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(54) PEACH TREE NAMED 'TAZ'

- (50) Latin Name: *Prunus persica* Varietal Denomination: **TAZ**
- (71) Applicants: Gary Neil Zaiger, Modesto, CA (US); Leith Marie Gardner, Modesto, CA (US); Grant Gene Zaiger, Modesto, CA (US)
- (72) Inventors: Gary Neil Zaiger, Modesto, CA (US); Leith Marie Gardner, Modesto, CA (US); Grant Gene Zaiger, Modesto, CA (US)
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U.S.C. 154(b) by 0 days.

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Primary Examiner — Anne Grunberg

(57) ABSTRACT

A new and distinct variety of peach tree (*Prunus persica*). 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. Regular and productive bearer of large size fruit.
- 3. Firm fruit with attractive red skin color.
- 4. Fruit with very good flavor and eating quality.
- 5. Fruit with good storage and shipping quality.

1 Drawing Sheet

1

Botanical designation: *Prunus persica*. Variety denomination: 'TAZ'.

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 peach tree was originated and asexually reproduced by us in our experimental orchard located near Modesto, Stanislaus County, 15 Calif.

PRIOR VARIETIES

Among the existing varieties of peach trees, which are 20 known to us, and mentioned herein, 'Zee Pride' Peach (U.S. Plant Pat. No. 22,606) and our proprietary non-patented peach varieties '226LV474', '152LT601', '133LM533', '243LP483' and '242LP147'.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT

Not applicable.

ORIGIN OF THE VARIETY

The new and distinct variety of peach tree (*Prunus persica*) was developed by us in our experimental orchard

2

located near Modesto, Calif. as a first generation cross between our proprietary non-patented peach seedling selections '226LV474' and '152LT601'. The seed parent (226LV474) originated as a first generation cross between 5 our proprietary non-patented peach seedling selections '133LM533' and '243LP483'. The pollen parent (152LT601) originated as an open pollinated seedling selection from our proprietary non-patented peach seedling selection with the field identification number '242LP147'. A large number of these first generation seedlings were budded onto older established trees of 'Nemaguard' Rootstock (nonpatented) to enhance earlier fruit production for evaluation. Under close and careful observation we recognized the desirable tree and fruit characteristics of the present seedling and selected it in 2010 for additional asexual propagation and commercialization.

ASEXUAL REPRODUCTION OF THE VARIETY

In 2010 asexual reproduction of the new and distinct variety of peach 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 variety of peach tree (*Prunus persica*) is of large size, vigorous, upright growth and a regular and productive bearer of large size, yellow flesh, clingstone fruit with very good flavor and eating quality. The fruit is further characterized by having firm flesh and an attractive red skin color. In comparison to its non-patented peach seed parent

'226LV474' the fruit of the new variety has attractive red skin color compared to yellow and is approximately 37 days earlier in maturity. In comparison to its non-patented peach pollen parent '152LT601' the new variety requires approximately 900 hours chilling at 45° F. compared to 300 hours 5 and has a more attractive red skin color. In comparison to the commercial variety 'Zee Pride' Peach (U.S. Plant Pat. No. 22,606) the fruit of the new variety is larger in size and is approximately 23 days later in maturity.

DESCRIPTION OF THE PHOTOGRAPH

The accompanying color photographic illustration shows typical specimens of the foliage and fruit of the present new peach 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 20 being picked (shipping ripe) from a 6 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 peach tree, its flowers, foliage and fruit, as based on observations of 6 year old specimens grown near Modesto, Calif., with color in accordance with Munsell 30 Book of Color published in 1958. Tree:

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

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

Form.—Upright, usually pruned to vase shape.

Branching habit.—Upright, crotch angle approxi- 40 mately 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, has had adequate fruit set 4 consecutive years. No alternate bearing observed.

Fertility.—Self fertile.

Density.—Medium dense, usually pruned to vase shape to increase air movement and sunlight to enhance 50 Flowers: fruit color and health of fruit wood.

Hardiness.—Hardy in all stone fruit growing areas of California. Tree grown in USDA Hardiness Zone 9. Winter chilling requirement approximately 900 hours at or below 45° F.

Trunk:

Size.—Medium, average circumference 48.3 cm at 25.4 cm above ground on a 6 year old tree.

Stocky.—Medium stocky.

Texture.—Medium shaggy, roughness increases with 60 age.

Color.—Varies from 2.5Y 3/2 to 2.5Y 2/2.

Branches:

Size.—Medium. Average circumference 13.5 cm at 1.2 meters above ground. Crotch angle approximately 65 35°, increases with heavy crop load.

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

Lenticels.—Average number 15 in a 25.8 square cm section. Average length 5.8 cm. Average width 2.5 cm. Color varies from 7.5YR 4/6 to 7.5YR 3/6.

Color.—New growth varies from 5GY 7/6 to 5GY 6/6. Mature growth varies from 7.5YR 4/2 to 7.5YR 3/2, varies with age of growth.

Leaves:

Size.—Medium. Average length 153.0 mm. Average width 38.8 mm.

Form.—Lanceolate.

Apex.—Acuminate.

Base.—Cuneate.

Margin.—Crenate.

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.—Medium to large. Average length 9.3 mm. Average width 1.7 mm. Longitudinally grooved. Surface — glabrous. Color varies from 5GY 7/6 to 5GY 6/6.

Glands.—Type — reniform. Size — medium. Average length 1.4 mm. Average diameter 0.9 mm. Number varies from 2 to 7, average number 4. Located primarily on base of leaf blade and upper portion of petiole. Color 5GY 6/8.

Stipules.—Average number 2. Average length 5.1 mm. Edges — pectinate. Color varies from 5GY 8/8 to 5GY 7/8.

Color.—Upper surface varies from 7.5GY 2/4 to 5GY 2/2. Lower surface varies from 5GY 3/4 to 5GY 3/6. Midvein color varies from 10Y 8/2 to 5GY 6/4.

Flower buds:

Size.—Large. Average length 18.1 mm. Average diameter 10.0 mm.

Hardiness.—Hardy with respect to California winters. Density.—Medium dense.

Form.—Conical, becoming elongated just before opening.

Pedicel.—Small to medium. Average length 4.6 mm. Average width 1.2 mm. Surface — glabrous. Color varies from 5GY 6/10 to 7.5GY 7/6.

Color.—Varies from 10RP 8/6 to 10RP 7/6.

Blooming period.—Date of First Bloom Feb. 14, 2015. Date of Petal Fall Feb. 24, 2015, varies slightly with climatic conditions.

Size.—Large. Average height 23.1 mm. Average diameter 49.7 mm.

Petals.—Normally 5, alternately arranged to sepals. Size — large. Average length 22.9 mm. Average width 21.7 mm. Form — orbicular. Margin — sinuate. Arrangement — overlapping. Petal apex rounded. Petal base — truncate. Color varies from 10RP 9/2 to 10RP 8/6, varies with age of flower. Both upper and lower surfaces glabrous.

Sepals.—Normally 5, alternately arranged to petals. Size — large. Average length 6.4 mm. Average width 5.9 mm. Shape — ovate. Margin — entire. Apex rounded to triangular. Surface — upper surface gla-

brous, lower surface pubescent. Color — upper surface 5GY 6/6. Lower surface varies from 10RP 4/6 to 10RP 3/6.

Stamens.—Average number per flower 42. Average filament length 18.3 mm. On average, the stamens 5 are above the height of the petals. Filament color varies from N 9.5/(white) to 10RP 5/8. Anther color varies from 10RP 5/6 to 10RP 5/8.

Pollen.—Self fertile. Color varies from 2.5Y 8/6 to 7.5R 3/10.

Pistil.—Number — normally one. Average length 19.8 mm. Surface — pubescent. Position of stigma an average of 1.9 mm below anthers. Color varies from 7.5Y 8/8 to 7.5Y 8.5/8.

Fragrance.—Slight.

Color.—Varies from 10RP 9/2 to 10RP 8/6.

Pedicel.—Average length 4.1 mm. Average width 1.5 mm. Color varies from 5GY 7/16 to 5GY 6/6.

Number flowers per flower bud.—Normally one.

Fruit:

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

Date of first picking.—Jun. 28, 2015.

Date of last picking.—Jul. 8, 2015, varies slightly with climatic conditions.

Size.—Large. Average diameter axially 69.6 mm. Average transversely in suture plane 81.3 mm. Average weight 272.6 grams, varies slightly with fertility of the soil, amount of thinning and climatic conditions. Form.—Globose.

Suture.—Slightly lipped, extends from base to apex. Ventral surface.—Slightly lipped.

Apex.—Slightly retuse.

Base.—Flat to retuse.

Stem cavity.—Rounded to slightly elongated in suture 35 plane. Average depth 14.4 mm. Average diameter 10.6 mm.

Stem:

Size.—Small. Average length 9.8 mm. Average diameter 3.3 mm.

Color.—Varies from 5GY 6/6 to 5GY 5/8.

Flesh:

Ripens.—Evenly.

Texture.—Firm, meaty.

Fibers.—Few, small, tender.

Firmness.—Good, comparable to other commercial peach varieties.

Aroma.—Slight.

Amydgalin.—Undetected.

Eating quality.—Very good.

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

Juice.—Moderate amount, enhances flavor.

Acidity.—Not available.

Brix.—Average Brix 10.2°, varies slightly with amount of fruit per tree and climatic conditions.

Pit cavity.—Average length 37.2 mm. Average width 27.1 mm. Average depth 10.6 mm. Color varies from 10YR 7/10 to 7.5R 3/10.

Color.—Varies from 2.5Y 7/10 to 7.5R 3/12 near pit 60 cavity.

Skin:

Thickness.—Medium.

Surface.—Smooth.

Pubescence.—Moderate amount, short in length.

Tendency to crack.—None.

Color.—Ground color varies from 7.5YR 7/10 to 7.5YR 6/10. Overspread with 7.5R 4/10 to 5R 3/10.

Tenacity.—Tenacious to the flesh.

Astringency.—Undetected.

10 Stone:

Type.—Clingstone, strong adherence to flesh.

Size.—Large. Average length 36.2 mm. Average width 26.1 mm. Average thickness 19.2 mm.

Form.—Ovoid.

Base.—Flat.

Apex.—Pointed. Average length 2.3 mm.

Surface.—Pitted throughout, pits vary from round to elongated.

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

Ridges.—Small, narrow ridge extending from base toward apex.

Tendency to split.—None.

Color.—Varies from 5R 4/10 to 5YR 5/6 when dry.

Kernel:

Size.—Medium to large. Average length 19.6 mm. Average width 11.5 mm. Average depth 6.0 mm. Form.—Ovoid.

Viability.—Viable, complete embryo development. Skin color.—Varies from 5Y 8.5/8 to 2.5Y 8.5/8.

Use: Dessert.

Market.—Local and long distance.

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

Shipping quality: Good, showed minimal skin scarring or flesh bruising during picking, packing and shipping trials. Plant/fruit disease resistance/susceptibility: No specific test-

ing 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 or selection 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 peach 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 peach tree, substantially as illustrated and described.

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