

US00PP23738P3

(12) United States Plant Patent Bradford

(10) Patent No.:

(45) **Date of Patent:**

US PP23,738 P3 Jul. 16, 2013

(54) INTERSPECIFIC TREE NAMED 'GREENSWEET XX'

(50) Latin Name: *Prunus* sp.

Varietal Denomination: GREENSWEET XX

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(US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 63 days.

(21) Appl. No.: 13/374,018
 (22) Filed: Dec. 8, 2011

(65) Prior Publication Data

US 2013/0152240 P1 Jun. 13, 2013

(51) Int. Cl.

A01H 5/00 (2006.01)

(52) U.S. Cl.

(56) References Cited

U.S. PATENT DOCUMENTS

PP14,220 P2 10/2003 Bradford PP16,461 P2 4/2006 Bradford

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(57) ABSTRACT

The present invention relates to an interspecific tree and more particularly to a new and distinct variety broadly characterized by a medium size, vigorous, hardy, and very productive tree. Being self-unfruitful, the present variety requires cross pollination from an apricot, interspecific, or plum that blooms during the late season. The present variety produces a heavy bloom with an abundant amount of pollen to entice good bee activity to facilitate pollination. The fruit matures under the ecological conditions described during the last half of October, with first picking on Oct. 23, 2011. The fruit is uniformly small to medium in size, a green and red two-tone in skin color, clingstone in type, globose in shape, yellow in flesh color, firm in texture, and excellent in flavor.

1 Drawing Sheet

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Botanical classification: Prunus sp.

Varietal denomination: 'GREENSWEET XX'.

BACKGROUND OF THE VARIETY

In a continuing effort to improve the quality of shipping fruits, I, the inventor, typically hybridize a large number of peach, nectarine, plum, apricot, and cherry seedlings each year. I also grow a lesser number of open pollinated seeds of each of these fruits. The present invention relates to a new and distinct variety of interspecific tree which has been denominated varietally as 'GREENSWEET XX'.

During a typical blooming season I isolate as seed parents both individual and groups of different plum trees by covering them with screen houses. A hive of bees is placed inside each 15 such house, and bouquets to provide pollen from different plum, apricot, and interspecific hybrid trees are placed in buckets near the trees approximately every two days for the duration of the bloom. During 2005 one such house containing a 'September Yummy®' plum tree (U.S. Plant Pat. No. 14,220) was crossed by me in this manner. To pollinate this plum tree, I selected bouquets from several sources of apricot and interspecific hybrid trees without keeping specific written details. Upon reaching maturity the fruit from this plum tree was harvested and the seeds were removed, cracked, stratified and germinated as a group with the label "H12". They were 25 grown as seedlings on their own root in my greenhouse and upon reaching dormancy transplanted to a cultivated area of my experimental orchard located near Le Grand, Calif. in Merced County (San Joaquin Valley). During the summer of 2008 the claimed variety was selected by me as a single plant 30 from the group of seedlings described above. Subsequent to origination of the present variety of interspecific 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

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respects. The reproduction of the variety included the use of 'Nemaguard' (unpatented) rootstock upon which the present variety was compatible and true to type.

The present variety is similar to its seed parent, 'September Yummy' (U.S. Plant Pat. No. 14,220) plum, by being self-unfruitful and by producing fruit that is firm, juicy, and mostly yellow in flesh color, but is distinguished therefrom by producing fruit that is a red and green two-tone in skin color instead of full red, that is sweeter in flavor, that is smaller in size, and that matures about forty days later.

The present variety is most similar to 'Plumsweet IV' (U.S. Plant Pat. No. 16,461) interspecific, by being self-unfruitful and by producing fruit that is very sweet in flavor, juicy, clingstone in type, and two-tone in skin color, but is distinguished therefrom by producing fruit that is purely yellow in flesh color, that is globose instead of oblong in shape, that is smaller in size, and that matures at least forty days later.

SUMMARY OF VARIETY

The present interspecific variety is characterized by a medium size, vigorous, hardy, and very productive tree. Being self-unfruitful, the present variety requires cross pollination from an apricot, interspecific, or plum that blooms during the late season. The present variety produces a heavy bloom with an abundant amount of pollen to entice good bee activity to facilitate pollination. The fruit matures under the ecological conditions described during the last half of October, with first picking on Oct. 23, 2011. The fruit is uniformly small to medium in size, a green and red two-tone in skin color, clingstone in type, globose in shape, yellow in flesh color, firm in texture, and excellent in flavor.

DRAWING

The accompanying photograph consists of four whole fruits positioned to display the characteristics of the skin

color and form, two half fruits divided to reveal the flesh and stone, one cleaned stone, typical leaves, and two insets depicting the blossoms as they appeared on the tree during the blooming season.

DETAILED BOTANICAL DESCRIPTION

Referring now more specifically to the pomological characteristics of this new and distinct variety of interspecific tree, the following has been observed under the ecological conditions prevailing near Le Grand, Merced County (San Joaquin Valley), Calif. The fruit description was developed at the state of shipping ripe on Oct. 23, 2011, on the original tree during its sixth growing season. The flower and bud descriptions were developed during the previous blooming season. 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.

PARENTAGE

Seed parent: 'September Yummy®' (U.S. Plant Pat. No. 14,220).

Pollen parent: Unknown.

TREE

Size: Medium, reaching and maintaining a height of 10' [3.05 m.] and a spread of 6' [1.83 m.] after six growing seasons 30 utilizing typical dormant pruning.

Vigor: Vigorous, responding typically to irrigation and fertilization. The variety grows about 4' [1.22 m.] of surplus top-growth during the spring and summer. The plant should be grown on a standard commercial rootstock for 35 production purposes.

Growth: Upright and dense.

Form: Pruned to a Perpendicular "V".

Hardiness: Hardy with respect to central California winters. Heat tolerance: Observed to perform adequately in typical 40 central California climatic conditions, which typically include extended periods of heat.

Drought tolerance: Variety is developed for commercial orchards and requires regular irrigation.

Production: Very productive, thinning usually necessary. Fertility: Self-unfruitful, requiring cross pollination by a suitable late seasonal blooming apricot, plum, or interspecific, such as 'Plumred X' interspecific tree (U.S. Plant Pat. No. 19,591).

Bearing: No crop failures yet observed, weather dependent. 50 Trunk:

Size.—Medium, reaching a maximum diameter of 2³/₄" [69.9 mm.] after the sixth growing season.

Texture.—Medium shaggy.

Bark color.—Dark grayish brown [62. d.gy.Br] with 55 Light yellowish brown [76. l.yBr] crevices present.

Lenticels.—Approximate Number Per Square Inch: 10. Color: Light yellowish brown [76. l.yBr]. Size: ½" [3.2 mm.] to ½" [6.4 mm.]. Shape: Eye-shaped, elongated.

Branches:

Size.—Diameter of main scaffold 1½" [38.1 mm.] measured 12" above the crotch, diameter of limb is ½" [22.2 mm.] measured 12" above first fork.

Texture.—Smooth on first and second year wood, 65 increasing roughness with age.

Color.—2nd Year Wood: Strong brown [55. s.Br]. 3rd Year Wood: Dark grayish brown [62. d.gy.Br] with Light yellowish brown [76. l.yBr] crevices present.

Lenticels.—Number Per Square Inch: About 40 on second year wood. Color: Light yellowish brown [76. 1.yBr]. Size: ½4" [0.4 mm.] to ½16" [1.6 mm.]. Shape: Eye-shaped, elongated.

Leaves:

Size.—Large.

Average length.—43/8" [111.1 mm.].

Average width.—2" [50.8 mm.].

Arrangement.—Alternate.

Thickness.—Medium.

Form.—Elliptical.

Apex.—Acuminate.

Base.—Acute with an average angle base angle of 75 degrees.

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: Light yellow green [119.1.YG].

Stipules.—Number: Usually 2 per leaf, up to 6 per growing tip. Average Length: 7/16" [11.1 mm.]. Color: Moderate yellow green [120. m.YG] becoming Dark yellowish brown [78. d.yBr] with age.

Glands.—Number: 1 to 4 per leaf, mostly 2. Position: Alternate, positioned at the intersection of the petiole and the leaf blade. Size: Medium. Form: Globose. Color: Brilliant yellow green [116. brill.YG] becoming Grayish brown [61. gy.Br] in the center with age. Leaf buds.—Pointed, medium.

Flower buds:

Hardiness.—Hardy, with respect to central California winters.

Diameter.—Typically ³/₁₆" [4.8 mm.] 1 week before bloom.

Length.—Typically 3/8" [9.5 mm.] 1 week before bloom. Form.—Not appressed.

Surface.—Pubescent.

Tip color.—White [263. White].

Flowers: Perfect, complete, perigynous, usually a single pistil, typically thirty or more stamens, five sepals and petal locations alternately positioned.

Average flower diameter.—15/16" [23.8 mm.].

Number of petals.—Five, no double blossoms observed.

Petal shape.—Oval to circular.

Petal margin.—Entire, smooth to slightly wavy.

Average petal diameter.—7/16" [11.1 mm.].

Average petal length.—½" [12.7 mm.].

Petal apex.—Rounded.

Petal base.—Obtuse.

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Petal color.—White [263. White] on both sides.

Anther color.—Light orange [52.1.O] over Brilliant yellow [83. brill.Y].

Stigma color.—Brilliant greenish yellow [98. brill.gY]. Sepal color.—Brilliant yellow green [116. brill.YG].

Sepal length.—3/16" [4.8 mm.].

Sepal width.—5/32" [4.0 mm.].

Sepal apex.—Rounded to elliptical to match the width and length.

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Sepal margin.—Fairly smooth with slight serrations toward the apex. Average pistil length.—9/16" [14.3 mm.]. Average stamen length.—7/16" [11.1 mm.]. Fragrance.—Moderate. Bloom density.—Heavy. *Number per cluster.*—2 to 10, average 5. Pollen production.—Heavy, strong enticement to bees. Blooming period.—Late, two days after 'Santa Rosa' plum (unpatented). Onset of bloom.—One percent on Mar. 6, 2011. Date of full bloom.—Mar. 14, 2011. Duration of bloom.—One to two weeks, dependent on

ambient temperature. **FRUIT** Maturity when described: Shipping ripe, Oct. 23, 2011. Date of first picking: Oct. 23, 2011. Date of last picking: Nov. 6, 2011. Size: Uniform, small to medium. Average diameter axially.—21/4" [57.2 mm.]. Average diameter across cheek plane.—21/4" [57.2] mm. Average diameter across suture plane.—23/8" [60.3 25 Kernel: mm. Typical weight.—4.2 ounces [119 grams]. Form: Uniform, globose, symmetrical. Longitudinal section form.—Circular to slightly oval. Transverse section through axial diameter.—Circular. 30 Suture: A Grayish reddish brown [46. gy.rBr] line extending from the base to the apex. Ventral surface: Rounded. Lips: None. Cavity: Flaring to Circular, suture showing on one side. Depth.— $\frac{3}{8}$ " [9.5 mm.]. *Breadth.*—1" [25.4 mm.]. Base: Truncate, slightly cordate is viewed parallel to suture. Apex: Rounded with a very slight hump on some. Pistil point: An inconspicuous Dark reddish orange [38. d.rO] 40 dot located on a very slight hump. Stem: Medium. *Average length.*—7/16" [11.1 mm.].

Average width.— $\frac{3}{32}$ " [2.4 mm.].

Skin:

Thickness.—Medium.

Surface.—Smooth.

Tenacity.—Tenacious to the flesh.

Astringency.—Slight.

Tendency to crack.—Slight in dry season.

Color.—A Moderate red [15. m.R] and Moderate greenish yellow [102. m.gY] two-tone with a moderate amount of Very greenish yellow [97. v.gY] freckling throughout.

Bloom.—Abundant.

Flesh:

Color.—Light greenish yellow [101. l.gY] throughout. Surface of pit cavity.—Covered with Moderate yellow [87. m.Y] fibers.

Amygdalin.—Moderate.

Juice.—Abundant, rich.

Texture.—Firm, crisp, melting.

Fibers.—Abundant, fine, tender.

Ripens.—Slightly earlier toward the shoulders.

Flavor.—Sweet with moderate acid, typically 23 brix. 65

Aroma.—Very slight. Eating quality.—Excellent.

STONE

Type: Clingstone.

Form: Oval.

Hilum: Narrow to oblong.

Base: Rounded to slightly cordate.

10 Apex: Obtuse with a sharp 1/16" [1.6 mm.] tip.

Sides: Equal.

Surface: Rough throughout, a vertical ridge on each side of the dorsal fin, another vertical ridge on each side closer to the ventral edge.

15 External color of stone: Deep yellowish brown [75. deep yBr] when dry.

Pit wall color when cracked: Moderate yellowish brown [77.] m.yBr|.

Cavity surface color: Deep yellowish brown [75. deep yBr].

20 Average pit wall thickness: 1/16" [1.6 mm.].

Average width: 5/8" [15.9 mm.]. Average length: 7/8" [22.2 mm.]. Average breadth: 3/8" [9.5 mm.]. Tendency to split: None observed.

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Form.—Oval. Skin color.—Strong yellowish brown [74. s.yBr]. *Pellicle color.*—Dark yellowish brown [78. d.yBr]. *Vein color.*—Deep yellowish brown [75. deep yBr]. *Taste*.—Bitter. Viable.—Yes. Average width.— $\frac{3}{8}$ " [9.5 mm.]. *Average length.*—½" [12.7 mm.]. Amygdalin.—Moderate.

USE

Market: Fresh market and long distance shipping.

Keeping quality: Good, fruit quality observed to remain in good condition after 30 days in standard cold room at 36° Fahrenheit [2° Celsius].

Shipping quality: Good.

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

OTHER NOTES

Although the new variety of interspecific 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 interspecific *Prunus* sp. tree, substantially as illustrated and described, that is most similar to 'Plumsweet IV' (U.S. Plant Pat. No. 16,461) interspecific, by being self-unfruitful and by producing fruit that is very sweet in flavor, juicy, clingstone in type, and two-tone in skin color, but is distinguished therefrom by producing fruit that is purely yellow in flesh color, that is globose instead of oblong in shape, that is smaller in size, and that matures at least forty days later.

