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Zaiger et al.

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(54) **INTERSPECIFIC TREE NAMED ‘FLORA’S FLAVOR’**

(50) Latin Name: *Interspecific Prunus species*
Varietal Denomination: **Flora’s Flavor**

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(58) **Field of Classification Search**
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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct variety of interspecific tree. The following features of the tree and its fruit are characterized with the tree budded on ‘Nemaguard’ Rootstock (non-patented), grown on Handford sandy loam soil with Storie Index rating 95, in USDA Hardiness Zone 9, near Modesto, Calif., with standard commercial fruit growing practices, such as pruning, thinning, spraying, irrigation and fertilization. Its novelty consist of the following combination of desirable features:

1. Tree having a vigorous, upright growth habit.
2. Tree being a regular and productive bearer of large size, yellow flesh fruit.
3. Fruit with an attractive dark purple skin color.
4. Fruit with very good flavor and eating quality.
5. Fruit with good storage and shipping quality.

1 Drawing Sheet

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Botanical designation: Interspecific *Prunus species*.
Variety denomination: ‘Flora’s Flavor’.

BACKGROUND OF THE VARIETY

Field of the Invention

In the field of plant genetics, we conduct an extensive and continuing plant-breeding program including the organization and asexual reproduction of orchard trees, and of which plums, peaches, nectarines, apricots, cherries, almonds and interspecifics are exemplary. It was against this background of our activities that the present variety of interspecific tree was originated and asexually reproduced by us in our experimental orchard located near Modesto, Stanislaus County, Calif.

PRIOR VARIETIES

Among the existing varieties of interspecific trees, which are known to us, and mentioned herein, ‘Flavorich’ Interspecific (U.S. Plant Pat. No. 8,546), ‘Honey Punch’ Interspecific (U.S. Plant Pat. No. 19,596), the proprietary non-patented interspecific plums ‘147LB395’ and ‘4G1180’ and the proprietary non-patented plum ‘24EB412’.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT

Not applicable.

ORIGIN OF THE VARIETY

The new and distinct variety of interspecific tree was developed by us in our experimental orchard located near

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Modesto, Calif. from a first generation cross between ‘Flavorich’ Interspecific (U.S. Plant Pat. No. 8,546) and the proprietary non-patented interspecific seedling selection ‘147LB395’. The pollen parent ‘147LB395’ originated from crosses between the proprietary non-patented plum seedling selection ‘24EB412’ and the proprietary non-patented interspecific seedling selection ‘4G1180’. A large number of these first generation seedlings were planted and maintained on their own root system and under close and careful observation we recognized the desirable fruit and tree characteristics of the present variety and selected it in 1994 for additional asexual propagation and commercialization.

ASEXUAL REPRODUCTION OF THE VARIETY

In 1994 asexual reproduction of the new and distinct variety of interspecific tree was by budding to ‘Nemaguard’ Rootstock (non-patented), as performed by us in our experimental orchard located near Modesto, Calif., and shows that reproductions run true to the original tree and all characteristics of the tree and its fruit are established and transmitted through succeeding asexual propagations.

SUMMARY OF THE NEW VARIETY

The present new and distinct variety of interspecific tree is of large size, vigorous, upright growth and a regular and productive bearer of large size, clingstone fruit with an attractive dark purple skin color. The fruit is further characterized by its firm, yellow flesh, very good flavor and eating quality with good handling and shipping ability. In comparison to its seed parent ‘Flavorich’ Interspecific (U.S. Plant Pat. No. 8,546) the fruit of the new variety is approxi-

mately 27 days later in maturity and has a globose shape compared to elongated. In comparison to its proprietary non-patented interspecific pollen parent '147LB395' the fruit of the new variety is approximately 10 days earlier in maturity. In comparison to the commercial variety 'Honey Punch' Interspecific (U.S. Plant Pat. No. 19,596) the fruit of the new variety is approximately 12 days later in maturity and has yellow flesh compared to red.

DESCRIPTION OF THE PHOTOGRAPH

The accompanying color photographic illustration shows typical specimens of the foliage and fruit of the present new interspecific variety. The illustration shows the upper and lower surface of the leaves, an exterior and sectional view of a single fruit divided in its suture plane to show flesh color, pit cavity and the stone remaining in place. The photographic illustration was taken shortly after being picked (shipping ripe) from a 20 year old tree and the colors are as nearly true as is reasonably possible in a color representation of this type.

DESCRIPTION OF THE VARIETY

The following is a detailed botanical description of the new variety of interspecific tree, its flowers, foliage and fruit, as based on observations of 20 year old specimens grown near Modesto, Calif., with color in accordance with Munsell Book of Color published in 1958.

Tree:

Size.—Large, pruned to 3 to 3.5 meters in height and width for economical harvesting of fruit. Varies with different cultural practices.

Vigor.—Vigorous, tree growth of 1.5 to 2 meters the first growing season. Varies with cultural practices, soil type, fertility and climatic conditions.

Form.—Upright growth, usually pruned to vase shape.

Branching habit.—Upright, crotch angle approximately 35°, increases with heavy crop load.

Productivity.—Productive, thinning and spacing of fruit necessary for desired market size fruit. Number of fruit set varies with climatic conditions during blooming period.

Bearer.—Regular, adequate fruit set 20 consecutive years. No alternate bearing observed.

Fertility.—Self-sterile, pollinator required.

Density.—Medium dense, usually pruned to vase shape to increase air movement and sunlight to enhance fruit color and health of fruit spurs.

Hardiness.—Hardy in all stone fruit growing areas of California. Tree grown in USDA Hardiness Zone 9. Winter chilling requirement approximately 850 hours at or below 45° F.

Trunk:

Size.—Large. Average circumference 59.4 cm at 27.9 cm above ground on a 20 year old tree.

Stocky.—Medium stocky.

Texture.—Medium shaggy, roughness increases with age of tree.

Color.—Varies from 5YR 5/1 to 10YR 5/1.

Branches:

Size.—Medium. Average circumference 14.0 cm at 1.2 meters above ground. Crotch angle approximately 35°, increases with heavy crop load.

Surface texture.—New growth relatively smooth. Mature growth medium rough, roughness increases with age.

Lenticels.—Average number 93 in a 25.8 square cm area. Average length 2.9 mm. Average width 1.3 mm. Color 2.5YR 4/8.

Color.—New growth varies from 2.5GY 8/6 to 2.5GY 7/6. Old growth varies from 7.5R 3/6 to 7.5R 4/6, varies with age of growth.

Leaves:

Size.—Medium to large. Average length 96.8 mm. Average width 46.2 mm.

Form.—Oblanceolate.

Apex.—Acuminate.

Base.—Cuneate.

Margin.—Doubly serrate.

Thickness.—Medium.

Surface texture.—Upper surface relatively smooth, slight indentations over midrib and leaf veins. Lower surface relatively smooth, except for small ridges created by midrib and pinnate venation. Both upper and lower surfaces glabrous.

Petiole.—Small to medium. Average length 13.8 mm. Average width 1.6 mm. Longitudinally grooved. Surface — glabrous. Color varies from 2.5GY 7/6 to 7.5R 3/6.

Glands.—Type — globose. Size — medium to large. Average length 1.0 mm. Average diameter 0.6 mm. Number varies from 1 to 2, average number 2. Located primarily on the base of the leaf blade and upper portion of the petiole. Color varies from 10Y 7/4 to 2.5GY 7/4.

Stipules.—Average number 2. Average length 9.9 mm. Edges — pectinate. Color varies from 2.5GY 6/4 to 5GY 5/4.

Color.—Upper surface varies from 5GY 3/4 to 7.5GY 3/4. Lower surface varies from 5GY 4/4 to 7.5GY 4/4. Midvein color varies from 2.5GY 8/4 to 2.5GY 7/4.

Flower buds:

Size.—Large. Average length 7.9 mm. Average diameter 5.5 mm.

Hardiness.—Hardy with respect to California winters.

Density.—Very dense.

Form.—Conical, becoming elongated just before opening.

Pedicel.—Average length 8.3 mm. Average width 0.6 mm. Surface — glabrous. Color 5GY 6/10.

Color.—N 9.5/(white).

Number of buds per spur.—Average number 10, varies from 2 to 17.

Flowers:

Blooming period.—Date of First Bloom Feb. 28, 2016. Date of Petal Fall Mar. 9, 2016, varies slightly with climatic conditions.

Size.—Large. Average height 11.8 mm. Average diameter 23.0 mm.

Petals.—Normally 5, alternately arranged to sepals. Size — medium to large. Average length 10.9 mm. Average width 8.9 mm. Form — elliptical. Arrangement — free. Petal apex — rounded. Petal base — truncated. Margin — sinuate. Color N 9.5/(white). Both upper and lower surfaces glabrous.

Sepals.—Normally 5, alternately arranged to petals. Size — medium. Average length 3.6 mm. Average

width 2.1 mm. Shape — triangular. Apex — triangular. Margin — entire. Both upper and lower surfaces glabrous. Color — upper surface 5GY 6/8. Lower surface 5GY 6/6.

Stamens.—Average number per flower 26. On average, the stamens are above the height of the petals. Average filament length 8.4 mm. Filament color N 9.5/(white). Anther color 1.25YR 5/12.

Pollen.—Self sterile, pollinator required. Color 1.25YR 5/12.

Pistil.—Number — normally 1. Average length 10.1 mm. Position of stigma an average of 1.2 mm above anthers. Surface — glabrous. Color 5GY 9/4.

Fragrance.—Moderate aroma.

Color.—N 9.5/(white).

Pedicel.—Average length 9.6 mm. Average width 0.7 mm. Surface — glabrous. Color 5GY 6/10.

Number flowers per flower bud.—Average number 2, varies from 1 to 3.

Fruit:

Maturity when described.—Firm ripe and ready for consumption.

Date of first picking.—Aug. 30, 2016.

Date of last picking.—Sep. 9, 2016, varies slightly with climatic conditions.

Size.—Large. Average diameter axially 57.7 mm. Average transversely in suture plane 62.2 mm. Average weight 150.5 grams, varies slightly with fertility of the soil, amount of thinning and climatic conditions.

Form.—Globose.

Suture.—Slightly lipped.

Ventral surface.—Slightly lipped.

Apex.—Slightly retuse.

Base.—Flat.

Stem cavity.—Rounded. Average depth 5.0 mm. Average diameter 3.6 mm.

Stem:

Size.—Medium. Average length 16.0 mm. Average diameter 2.1 mm.

Color.—Varies from 2.5GY 6/6 to 10YR 4/4.

Flesh:

Ripens.—Evenly.

Texture.—Firm, meaty.

Fibers.—Few, small, tender.

Firmness.—Firm, comparable to other commercial interspecific varieties.

Aroma.—Slight.

Amydgalin.—Undetected.

Eating quality.—Very good.

Flavor.—Very good, good balance between acid and sugar.

Juice.—Heavy amount, enhances flavor.

Acidity.—Not available.

Brix.—Average Brix 20.0°, varies slightly with amount of fruit per tree and climatic conditions.

Color.—Varies from 2.5Y 8/6 to 2.5Y 8/8.

Pit cavity.—Average length 22.7 mm. Average width 19.7 mm. Average depth 6.1 mm. Color varies from 10YR 7/8 to 10YR 6/8.

Skin:

Thickness.—Medium.

Surface.—Slightly waffled.

Bloom.—Moderate amount, complete coverage.

Tendency to crack.—None.

Color.—Ground color varies from 2.5Y 5/4 to 2.5Y 8/6. Overspread with 5R 2/2 to 7.5R 2/2.

Tenacity.—Tenacious to the flesh.

Astringency.—Undetected.

Stone:

Type.—Clingstone, medium adherence to flesh.

Size.—Medium. Average length 21.7 mm. Average width 18.7 mm. Average thickness 10.2 mm.

Form.—Obovoid.

Base.—Flat.

Apex.—Pointed. Average length 1.0 mm.

Surface.—Slightly pitted throughout. One shallow groove on each side of suture extending from base to apex.

Sides.—Unequal, one side extending further outward from suture plane.

Ridges.—Small, extending from base toward apex.

Tendency to split.—None.

Color.—Varies from 10YR 6/6 to 10YR 6/8 when dry.

Kernel:

Size.—Small to medium. Average length 13.7 mm. Average width 10.9 mm. Average depth 5.1 mm.

Form.—Ovate.

Viability.—Viable, complete embryo development.

Skin color.—Varies from 5Y 9/4 to 5Y 8.5/6.

Use:

Dessert.—Market — local and long distance.

Keeping quality: Good, held firm in cold storage for 3 weeks at 38° to 42° F. without internal breakdown of flesh or appreciable loss of eating quality.

Shipping quality: Good, showed minimal skin scarring or flesh bruising during picking, packing and shipping trials.

Plant/fruit disease resistance/susceptibility: No specific testing for relative plant/fruit disease resistance/susceptibility has been designed. Under close observation during planting, growing and harvesting of fruit, under normal cultural and growing conditions near Modesto, Calif., no particular plant/fruit disease resistance or susceptibility has been observed. Any variety observed during indexing of plant characteristics with abnormal fungus, bacterial, virus or insect susceptibility is destroyed and eliminated from our breeding program. No atypical resistances/susceptibilities have been noted under normal cultural practices. The present new variety of interspecific tree, its flowers, foliage and fruit herein described may vary in slight detail due to climate, soil conditions and cultural practices under which the variety may be grown. The present description is that of the variety grown under the ecological conditions prevailing near Modesto, Calif.

The invention claimed is:

1. A new and distinct variety of interspecific tree, substantially as illustrated and described.

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