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(12) **United States Plant Patent**  
**Bradford**

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(54) **INTERSPECIFIC TREE NAMED 'PLUMRED I'**

(50) Latin Name: ***Prunus* sp.**

Varietal Denomination: **PLUMRED I**

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(52) **U.S. Cl.** ..... **Plt./180**

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See application file for complete search history.

(56)

**References Cited**

**U.S. PATENT DOCUMENTS**

PP13,476 P2 \* 1/2003 Bradford

\* cited by examiner

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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 large size, vigorous, hardy, and productive tree. Being self-unfruitful, the present variety requires cross pollination from an apricot, interspecific, or plum that blooms during the mid season. The fruit matures under the ecological conditions described during late June, with first picking on Jun. 30, 2006. The fruit is uniformly large in size, full red to purple in skin color, clingstone in type, somewhat obovate to cordate in shape, significantly red in flesh color, firm in texture, and excellent in flavor.

**1 Drawing Sheet**

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Botanical classification: *Prunus* sp.  
Varietal denomination: 'PLUMRED I'.

**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 'PLUMRED I'.

During a typical blooming season I select for some seed parents individual plum trees and place bouquets inside the tree perimeter to provide pollen. The bouquets are selected from different plum, apricot, and interspecific plum-apricot hybrid trees and are replaced approximately every two days for the duration of the bloom. During 2001 I selected an unnamed plum seedling, "36P645" (unpatented), as a seed parent and cross pollinated it using selected bouquets from several sources of apricot and interspecific plum-apricot 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 "36P645(OP)". They were 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 2004 the claimed variety was selected by me as a single plant 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 respects. The reproduction of the

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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 'YUMMYrosa' (U.S. 5 Plant Pat. No. 13,476) plum by being self-unfruitful and by producing fruit that is clingstone in type and that matures in late June, but is distinguished therefrom by producing fruit that is firmer in texture, that has a higher amount of red skin color, that is entirely red to pink in flesh color, and that is 10 larger in size.

**SUMMARY OF VARIETY**

The present interspecific variety is characterized by a 15 large size, vigorous, hardy, and productive tree. Being self-unfruitful, the present variety requires cross pollination from an apricot, interspecific, or plum that blooms during the mid season, such as 'Santa Rosa' (unpatented) plum. The present variety's abundance of blossoms and pollen entices 20 strong bee activity to facilitate pollination. The fruit matures under the ecological conditions described during late June, with first picking on Jun. 30, 2006. The fruit is uniformly large in size, full red to purple in skin color, clingstone in type, somewhat obovate to cordate in shape, significantly red 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 30 color and form, one fruit divided transversely to the suture plane to reveal the flesh and stone, typical leaves, and an inset displaying the blossoms on the tree.

**DETAILED BOTANICAL DESCRIPTION**

35 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 firm ripe on Jul. 4, 2006, on the original tree during its fifth 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.*—‘36P645’ (unpatented).

*Pollen parent.*—Unknown.

Tree

Size: Large, reaching and maintaining a height of 12' [3.66 m.] and a spread of 8' [2.44 m.] after five growing seasons utilizing typical dormant pruning.

Vigor: Medium, 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 production purposes.

Growth: Spreading and dense.

Form: Pruned to a perpendicular “V”.

Hardiness: Hardy with respect to central California winters.

Heat tolerance: Observed to perform adequately in typical central California climatic conditions, which typically include extended periods of heat.

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

Production: Medium productive, thinning usually required.

Fertility: Self-unfruitful, requiring cross pollination by a suitable mid seasonal blooming apricot, interspecific, or plum, such as ‘Santa Rosa’ (unpatented).

Bearing: Uncertain bearer, dependent upon favorable weather during the blooming period.

Trunk:

*Size.*—Large, reaching a maximum diameter of 5" [127 mm.] after the fifth growing season.

*Texture.*—Shaggy.

*Bark color.*—A Dark grayish brown [62. d.gy.Br] and Moderate brown [58. m.Br] variegation with Light yellowish brown [76. l.yBr] crevices present.

*Lenticels.*—Approximate Number Per Square Inch: 7. Color: Deep orange yellow [69. deep OY]. Typical Size:  $\frac{3}{16}$ " [4.8 mm.] to  $\frac{7}{16}$ " [11.1 mm.]. Shape: Eye-shaped to elongated.

Branches:

*Size.*—Diameter of limb is  $\frac{1}{2}$ " [64 mm.] measured 12" above the crotch,  $1\frac{1}{4}$  [32 mm.] measured 12" above the first fork.

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

*Color.*—1st Year Wood Topside: Deep brown [56. deep Br] when exposed to sunlight. 1st Year Wood Under-side: Brilliant yellow green [116. brill.YG]. Older Wood: Strong yellowish brown [74. s.yBr] with Moderate olive [107. m.Ol] showing through from underneath.

*Lenticels.*—Number Per Square Inch: More than 50 on second year wood. Color: Light yellowish brown [76. l.yBr]. Typical size:  $\frac{1}{32}$ " [0.8 mm.] to  $\frac{1}{8}$ " [3.2 mm.]. Shape: Elongated.

Leaves:

*Size.*—Medium. Average Length:  $4\frac{1}{4}$ " [108 mm.]. Average width:  $2\frac{1}{4}$ " [57 mm.].

*Arrangement.*—Alternate.

*Thickness.*—Medium.

*Form.*—Elliptical.

*Apex.*—Acuminate.

*Base.*—Acute with an average angle base angle of 65 to 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:  $\frac{1}{16}$ " [14.3 mm.]. Average Thickness:  $\frac{1}{16}$ " [1.6 mm.]. Color: Strong yellow green [117. s.YG] with Moderate yellowish brown [77. m.yBr] tinting with exposure to sunlight.

*Stipules.*—Number: 2 per leaf, up to 6 per growing tip. Average Length:  $\frac{3}{8}$ " [9.5 mm.]. Color: Very yellow green [115. v.YG] becoming Strong yellowish brown [74. s.yBr] with age.

*Glands.*—Number: 2 to 3 per leaf. Position: Mostly alternate, positioned on petiole and base of blade.

*Size.*—Small. Form: Reniform when mature. Color: Strong yellow green [117. s.YG] becoming Deep reddish brown [41. deep rBr] in the center with age.

*Leaf buds.*—Pointed, medium.

Flower buds:

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

*Diameter.*—Typically  $\frac{3}{16}$ " [4.8 mm.] 1 week before bloom.

*Length.*—Typically  $\frac{3}{8}$ " [9.5 mm.] 1 week before bloom.

*Form.*—Not appressed.

*Surface.*—Pubescent.

*Color.*—White [263. White].

Flowers: Perfect, complete, perigynous, usually a single pistil, typically twenty-four or more stamens, five sepals and petal locations alternatively positioned.

*Average flower diameter.*—1" [25.4 mm.].

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

*Petal shape.*—Oval.

*Petal margin.*—Smooth to slightly wavy.

*Average petal diameter.*— $\frac{7}{16}$ " [11.1 mm.].

*Average petal length.*— $\frac{1}{2}$ " [12.7 mm.].

*Petal apex.*—Rounded.

*Petal base.*—Obtuse.

*Petal color.*—White [263. White].

*Anther color.*—Light yellow [86. l.Y].

*Stigma color.*—Pale greenish yellow [104. p.gY].

*Sepal color.*—Strong yellow green [117. s.YG].

*Sepal length.*— $\frac{5}{32}$ " [4.0 mm.].

*Sepal width.*— $\frac{1}{8}$ " [3.2 mm.].

*Average pistil length.*— $\frac{9}{16}$ " [14.3 mm.].

*Average stamen length.*— $\frac{1}{2}$ " [12.7 mm.].

*Fragrance.*—Moderate.

*Pollen production.*—Moderate.

*Blooming period.*—Medium, five days after ‘Black Amber’ (unpatented).

*Onset of bloom.*—One percent on Feb. 18, 2006.

*Date of full bloom.*—Mar. 3, 2006.

*Duration of bloom.*—One to two weeks, dependent on ambient temperature.

*Bloom density.*—Very heavy.

*Number per cluster.*—2 to 9, average 4.

## Fruit

Maturity when described: Shipping ripe, Jul. 4, 2006.

Date of first picking: Jun. 30, 2006.

Date of last picking: Jul. 10, 2006.

Size: Uniform, large.

*Average diameter axially.*— $2\frac{3}{4}$ " [70 mm.].

*Average diameter across cheek plane.*— $2\frac{13}{16}$ " [71 mm.].

*Average diameter across suture plane.*— $2\frac{3}{4}$ " [70 mm.].

*Typical weight.*—6.7 ounces [190 grams].

Form: Uniform, symmetrical, obovate to cordate.

*Longitudinal section form.*—Obovate, cordate if viewed parallel to the suture.

*Transverse section through diameter.*—Round.

Suture: A shallow groove extending from the base to the apex.

Ventral surface: Rounded, lipped very slightly toward the base.

Lips: Equal.

Cavity: Flaring, circular, suture showing on one side, Strong greenish yellow [99. s.qY] stem markings typical.

*Depth.*— $\frac{3}{8}$ " [9.5 mm.].

*Breadth.*—1" [25.4 mm.].

Base: Somewhat truncate, cordate if viewed parallel to the suture.

Apex: Rounded.

Pistil point: An inconspicuous dot.

Stem: Medium.

*Average length.*— $\frac{3}{8}$ " [9.5 mm.].

*Average width.*— $\frac{1}{8}$ " [3.2 mm.].

Skin:

*Thickness.*—Medium.

*Surface.*—Smooth.

*Tenacity.*—Tenacious to flesh.

*Astringency.*—Slight.

*Tendency to crack.*—Slight in wet season.

*Color.*—Very dark red [17. v.d.R] smoothly blending into a Very deep red [14. v.deep R] background with Moderate orange yellow [7.1 m.OY] freckling throughout.

*Bloom.*—Abundant.

Flesh:

*Color.*—Light yellowish pink [28. l.yPk] with ample Very red [11. v.R] streaking next to the skin and stone.

*Surface of pit cavity.*—Covered with Very red [11. v.R] broken fibers when twisted away from stone.

*Amygdalin.*—Moderate.

*Juice.*—Abundant, rich.

*Texture.*—Firm, tough.

*Fibers.*—Abundant, fine.

*Ripens.*—Slightly earlier toward the apex.

*Flavor.*—Acidic and sweet, typically 19 brix.

*Aroma.*—Slight.

*Eating quality.*—Excellent.

## STONE

Type: Clingstone.

Form: Oval.

Hilum: Narrow, oblong.

Base: Straight.

Apex: Acuminate with a sharp  $\frac{1}{8}$ " [3.2 mm] tip.

Sides: Equal.

Surface: Rough with a single groove from base to apex on each side of dorsal fin.

External color of stone: Moderate yellowish brown [77. m.yBr].

Pit wall color when cracked: Moderate brown [58. m.Br].

Cavity surface color: Light brown [57. l.Br].

Average pit wall thickness:  $\frac{1}{16}$ " [1.6 mm.].

Average width:  $1\frac{1}{16}$ " [17.5 mm.].

Average length:  $1\frac{1}{4}$ " [31.8 mm.].

Average breadth:  $\frac{3}{8}$ " [9.5 mm.].

Tendency to split: None observed.

Kernel:

*Form.*—Oval.

*Skin color.*—Dark orange yellow [72. d.OY] when freshly removed.

*Pellicle color.*—Dark yellowish brown [78. d.yBr].

*Vein color.*—Moderate yellowish brown [77. m.yBr].

*Taste.*—Bitter.

*Viable.*—Yes.

*Average width.*— $\frac{1}{2}$ " [12.7 mm.].

*Average length.*— $1\frac{1}{16}$ " [17.5 mm.].

*Amygdalin.*—Abundant.

## USE

Market: Fresh market and long distance shipping.

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

Shipping quality: Very 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 similar to 'YUMMYrosa' (U.S. Plant Pat. No. 13,476) plum by being self-unfruitful and by producing fruit that is clingstone in type and that matures in late June, but is distinguished therefrom by producing fruit that is firmer in texture, that has a higher amount of red skin color, that is entirely red to pink in flesh color, and that is larger in size.

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