



US00PP27449P3

(12) **United States Plant Patent**  
**Bacon**(10) **Patent No.:** US PP27,449 P3  
(45) **Date of Patent:** Dec. 13, 2016

- (54) **PLUM TREE NAMED  
'SUPLUMFORTYEIGHT'**
- (50) Latin Name: *Prunus salicina*  
Varietal Denomination: Suplumfortyeight
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- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 163 days.

(21) Appl. No.: **14/121,916**(22) Filed: **Nov. 3, 2014**(65) **Prior Publication Data**

US 2016/0128251 P1 May 5, 2016

- (51) **Int. Cl.**  
**A01H 5/08** (2006.01)
- (52) **U.S. Cl.**  
USPC ..... **Plt./184**
- (58) **Field of Classification Search**  
USPC ..... Plt./184  
See application file for complete search history.

*Primary Examiner* — Keith Robinson(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear, LLP(57) **ABSTRACT**

A new and distinct plum tree variety, *Prunus salicina*, cv. 'Suplumfortyeight' is characterized by late season harvest and fruit having a pure yellow skin and a cling stone. The fruit is high in sugar and has medium-low acidity. The fruit of the new variety 'Suplumfortyeight' is also abundant in juice and has a sweet-neutral flavor. The harvest of fruit from the new variety starts about 27 days earlier than 'Flavor Queen' (U.S. Plant Pat. No. 7,420) and about 5 days later than 'Suplumsix' (U.S. Plant Pat. No. 2,747).

**1 Drawing Sheet****1**

Latin name of the genus and species claimed: *Prunus salicina*.

Variety denomination: 'Suplumfortyeight'.

**BACKGROUND AND SUMMARY OF THE INVENTION**

This invention relates to the discovery and asexual propagation of a new and distinct variety of plum, *Prunus salicina* cv. 'Suplumfortyeight'. The new variety was first originated by hybridization in September 2005 by Terry A. Bacon as breeder number 'PL624YY'.

The new variety 'Suplumfortyeight' is characterized by late-season harvest and by fruit having a pure yellow skin and a cling stone. The fruit is high in sugar and has medium-low acidity. The fruit of the new variety 'Suplumfortyeight' is also abundant in juice and has a sweet-neutral flavor.

The seed parent is 'Suplumfourteen' (U.S. Plant Pat. No. 5,342), and the pollen parent is unknown (bulk pollen). The parent varieties were first crossed in February 2002, with the date of first sowing being February 2003, and the date of first flowering being February 2005. The new plum variety 'Suplumfortyeight' was first asexually propagated by Terry Bacon near Wasco, Kern County, Calif. in January 2007 by grafting.

The new variety 'Suplumfortyeight' is distinguished from its seed parent 'Suplumfourteen' (U.S. Plant Pat. No. 5,342) by having fruit with a yellow skin compared to the red skin of the fruit of 'Suplumfourteen' (U.S. Plant Pat. No. 5,342).

The harvest of the new variety 'Suplumfortyeight' starts about 5 days before the harvest of 'Suplumsix' (U.S. Plant Pat. No. 2,747). The fruit of the new variety 'Suplumfortyeight' has a yellow skin color compared to the reddish-black skin of the fruit of 'Suplumsix' (U.S. Plant Pat. No.

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2,747). The skin color of the fruit of the new variety 'Suplumfortyeight' is somewhat similar to the skin color of the fruit of 'Flavor Queen' (U.S. Plant Pat. No. 7,420), but the skin color of the fruit of the new variety 'Suplumfortyeight' is nearly pure yellow compared to the green-yellow color of the fruit of 'Flavor Queen' (U.S. Plant Pat. No. 7,420). In addition, the harvest of the fruit of the new variety 'Suplumfortyeight' starts about 27 days later than 'Flavor Queen' (U.S. Plant Pat. No. 7,420).

The new variety 'Suplumfortyeight' has been shown to maintain its distinguishing characteristics through successive asexual propagations by, for example, grafting.

**BRIEF DESCRIPTION OF THE PHOTOGRAPH**

The accompanying color photographic illustration FIG. 1 shows typical specimens of the foliage and fruit of the present new plum variety 'Suplumfortyeight'. The illustration shows a 4 year old plant. The illustration shows the upper and lower surface of the leaves, a view of the fruit as a whole, the stone as a whole, and a sectional view of a fruit divided across its suture plane to show flesh color, pit cavity and the stone remaining in place.

The photographic illustration was taken shortly after being picked and the colors are as nearly true as is reasonably possible in a color representation of this type.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

Throughout this specification, color names beginning with a small letter signify that the name of that color, as used in common speech is aptly descriptive. Color names beginning with a capital letter designate values based upon The

R.H.S. Colour Chart published by The Royal Horticultural Society, London, England, 1986.

The descriptive matter which follows pertains to 9 year old 'Suplumfortyeight' trees, grown in the vicinity of Wasco, Kern County, Calif., during 2014, and is believed to apply to plants of the variety grown under similar conditions of soil and climate elsewhere. 5

## TREE

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*General:* (Measurements taken on an 9 year old tree unless otherwise noted.)

*Size.*—Medium, reaches a height of approximately 3 meters including normal pruning. 15

*Spread.*—Approximately 3 meters.

*Vigor.*—Medium, growth of about 1.8 m to 2 m in height the first growing season.

*Growth.*—Semi-upright.

*Productivity.*—Productive, fruit set is usually two or more times desired amount for marketable size fruit. 20

Thinning and spacing of fruit is necessary.

*Form.*—Vase formed.

*Bearer.*—Regular.

*Fertility.*—Unknown, should be planted with another 25 plum variety to ensure consistent production.

*Canopy density.*—Medium, pruning is required to open tree vase shape, allowing more sunlight to reach the center of the tree.

*Hardiness.*—Hardy in all fruit growing areas of California. Winter chilling requirement is approximately 30 750 hours at or below 7.2° C.

*Disease resistance/susceptibility.*—Under close observation in Kern County, Calif., no particular plant/fruit disease resistance/susceptibility has been 35 observed.

*Insect resistance/susceptibility.*—Under close observation in Kern County, Calif., no particular plant/fruit insect resistance/susceptibility has been observed.

*Trunk:* (Measurements at approximately 30 cm above soil 40 line on mature tree.)

*Diameter.*—Approximately 15 cm, and varies with soil type, fertility, climatic conditions and cultural practices.

*Texture.*—Medium shaggy, increases with age of tree. 45

*Trunk color.*—About Dark Greyed-White 156A in exposed areas to about Medium Greyed-Orange 164B in recesses; becomes darker with age.

*Branches:* (Measurements at approximately 90 cm above soil line.) 50

*Size.*—Diameter approximately 9 cm.

*Texture.*—Smooth to slightly shaggy, increasing with tree age.

*Color.*—Varying between about Medium Greyed-Green 197D to about Dark Greyed-Green 197B on exposed areas, to about Medium Greyed-Orange 164C in recesses. 55

*Lenticels.*—Present.

*Lenticels:*

*Number.*—Medium.

*Density.*—Varies with tree vigor and climatic conditions, about 2/cm<sup>2</sup>.

*Color.*—About Medium Grey-Brown 199B.

*Size.*—Medium.

*Length.*—About 3 mm.

*Width.*—About 2 mm.

*Flowering shoots:* (Data taken in September at mid-point of current season growth.)

*Size.*—Average diameter approximately 5 mm.

*Color.*—Topside: About Dark Greyed-orange 176A.

Underside: About Dark Greyed-Orange 176A with about Medium Green 138B background.

*Internode length.*—Medium; approximately 2 cm. Midway on flowering shoot.

*Flowering shoot lenticels.*—Medium amount. Color: About Medium Greyed-Orange 164B. Diameter: Approximately 0.5 mm.

*Flowering shoot leaf buds.*—Shape: Broad obovate. Width: Approximately 2 mm. Length: Approximately 2 mm. Color: About Dark Greyed-Orange 166A.

*Flowering shoot flower buds.*—Shape: Ovoid. Width: Approximately 1.2 mm. Length: Approximately 2 mm. Color: About Dark Greyed-Orange 166A. Number of buds per node: About 2-4, usually 2.

*Intensity.*—Medium.

*Density of buds.*—Medium.

*Flower bud distribution.*—On spurs and one year old shoots and older wood.

*Ratio of wood (leaf) buds to flowering buds.*—1/2 on nodes.

*Anthocyanin intensity.*—Strong.

*Spurs length.*—Usually 5 mm.

*Vegetative bud size.*—Length 2 mm, width 1.5 mm.

*Position of vegetative bud in relation to shoot.*—Slightly held out.

## FOLIAGE

*Leaves:* (Data taken in September on fully expanded leaves at mid-point of the current season growth.)

*Size.*—Medium.

*Average length.*—Medium; approximately 70 mm without petiole.

*Average width.*—Medium; approximately 32 mm.

*Thickness.*—Medium.

*Color.*—Upper surface: About Medium Green 137B. Lower surface: About Medium Green 137D.

*Form.*—Broad obovate.

*Tip.*—Cuspidate.

*Base.*—V-shaped.

*Margin.*—Crenate.

*Venation.*—Pinately net veined.

*Vein color.*—About Light Green 138C.

*Surface texture.*—Smooth on both upper and lower side.

*Leaf blade (ratio of length to width).*—Medium, about 2:1.

*Shape in the cross section.*—Concave.

*Angle at apex.*—Small.

*Profile.*—Up folded.

*Leaf blade tip.*—Curved downward.

*Angle of tip.*—Acute.

*Undulation of margin.*—Slight.

*Glossiness of upper side.*—Weak.

*Density of pubescence of lower side.*—Absent or very slight.

*Petiole:*

*Average length.*—Medium; approximately 12 mm.

*Average diameter.*—Approximately 1.5 mm.

<i>Color.</i> —About Light Green 138C on shaded underside and about Medium Greyed-Red 179B on topside where sunlight hits.		<i>Positioning.</i> —Adpressed to petals.
<i>Stipules:</i>		<i>Pubescence of inner surface.</i> —Absent.
<i>Number/leaf bud.</i> —Approximately 0-2 per leaf bud when present.	5	<i>Pubescence of outer surface.</i> —Absent.
<i>Typical length.</i> —Approximately 8 mm.		<i>Frequency of flowers with double sepals.</i> —None.
<i>Color.</i> —About Medium Yellow-Green 147C.		
<i>Persistence.</i> —Falls off.		<i>Stamens:</i>
<i>Width.</i> —Approximately 2 mm.	10	<i>Anther color.</i> —About Dark Number: Usually 25-30.
<i>Leaf glands:</i>		<i>Average length.</i> —About 1-10 mm.
<i>Form.</i> —Globose.		<i>Filament color.</i> —About White 155D. Greyed-Yellow 162A.
<i>Average number.</i> —Approximately 0 to 3, usually 2.		<i>Flower pollen color.</i> —About Dark Greyed-Yellow 162A when dried.
<i>Positioning.</i> —On petiole, alternate.	15	<i>Position.</i> —Perigynous.
<i>Size.</i> —Small, 1 mm diameter.		<i>Amount of pollen.</i> —Abundant.
<i>Color.</i> —About Medium Greyed-Orange 178B in late summer.		
FLOWERS	20	<i>Pistil:</i>
<i>General:</i>		<i>Number.</i> —Usually one, occasionally 2.
<i>Flower blooming period.</i> —First bloom: Approximately March 4. Full bloom: Approximately March 8.		<i>Average length.</i> —Approximately 6-9 mm.
<i>Location of first bloom.</i> —Top of tree.	25	<i>Ovary diameter.</i> —Approximately 1 mm.
<i>Location of full bloom.</i> —Mid-section of the canopy.		<i>Pubescence.</i> —None.
<i>Time of bloom.</i> —Medium.		<i>Stigma extension in comparison to anthers.</i> —Usually below.
<i>Duration of bloom.</i> —Medium; approximately 12 days.		<i>Style frequency of supplementary pistils.</i> —Few.
<i>Diameter of fully opened flower.</i> —Medium, approximately 7 mm.	30	
<i>Flower aroma.</i> —Slight.		<i>Receptacle:</i>
<i>Shape.</i> —Rosaceous.		<i>Depth.</i> —Medium.
<i>Pedicel:</i>		<i>Size.</i> —Approximately 4 mm wide by 3 mm long.
<i>Length.</i> —Medium; approximately 11 mm.	35	<i>Pubescence of inner surface.</i> —Absent.
<i>Diameter.</i> —Slender; approximately 1.5 mm.		<i>Pubescence of outer surface.</i> —Absent.
<i>Color.</i> —About Medium Yellow-Green 144B.		
<i>Pubescence.</i> —Absent.		<i>Ovary:</i>
<i>Petals:</i>		<i>Pubescence.</i> —Absent.
<i>Number.</i> —5.		<i>Diameter.</i> —Approximately 1 mm.
<i>Arrangement.</i> —Free.	40	<i>Color.</i> —About Medium Green 137D.
<i>Length.</i> —Approximately 9 mm.		
<i>Diameter.</i> —Approximately 7 mm.		<i>Style:</i>
<i>Shape.</i> —Obovate.		<i>Pubescence (of base).</i> —Absent.
<i>Apex shape.</i> —Rounded.		
<i>Base shape.</i> —Narrows at point of attachment.		FRUIT
<i>Color of inner and outer surface.</i> —About White 155D.		
<i>Surface texture.</i> —Smooth, on both upper and lower side.		<i>General:</i> (Description taken near Wasco, Kern County, Calif. on August 26.)
<i>Margins.</i> —Undulating.		<i>Date of first pick.</i> —Approximately August 22.
<i>Frequency of flowers with double petals.</i> —None.	50	<i>Date of last pick.</i> —Approximately September 1.
<i>Size.</i> —Medium.		<i>Maturity when described.</i> —Firm-mature.
<i>Claw length.</i> —Medium, approximately 1 mm.		<i>Season ripening.</i> —Late.
<i>Margin waviness.</i> —Medium.		<i>Position of maximum diameter.</i> —Middle.
<i>Base angle.</i> —Narrow.		<i>Symmetry about the suture.</i> —Symmetric.
<i>Division of upper margin.</i> —Entire.		<i>Shape of base.</i> —Flat.
<i>Pubescence of inner surface.</i> —Absent.		
<i>Pubescence of outer surface.</i> —Absent.		<i>Size:</i>
<i>Sepals:</i>		<i>Length (stem end to apex).</i> —Approximately 65 mm.
<i>Number.</i> —5.		<i>Diameter in line with suture plane.</i> —Approximately 65 mm.
<i>Length.</i> —Approximately 3 mm.	60	<i>Diameter perpendicular to suture plane.</i> —Approximately 66 mm.
<i>Diameter.</i> —Approximately 3 mm.		<i>Average weight.</i> —Approximately 161 gm.
<i>Shape.</i> —Triangular.		
<i>Color.</i> —About Medium Green 143C.		<i>Form:</i>
<i>Surface texture.</i> —Smooth, on both upper and lower side.		<i>Viewed from apex.</i> —Rounded.
<i>Margins.</i> —Entire.	65	<i>Viewed from side, facing suture.</i> —Rounded.
		<i>Viewed from side, perpendicular to suture.</i> —Rounded.
		<i>Apex shape:</i> Rounded.
		<i>Fruit stem cavity:</i>
		<i>Shape.</i> —Elongated in suture plane.
		<i>Depth.</i> —Medium; Approximately 0.8 cm.
		<i>Breadth.</i> —Approximately 1 cm.
		<i>Width.</i> —Narrow, approximately 4 mm.
		<i>Fruit stem:</i>
		<i>Length.</i> —Medium; approximately 8 mm.
		<i>Diameter.</i> —Approximately 3 mm.
		<i>Color.</i> —About Light-Yellow-Green 147D.
		<i>Adherence to stone.</i> —Weak.

Fruit skin:

*Thickness.*—Medium.  
*Adherence to flesh.*—Medium.  
*Surface texture.*—Smooth.  
*Pubescence.*—None.  
*Bloom.*—Medium.  
*Ground color.*—About Medium Yellow-Green 151C when visible.  
*Overcolor.*—About Medium Yellow-Orange 16A.  
*Relative area of overcolor.*—100%.  
*Pattern of overcolor.*—Nearly solid with slightly visible lenticels.  
*Taste.*—Neutral.  
*Reticulation.*—Absent.  
*Roughness.*—Absent.  
*Tenacity.*—Tenacious to flesh.  
*Tendency to crack.*—None in wet season.

Flesh:

*Ripens.*—Evenly.  
*Texture.*—Fine.  
*Fibers.*—Few.  
*Flavor.*—Sweet-neutral.  
*Brix.*—Approximately 19°.  
*Juice.*—Abundant to moderate.  
*Aroma.*—Slight fruity aroma.  
*Color.*—About Medium Yellow-Orange 14C.  
*Anthocyanin color around stone.*—Absent.  
*Anthocyanin color of flesh.*—Absent.  
*Acidity.*—Medium-low.  
*Sugar content.*—High.  
*Eating quality.*—Good.  
*Stone/flesh ratio.*—Small, about 1/30.  
*Firmness.*—Medium.

Pit cavity size:

*Length.*—Approximately 19 mm.  
*Diameter perpendicular to suture plane.*—Approximately 14 mm.  
*Diameter in line with suture.*—Approximately 10 mm.  
*Color.*—About Medium Yellow-Orange 23C.

Fruit use: Fresh market.  
Fruit shipping and keeping quality: Good.  
Stone:  
*Stone freeness.*—Cling over the entire surface.  
*Degree of adherence to flesh.*—Medium.  
*Stone size.*—Size: Small. Size compared to Fruit: Small. Length: Medium, approximately 19 mm. Diameter in line with suture plan: Approximately 14 mm. Diameter perpendicular to suture plane: Approximately 10 mm. Width of Stalk End: Medium, Approximately 6 mm. Angle of Stalk end: Right angle. Hilum: Oval.  
*Stone form.*—Viewed from side: Oval with flat base. Viewed from ventral end: Flattened. Viewed from Stem end: Oval.  
*Stone shape.*—Base shape: Nearly straight. Apex shape: Rounded with small point.  
*Stone surface.*—Slightly rough with irregular shallow furrows.  
*Stone halves.*—Nearly symmetrical.  
*Stone ridges.*—Rough, rounded, continuous.  
*Stone outgrowing keel.*—Partly developed.  
*Stone tendency to split.*—Almost none.  
*Stone color.*—About Dark Orange 26A.  
*Position of maximum.*—Middle.  
*Sides.*—Nearly equal.  
*Pits.*—Angular.  
*Ventral edge.*—Narrow.  
*Dorsal edge.*—Narrow continuous.  
Lenticels:  
*Number.*—Approximately 75 lenticels/cm<sup>2</sup>.  
*Size.*—Approximately 0.5 mm.

What is claimed is:

1. A new and distinct plum tree as herein described and illustrated.

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