full red in skin color and almost free of red texture bleeding, but is very distinguished therefrom by producing fruit that ripens about four weeks later, that is firmer in texture, that is sweeter in flavor, and that is yellow instead of white in flesh color.

DRAWING

The accompanying photograph exhibits four whole fruits positioned to display the characteristics of the skin color and form, one fruit divided transversely to the suture plane to reveal the flesh and stone, and typical leaves.

POMOLOGICAL CHARACTERISTICS

Referring now more specifically to the pomological characteristics of this new and distinct variety of nectarine tree, the following has been observed of a 4 year-old tree grown under the ecological conditions prevailing near Le Grand, Merced County (San Joaquin Valley), Calif., and was developed at the state of hard shipping ripe on Jul. 24, 1999. However, during 1999 most stone fruit varieties in California ripened approximately ten days later than normal. All major color code designations are by reference to the Inter-Society Color Council, National Bureau of Standards. Common color names are also used occasionally.

TREE

Size: Medium, reaching a height of 12' [3.66 meters] by the 4th growing season after typical dormant pruning.

Vigor: Vigorous, responding typically to irrigation and fertilization. The plant should be grown on a standard commercial rootstock for production purposes. The variety grows about 3' [0.91 meters] of surplus top-growth during the spring and summer.

Growth: Upright and dense.

Form: Vase formed.

Hardiness: Hardy with respect to typical central California winters.
Production: Productive, thinning usually necessary.
Fertility: Self-fertile.
Bearing: Regular bearer, with no alternate bearing observed.
Trunk:
Size.—Medium, reaching a maximum diameter of 4" [102 mm.] after 4 growing seasons.
Texture.—Shaggy.
Bark color.—Grayish yellowish brown [80. gy.yBr].
Lenticels.—Numerous. Color: Strong orange yellow [68. s.OY]. Typical Size: 1/8" to 7/16" [3.2–11.1 mm.].
Branches:
Size.—Medium, typical of *Prunus persica.*
Texture.—Smooth on 1st year wood, increasing roughness with age.
Color.—1st Year Wood Topside: Grayish red [19. gy.R]. 1st Year Wood Underside: Vivid yellow green [115. v.YG]. Older Wood: Moderate brown [58. m.Br].
Lenticels.—Numerous, very small. Color: Light orange yellow [70. l.OY]. Size: 1/16" to 3/16" [1.6–4.8 mm.].
Leaves:
Size.—Medium. Average Length: 6" [152.4 mm.]. Average Width: 1½" [38.1 mm.].
Thickness.—Medium.
Form.—Elliptical.
Apex.—Acuminate.
Base.—Acute.
Surface.—Smooth.
Color.—Dorsal Surface: Moderate olive green [125. m.OlG]. Ventral Surface: Moderate yellow green [120. m.YG].
Margin.—Finely serrate.
Venation.—Pinnately net veined.
Petiole.—Average Length: 7/16" [11.1 mm.]. Average Thickness: 1/16" [1.6 mm.]. Color: Brilliant yellow green [116. brill.YG].
Stipules.—2 per leaf bud, up to 6 at the growing tip. Average Length: 3/8" [9.5 mm.].
Glands.—Numbers: 2 to 4 per leaf. Position: Alternately positioned on petiole and base of blade. Size: Medium. Form: Reniform. Color: Light yellow green [119. l.YG].
Flower buds:
Hardiness.—Hardy with respect to central California winters.
Diameter.—Typically 3/8" [9.5 mm.] 1 week before bloom.
Length.—Typically 3/4" [19.1 mm.] 1 week before bloom.
Form.—Not appressed.
Color.—Brilliant purplish pink [246. brill. p. Pk.].
Surface.—Pubescent.
Flowers: Perfect, complete, perigynous, usually a single pistil, typically thirty or more stamens, five sepals and petal locations alternately positioned.
Blooming period.—Medium as compared with other varieties.
Onset of bloom.—One percent on Mar. 4, 1999.
Duration of bloom.—One to two weeks, dependent on ambient temperature.
Type.—Showy.
Number of petals.—Usually five, but a few doubles.
Number per cluster.—Generally from 1 to 3.
Petal shape.—Rounded.
Petal margin.—Slightly wavy.

Average petal diameter.—3/4" [19.1 mm.].
Petal color.—Pale purplish pink [252. p.pPk].
Anther color.—Dark red [16. d.Red].
Average pistil length.—5/8" [15.9 mm.].
Fragrance.—Strong when nectar is present.
Average diameter.—1 7/8" [47.6 mm.].

FRUIT

Maturity when described: Hard shipping ripe, Jul. 24, 1999, noting the 1999 ripening season was delayed about ten days later than normal.
Date of first picking: Jul. 20, 1999.
Date of last picking: Jul. 31, 1999.
Size: Uniform, medium.
Average diameter axially.—2 5/8" [66.7 mm.].
Average diameter across suture plane.—2¾" [69.9 mm.].
Typical weight.—6.42 ounces [182 grams].
Form: Globose, uniform, mostly symmetrical.
Longitudinal section form.—Round.
Transverse section through diameter.—Round.
Suture: An inconspicuous line on the lateral surface transforming into a shallow groove toward the apex with a depression beyond the pistil point.
Ventral surface: Rounded, lipped stronger on one side.
Lips: Unequal.
Cavity: Flaring, slightly elongated in the suture plane, suture showing on both sides, stem markings typical.
Depth.—½" [12.7 mm.].
Breadth.—5/8" [15.9 mm.].
Base: Truncate.
Apex: Rounded.
Pistil point: Oblique, very short, depressed within the suture.
Stem: Medium.
Average length.—3/8" [9.5 mm.].
Average width.—3/16" [4.8 mm.].
Skin:
Thickness.—Medium.
Texture.—Medium.
Tenacity.—Tenacious to flesh.
Tendency to crack.—Slight in wet seasons.
Color.—Very dark red [17. v.d.R] smoothly blending into deep red [13. deep R], with a minor amount of strong orange yellow [68. s.OY] freckling.
Flesh:
Color.—Brilliant yellow [83. brill.Y] with a minimum of moderate red [15. m.R] streaking very close to the stone on the more mature fruits.
Surface of pit cavity.—Brilliant yellow [83. brill.Y] and moderate red [15. m.R] fibers breaking when twisted away from the stone.
Amygdalin.—Scarce.
Juice.—Moderate, rich.
Texture.—Very firm, crisp.
Fibers.—Abundant, fine.
Ripens.—Slightly earlier at the apex.
Flavor.—Subacidic and very sweet, ranging from 16 to 20 brix.
Aroma.—Slight.
Eating quality.—Very good.

STONE

Type: Clingstone.
Form: Oval.
Base: Straight.
Apex: Acute.

Hilum: Narrow.
Sides: Equal.
Surface: Irregularly furrowed toward the apex, pitted toward the base.
Ridges: Jagged toward the base.
Color: Light brown [57. 1.Br] when first removed from fruit.
Pit wall: ¼" [6.4 mm.] thick.
Tendency to split: None observed.
Kernel:

Form.—Oval.
Taste.—Bitter.
Viable.—Yes.
Average width.—7/16" [11.1 mm.].
Average length.—¾" [19.1 mm.].
Skin color.—Pale yellow [89. p.Y] with strong yellowish brown [74. s.yBr] veins when first removed from stone.
Pellicle color.—Light grayish brown [60. 1.gy.Br].
Amygdalin.—Abundant.

USE

Market: Fresh and long distance shipping.
Keeping quality: Fruit quality observed to remain in good condition in excess of 17 days in cold room at 36° Fahrenheit [2° Celsius].

Resistance to insects: No unusual susceptibilities noted.
Resistance to diseases: No unusual susceptibilities noted.

Although the new variety of nectarine tree possesses the described characteristics under the ecological conditions at Le Grand, Calif., in the central part of the San Joaquin Valley, it is to be expected that variations in these characteristics may occur when farmed in areas with different climatic conditions, different soil types, and/or varying cultural practices.

I claim:

1. A new and distinct variety of nectarine tree, substantially as illustrated and described, that is most similar to its sister cross, Grand Pearl (U.S. Plant Pat. No. 9,960) white flesh nectarine, by producing fruit that is dark red in skin color, very firm in texture, sweet and subacidic in flavor, medium in size, clingstone in type and that ripens in mid July during normal years, but is distinguished therefrom and an improvement thereon by producing fruit that is yellow instead of white in flesh color and that has less skin freckling.

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