



US00PP29884P3

(12) **United States Plant Patent**  
**Maillard et al.**

(10) **Patent No.:** **US PP29,884 P3**  
(45) **Date of Patent:** **Nov. 27, 2018**

(54) **NECTARINE TREE NAMED ‘CAKEBELLA’**

(50) Latin Name: ***Prunus persica* (L.) Batsch**  
Varietal Denomination: **CAKEBELLA**

(71) Applicant: **AGRO SELECTIONS FRUITS, Elne (FR)**

(72) Inventors: **Arsene Maillard, Elne (FR); Laurence Maillard, Elne (FR)**

(73) Assignee: **AGRO SELECTIONS FRUITS, Elne (FR)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/732,468**

(22) Filed: **Nov. 17, 2017**

(65) **Prior Publication Data**

US 2018/0153068 P1 May 31, 2018

(30) **Foreign Application Priority Data**

Nov. 25, 2016 (QZ) ..... PBR 2016/2954

(51) **Int. Cl.**

**A01H 5/08** (2018.01)

**A01H 6/74** (2018.01)

(52) **U.S. Cl.**

USPC ..... **Plt./188**

CPC ..... **A01H 6/7454** (2018.05); **A01H 5/08** (2013.01)

(58) **Field of Classification Search**

USPC ..... **Plt./188**

CPC ..... **A01H 5/0856**

See application file for complete search history.

*Primary Examiner* — Kent L Bell

(74) *Attorney, Agent, or Firm* — Westerman, Hattori, Daniels & Adrian, LLP

(57) **ABSTRACT**

A new and distinct variety of white flat nectarine tree denominated ‘CAKEBELLA’ has fruits with high eating quality and very long shelf life without alteration before and after harvesting, with a very well closed pistil cavity, with a semi-sweet white flesh having a red pigmentation, in particular around the stone cavity in a star shape, and an attractive luminous skin with a very high percentage of purple red blush on skin surface, on a red background.

**2 Drawing Sheets**

**1**

Botanical classification: *Prunus persica* (L.) Batsch.

Variety denomination: ‘CAKEBELLA’.

This application claims priority of Community plant variety right No. 2016/2954 filed on Nov. 25, 2016 (Nov. 25, 2016) which is hereby incorporated by reference in its entirety.

#### BACKGROUND OF THE NEW VARIETY

The present invention relates to a new and distinct variety of white flat nectarine tree, *Prunus persica* (L.) Batsch, which has been given the variety denomination ‘CAKEBELLA’.

This new tree produces fruits with a long shelf life without alteration both on the tree after growth completion and after harvesting, very good eating quality, semi-clingstone white flesh fruits, with a very slightly red pigmentation near the epidermis, for fresh market in July in the Pyrénées-Orientales department, France.

#### ORIGIN OF THE VARIETY

The ‘CAKEBELLA’ white flat nectarine tree originated from a cultivated area of the south of France, in the Pyrénées-Orientales department, where it was tested.

This place is under a Mediterranean climate (a temperate area), on the Mediterranean coastline. Winters are gentle and summers warm and dry. The amount of days with temperatures below 7° Celsius can vary between 600 and 1200 hours per year. The place is sunny, with 2400 to 2800 hours of sunny days per year on average. The prevailing wind is called ‘Tramontane’: it dries the air, clears the sky from

**2**

clouds, but its intensity can be strong and affect the harvest, fruit quantity and/or quality. Marine moisture does not affect the place. Precipitations are irregular through the year and from one year to another. The amount of rainy days does not exceed 80 days per year, and are mostly found in Spring and Autumn. In May and October, very intense precipitations occasionally happen. Summer is dry with a few thunderstorms.

The ‘CAKEBELLA’ variety results from a controlled cross between the ‘CAKEDELICE’ white flat nectarine tree (not patented) which was used as the seed parent and the ‘NECTARBOOM’ white nectarine tree (U.S. Plant Pat. No. 23,355) which was used as the pollen parent.

The ‘CAKEBELLA’ variety was obtained by hybridizing and propagated by grafting on a ‘INRA® GF677’ (non-patented) rootstock trees. It has been determined to have unique tree and fruit characteristics making it worthy for commercial fresh fruit production. There are no known effects of the standard rootstock trees set forth above on the scion cultivar. Asexually propagated plants remained true to the original tree and all characteristics of the tree and the fruit were transmitted. The plant was reproduced asexually by us in Les Régelines, Route d’Alenya, La Prade de Mousseillous, 66200 ELNE, Pyrénées-Orientales, France. More particularly, the plant was reproduced by grafting.

#### SUMMARY OF THE VARIETY

The new and distinct variety ‘CAKEBELLA’ white flat nectarine tree blooms at the end of February or during March near Elne in the Pyrénées-Orientales department, France. The blooming period is considered medium. However, it

was observed that its late date of blooming seems to be highly dependant on climatic conditions.

The first fruit of 'CAKEBELLA' ripens generally early to medium season, in the beginning of July. More particularly, it usually ripens between July 1<sup>st</sup> and July 6<sup>th</sup>. However, it was observed that its date of maturity seems to be highly dependant on climatic conditions.

#### DESCRIPTION OF THE DRAWINGS

In the accompanying drawing, which are as nearly true as it is reasonably possible to make in a color illustration of this type:

FIG. 1 is a color photograph that shows five trees of the new variety 'CAKEBELLA' at blooming time in orchard.

FIG. 2 is a color photograph which depicts the flower buds at different development stages, and the reverse and side view of the flower and the reproductive organs with petals removed, of the new variety.

FIG. 3 is a color photograph which shows three typical specimens of the fruit, one of them having been cut in half with the pit being left in one of the halves for depicting fruit flesh, pit and pit cavity of the new variety.

FIG. 4 is a color photograph showing a close view of typical specimens of the new variety at ripening time.

Due to chemical development, processing and printing, the flowers, stones and fruits depicted in these photographs may or may not be accurate when compared to the actual botanical specimen.

#### DETAILED BOTANICAL DESCRIPTION

The tree, flowers, and fruit may vary in slight detail due to variations in soil type, cultural practices, and climatic condition. The potential for commercial production of fresh fruits by 'CAKEBELLA' is high, due to fruit very long shelf life without alteration after harvesting.

Trees are vigorous and large stature half-standing in a semi-flared out aspect. The anthocyanic coloration of flowering shoot is present excluding brushwood side away from sun. The time of beginning of flowering is considered medium; flowering begins at the end of February or during March. The type of flower is showy (rosette) with large petal size. Petals are medium pink. Leaf glands are present and reniform. The fruit flesh is white, generally with a red pigmentation at ripening time and with a red pigmentation in a star shape around the stone cavity. The fruit skin is medium thick, with a luminous purple red blush on a red background. The stone is semi-clingstone and his size is medium. Fruit taste is semi-sweet, very aromatic and with a high level of sugars.

Compared to 'CAKEREVE' white flat nectarine variety (U.S. Plant Pat. No. 26,769), the fruits of 'CAKEBELLA' variety ripen approximately one week earlier, sometimes even more than one week earlier. The amount of flower produced by the new variety 'CAKEBELLA', between 40 and 45 flowers per linear meter, is lower than the flower productivity of the similar variety 'CAKEREVE', between 50 and 60 flowers per linear meter. 'CAKEBELLA' fruits show a very well closed pistil cavity. In comparison, 'CAKEREVE' fruits possess a pistil cavity well closed.

Compared to the seed parent 'CAKEDELICE' white flat nectarine tree (not patented), the new variety named 'CAKEBELLA' generally ripens more than 2 weeks earlier. Compared to the pollen parent 'NECTARBOOM' white nectarine tree (U.S. Plant Pat. No. 23,355), the new variety

named 'CAKEBELLA' differs from its pollen parent by the fruit shape: 'CAKEBELLA' is a flat nectarine whereas 'NECTARBOOM' is a round nectarine. Fruit of 'CAKEBELLA' ripen generally later than those of 'NECTARBOOM', approximately 10 to 15 days later.

#### DETAILED DESCRIPTION

Referring more specifically to the pomological details of this new and distinct variety of white flat nectarine tree, the following was observed on trees in their third growing season (second year of production) under the ecological conditions prevailing at the orchards located near the town of Elne, Pyrénées-Orientales departement, France. All observations have been done on rootstock cultivars. Used rootstocks were 'INRA® GF677' (non-patented) trees. All major color code designations are by reference to The R.H.S. Colour Chart (Fourth Edition) provided by The Royal Horticultural Society of Great Britain.

Tree:

*Size.*—

*Generally.*—Considered medium. The tree size the first year was approximately 200 to 280 cm. The tree was pruned during each following dormant season to a height of approximately 250 cm. Current season shoots growth could reach 80 cm. The tree size from the second year (second and next years) reached a final height of 330 cm including current season shoots length. The tree size is consistently reduced to 250 cm the next years.

*Spread.*—Approximately 100 cm with a cylindrical shape. The whole orchard was oriented to a central leader organization, with tree lines spaced of 4.0 meters and trees spaced of 1.0 meter in a same tree line. As a result, tree spread was about 100 cm and the orchard contained 2500 trees by hectare.

*Vigor.*—Considered medium to strong.

*Productivity.*—Considered good to very good and regular. Fruit set is spaced by thinning to develop the remaining fruit into the desired market sized fruit. The number of the fruit set varies with the prevailing climatic conditions and cultural practices employed during the bloom period, and is therefore not distinctive of the present variety. A reduce vegetation, obtained with pruning or green pruning, approximately 1 month or 1 month ½ before harvesting flat fruits, significantly promotes fruit qualities, especially growth, color and firmness. Moreover, contamination risks due to monilia or rot are significantly reduced. 'CAKEBELLA' variety is not much sensitive to cracking of pistil cavity, to cork formation into peduncle cavity or to monilia.

*Bearer.*—Very regular. The fruit distribution is considered homogenous on mixed branches and spurs having more than 1 year. Thinning of 2 fruits out of 3 was necessary for the tree valorisation. Thinning was necessary every year during the years of observation.

*Form.*—The 'CAKEBELLA' variety has naturally a semi-flared shape.

*Density.*—Considered dense.

*Hardiness.*—The present tree was grown and evaluated in France. The variety appears to be hardy under the central Pyrénées-Orientales departement typical climatic conditions. Experimentations on different sites

with winter chilling requirement comprised between 350 hours and 1200 hours showed a good behaviour of the tree in all cases. Traditionally, flat fruits are more sensitive to critical low temperatures and to climatic variations, because of the flower morphology in which the ovule is less protected than in the classical round fruits. Thus, areas not much exposed to frost are recommended for trees growth. However 'CAKEBELLA' trees seem to be very resistant to critical frosty weather.

#### Trunk:

*Diameter.*—Approximately 36 millimeters in diameter when measured at a distance of approximately 20 centimeters above the soil level.

*Bark texture.*—Considered rough, with lenticels.

*Lenticels.*—Numerous lenticels are present. The number of lenticels reaches 6 lenticels per cm<sup>2</sup>. The lenticels range in size from approximately 3.0 to 4.0 millimeters in width, and about 1.1 to 1.5 millimeters in height.

*Lenticel color.*—The lenticels have a beige color (RHS Greyed Yellow 161 D).

*Bark coloration.*—The bark has a grey to brown color (RHS Grey 201 A or RHS Grey 201 B or RHS Grey Brown N199A) darker than the outside of lenticels color.

#### Branches:

*Size.*—The branches are pruned to approximately 1.0 meter in length.

*Diameter.*—Average as compared to other nectarine varieties. The current season shoots have a diameter of approximately 4.0 to 5.0 millimeters, and mature branches have a diameter of approximately 6.0 to 8.5 millimeters.

*Surface texture.*—Smooth for current season shoots and rough, with lenticels, for mature branches, wood which is several years old has no furrowed appearance.

*Crotch angles.*—Primary branches are considered variable, but the crotch angles are generally 45.0 degrees from the horizontal axis. This particular characteristic is not considered distinctive of the variety, however.

*Current season shoots.*—

*Internode length.*—Generally 19.0 to 23.0 millimeters.

*Color.*—The color of new shoot tips is considered green (RHS Yellow Green 145 A) on lower part of new shoot tips, whereas the upper part is darker and colored in brown-purple more or less deep (RHS Greyed Purple 187 A or Greyed Purple 187 B), depending on the level on the tip and the sunlight exposure.

*Mature branches.*—

*Internode length.*—Generally 16.0 to 19.0 millimeters.

*Color of mature branches.*—Brown to slightly grey (RHS Grey Brown N199 A to RHS Grey Brown N 199 B).

*Lenticels.*—Numerous lenticels are present on mature branches. The number of lenticels reaches 2 lenticels per cm<sup>2</sup>. The size of lenticels is considered small. The lenticels range in size from approximately 1.2 to 1.5 millimeter in width, and about 0.8 to 1.0 millimeter in height. The lenticel shape is round and slightly stretched.

*Lenticel color.*—The lenticels on mature branches have a light beige color (RHS Greyed Orange 164 C or RHS Greyed Orange 164 D).

#### Leaves:

*Size.*—Considered medium for the species. The ratio leaf length/leaf width is 3.91.

*Leaf length.*—The medium length is about 152.67 millimeters with leaf petiole.

*Leaf width.*—The medium width is 39.0 millimeters.

*Leaf shape in cross section.*—Concave.

*Leaf form.*—Lanceolate.

*Leaf tip form.*—Acute.

*Leaf base form.*—Acute.

*Leaf margins.*—Crenate.

*Leaf thickness.*—Medium.

*Leaf color.*—

*Upper leaf surface.*—Green (RHS Yellow Green 147 A).

*Lower surface.*—A lighter green (RHS Yellow Green 146 A or RHS Yellow Green 146 B) than the upper leaf surface color.

*Leaf texture.*—Smooth and glabrous.

*Leaf venation.*—Pinnately veined.

*Mid-vein.*—

*Color.*—Light green, almost cream white (RHS Yellow Green 145 C). The color may evolve with maturity.

*Thickness.*—Approximately 1.5 millimeters.

*Uniformity.*—Leaves are isolated or grouped by 2 or 3. In this last case, one leaf of normal size is found with one or two smaller leaves (at least 50% smaller).

*Leaf petioles.*—

*Size.*—Considered medium.

*Length.*—About 10.0 to about 14.0 millimeters.

*Diameter.*—About 1.7 to 2.0 millimeters.

*Shape.*—Ribbed, fluted.

*Petioles color.*—

*Upper petiole surface.*—Light green (RHS Yellow Green 145 A).

*Lower surface.*—Light green (RHS Yellow Green 145 B).

*Leaf glands.*—

*Size.*—Considered medium. Their length is about 1.5 millimeters and their width is about 1.0 millimeter.

*Number.*—Generally 2 glands per leaf.

*Type.*—Reniform.

*Margins.*—Smooth and regular.

*Color.*—On mature leaves, leaf gland color is considered brown (RHS Brown 200 A to RHS Brown 200 B).

*Margins.*—Smooth and regular.

*Leaf stipules.*—

*Generally.*—No leaf stipules were observed. But as seen in the characteristic relative to the leaves uniformity, it is possible to find leaves by groups of 2 or 3, with a normal-size leaf and smaller ones.

#### Flowers:

*Flower buds.*—

*Generally.*—At pre-floral stage of development, the floral buds are conic in form with a round tip. Their form is evolving until blooming, with variable dimensions. Just before blooming, floral buds are approximately 9.0 to 10.0 millimeters wide and approximately 17.0 to 18.0 millimeters long.

*Color.*—This characteristic is dependent upon the proximity to bloom. At pre-floral stage of develop-

ment, the bottom of the flowers buds, formed by the sepals, is of purple-brown color (RHS Greyed Purple 183 A) on their outer surface, and green (RHS Yellow green 146 B or RHS Yellow Green 146 C) on their inner surface. The corolla, formed by the petals, is generally of pale pink color (RHS Red Purple 69 A or RHS Red Purple 69 B) on both faces. Petal color shows an evolution until the end of flowering.

*Hardiness*.—The buds are considered hardy under typical central Pyrénées-Orientales département climatic conditions. No winter injury was noted during the last several years of evaluation in the central Pyrénées-Orientales département, with winter temperatures as low as -10 degrees Celsius in January. The current variety has not been intentionally subjected to drought or heat stress, but the variety showed a very good resistance in orchard to temperatures up to 42 degrees Celsius with an average temperature between 28 and 30 degrees Celsius during 3 weeks in summer.

*Date of bloom*.—The blooming time generally begins at the end of February or during March. The first bloom was observed on Mar. 10, 2015.

*Blooming time*.—Considered medium in relative comparison to other commercial nectarine cultivars grown in the Pyrénées-Orientales département, France. The date of full bloom is observed generally at the middle of the blooming period. The date of bloom varies slightly with climatic conditions and cultural practices. Thus the full bloom was observed in 2015, from March 10<sup>th</sup> until March 19<sup>th</sup> and then from February 22<sup>nd</sup> until Mar. 5, 2016 and then from February 28<sup>th</sup> until Mar. 9, 2017.

*Duration of bloom*.—Medium. Approximately between 10 to 13 days. This characteristic varies slightly with the prevailing climatic conditions.

*Flower type*.—The variety is considered to have a showy type flower.

*Flower size*.—Considered large. Flower diameter at full bloom is approximately 39.0 to 44.0 millimeters.

*Bloom quantity*.—Considered abundant, approximately between 40 and 45 flowers per meter, with a high rate of fruit set. The bloom is heterogeneous, and the bloom quantity is more important on the top of the tree.

*Flower bud frequency*.—Generally 2 flower buds appear per node, occasionally 1.

*Petal size*.—

*Generally*.—Considered large.

*Length*.—Generally between 22.0 and 24.0 millimeters. The medium length is 23.0 millimeters.

*Width*.—Generally between 20.0 and 22.0 millimeters. The medium width is about 21.0 millimeters.

*Petal form*.—Round-shaped.

*Petal count*.—Generally 5.

*Petal texture*.—Smooth and soft.

*Petal color*.—At the stage F2, when the flower is fully open, both surfaces of the petal are colored with a medium Pink (RHS Red Purple 65 B or RHS Red Purple 65 C or RHS Red Purple 65 D) when young, becoming slightly darker until the end of blooming.

*Fragrance*.—Sweet.

*Petal claw*.—

*Form*.—The claw is considered to have narrow form.

*Length*.—About 2.5 millimeters.

*Width*.—About 1.0 millimeter at the base.

*Color*.—A darker pink than the petal color (RHS Red Purple 61 B).

*Petal margins*.—Generally considered wavy at their base.

*Petal apex*.—

*Generally*.—The petal apices are generally wide dome-shaped.

*Flower pedicel*.—

*Length*.—Considered medium and having an average length of approximately 2.5 millimeters.

*Diameter*.—Considered average, approximately 1.5 millimeters.

*Color*.—Light green (RHS Yellow Green 145 A).

*Calyx*.—

*Internal surface texture*.—Smooth and glabrous.

*Color*.—At the stage F of blooming, when the flower is open, the inner surface of the calyx, namely the flower receptacle, is greenish yellow (RHS Yellow Green 153 D). The outer surface of the calyx is considered of purple-brown (RHS Greyed Purple 183 A) color.

*Sepals*.—

*Sepal count*.—5.

*Surface texture*.—The outer surface has a short, fine pubescent texture.

*Margins*.—Smooth.

*Form*.—Conic.

*Size*.—Medium.

*Length*.—Approximately 6.0 to 7.0 millimeters.

*Width*.—Approximately 4.0 to 5.0 millimeters.

*Color*.—At pre-floral stage of development, the color of the sepals is purple-brown (RHS Greyed Purple 183 A) on their outer surface, and green (RHS Yellow green 146 B or RHS Yellow Green 146 C) on their inner surface. At the stage F of blooming, when the flower is open, the inner surface of the sepals is green yellow (RHS Yellow Green 153 D). The outer surface of the sepals is considered of purple-brown color (RHS Greyed Purple 183 A).

*Average number of stamens per flower*.—Approximately 32 to 36 stamens per flower.

*Anthers*.—

*Generally*.—Medium in length.

*Color*.—At an early stage of maturity, anthers are colored with an orange yellow (RHS Yellow Orange 16 A to RHS Yellow Orange 16 B) or an orange red color (RHS Red Group N 34 A or RHS Greyed Red Group 178 A). The color may evolve with maturity to turn in a red color.

*Pollen production*.—Pollen is abundant, and has an orange yellow color (Approximately RHS Yellow Orange 17 B to RHS Yellow Orange 17 C) which may evolve with maturity. The present variety is considered auto-fertile (self-pollinating).

*Filaments*.—

*Size*.—Medium length, between 11.0 and 16.0 millimeters in length. Filament length is generally the same or slightly higher than the pistil's length.

*Color*.—Considered pale pink (RHS Red Purple 62 C to RHS Red Purple 62 D) or darker pink (RHS Red Purple 73 A to RHS Red Purple 73 B). The color becomes darker during the blooming.

*Pistil*.—

*Number*.—Usually 1.

*Generally*.—Average in size.

*Length*.—Approximately 17.0 to 22.0 millimeters including the ovary. Generally smaller than stamen length.

*Color*.—Considered a very pale green (RHS Yellow Green Group 151 D) at the beginning of the flowering. The color evolves during the blooming, becoming more light (RHS Yellow Green 150 D) and sometimes very slightly pink (RHS Red Group 36D) at the end of the blooming.

*Surface texture*.—Glabrous.

*Ovary*.—No pubescence.

*Height*.—Between 1.5 and 2.0 millimeters.

*Diameter*.—Between 1.5 and 2.0 millimeters.

*Color*.—Green (RHS Yellow Green 145 A or RHS Yellow Green 145 B).

*Stamen*.—Size compared to petals. The size of stamen is smaller than the size of petals.

*Stigma*.—

*Position compared to anthers*.—The stigma is below the anthers.

*Diameter*.—Approximately 1.0 millimeter.

*Color*.—Pale green to slightly yellow (RHS Yellow Green 154 B).

#### Fruit:

*Maturity when described*.—Very firm in ripe conditions (shipping ripe).

*Date of first picking*.—Jul. 1, 2014.

*Date of last picking*.—The date of harvest varies slightly with the prevailing climatic conditions. The 'CAKEBELLA' variety has an early to medium date of picking, and a grouped maturity. The maturity is grouped within 7 to 9 days and the harvest is generally performed in two runs. Last known picking times carry on July 1<sup>st</sup> to Jul. 9, 2014, then from July 1<sup>st</sup> to Jul. 7, 2015, then from July 6<sup>th</sup> to Jul. 12, 2016, and then from July 4<sup>th</sup> to Jul. 10, 2017.

*Size*.—

*Generally*.—Homogeneous in size. Considered medium to large.

*Average cheek diameter*.—Approximately 76.0 to 79.0 millimeters.

*Average axial diameter*.—Approximately 42.0 to 44.0 millimeters.

*Typical weight*.—Generally about 160.0 grams. This characteristic is highly dependent upon the prevailing cultural practices, and therefore is not particularly distinctive of the variety.

*Fruit form*.—

*Generally*.—Round and flattened, regular. The fruit is generally uniform in symmetry, viewed from the suture's plane.

*Suture*.—

*Fruit suture*.—Wide-mouthed and not marked, extending from the base to the apex. No apparent callousing or stitching exists along the suture line. Not pointed.

*Color*.—The suture has generally a similar color to the whole fruit color, a luminous purple red (RHS Greyed Purple 187 A).

*Ventral surface*.—

*Form*.—Smooth.

*Apex*.—Slightly depressed.

*Base*.—Semi-flared, shallow.

*Stem cavity*.—Small depth of the stem cavity is about 11.0 to 13.0 millimeters. Average width is about 18.0 to 20.0 millimeters.

*Fruit skin*.—

*Thickness*.—Considered medium thick and strong, and the adherence of skin to flesh is strong.

*Texture*.—Smooth and glabrous, no pubescence.

*Taste*.—Semi-sweet, sugary.

*Tendency to crack*.—None observed.

*Lenticels*.—None observed.

*Color*.—

*Blush color*.—This blush color is a luminous purple red (RHS Greyed Purple 187 A). The purple red blush covers 95% of the fruit skin surface on a red background (RHS Greyed Purple 185 A) on approximately 5% of the fruit skin surface. The percentage of the blush on the fruit skin surface can vary, and is generally dependant upon the prevailing conditions under which the fruit was grown.

*Ground color*.—The ground color covers approximately 5% of the fruit skin surface, and is considered red (RHS Greyed Purple 185 A).

*Fruit stem*.—Medium in length, approximately 8.0 to 9.0 millimeters.

*Diameter*.—Approximately 4.0 to 5.0 millimeters.

*Color*.—Green (RHS Yellow Green 145 A).

*Flesh*.—

*Ripens*.—Very homogenously, slowly. The flesh has a long shelf life.

*Texture*.—Very firm, very dense, crunchy, melting, juicy at harvest maturity stage.

*Fibers*.—Not fibrous.

*Aroma*.—Pronounced.

*Eating quality*.—Considered very good, aromatic.

*Flavor*.—Considered semi-sweet. The Brix is generally superior to 12 and acidity comprised between 6 and 9 meq/100 ml.

*Juice*.—Juicy at complete maturity.

*Brix*.—Generally 15.7 degrees. This characteristic varies slightly with the number of fruit per tree; prevailing cultural practices; and the surrounding climatic conditions.

*Flesh color*.—White flesh (RHS White 155 D) usually with a red pigmentation (RHS Red 51 B) at ripening time. A red pigmentation (RHS Red Purple 60 B) is also observed around the stone cavity, in a star shape on approximately 6.0 millimeters.

#### Stone:

*Type*.—Semi-Clingstone, more or less semi-adherent depending on the fruit maturity.

*Size*.—Considered medium for the variety. The stone size varies significantly depending upon the tree vigor, crop load and prevailing growing conditions.

*Length*.—Approximately 15.0 to 16.0 millimeters.

*Width*.—Approximately 22.0 to 24.0 millimeters.

*Diameter*.—Approximately 20.0 to 22.0 millimeters.

*Form*.—Flattened.

*Base*.—Straight.

*Apex*.—

*Shape*.—The stone apex is flattened, not marked.

*Stone cavity*.—Considered medium size, with flattened form and dimensions corresponding to the stone's dimensions.

*Stone surface.*—

*Surface texture.*—The pit is transversely furrowed on its entire surface. Furrows are deeper and more oblate on lateral sides.

*Ridges.*—The surface texture is generally characterized by more prominent ridges along the ventral edges and at the apical tip. 5

*Ventral edge.*—

*Width.*—Approximately 3.0 to 4.0 millimeters at mid-suture. 10

*Dorsal edge.*—

*Shape.*—Grooved.

*Stone color.*—The color of the dry stone is generally considered light orange brown (RHS Greyed Orange 165 B or RHS Greyed Orange 165 C). 15

*Tendency to split.*—Splitting is very low or absent, depending on climatic conditions between blooming period and stone hardening.

*Kernel.*—

*Size.*—The kernel is considered small. 20

*Length.*—Approximately 4.0 millimeters.

*Width.*—Approximately 7.0 millimeters.

*Thickness.*—Approximately 6.0 millimeters.

*Form.*—Considered flattened and elliptic. Sometimes double. 25

*Pellicle.*—The pellicle of the kernel has a short pubescence.

*Color.*—The kernel skin is orange-brown colored (RHS Greyed Orange N167 B). The almond, which is the seed of the kernel, is white (RHS White 155 B) and has a bitter tasting. The kernel and its embryo are mature at the time of fruit maturity. 30

*Use.*—The subject variety 'CAKEBELLA' is considered to be a white flat nectarine tree of the early to medium season of maturity, and which produces fruits that are considered firm, attractively colored with a very luminous purple red. Fruits have a semi-sweet taste and are excellent for uncooked consumption, crunchy or melting when at full maturity. Fruits have excellent gustative qualities. Due to their flesh quality, firmness and density, they can also 40

be commercialized as 4<sup>th</sup> range product (packed fruit or fruit in bags for example). And they are also useful for both local and very long distance shipping.

*Keeping quality.*—Remarkable. Fruit have a slow maturation and a long shelf life both on the tree after growth completion and after harvesting without alteration. After growth completion, fruits are preserved more than one week. After harvest, fruits are well preserved more than 4 weeks at 2.0 degree Celsius.

*Shipping quality.*—Considered very good. The fruit of the new white flat nectarine variety showed minimal bruising of the flesh or skin damage after being subjected to normal harvesting and packing procedures. Its resistance to handling during harvest and packing and its long shelf life without alteration after harvest easily permit 3 to 4 weeks-shipping at 2 degrees Celsius.

*Resistance to insects and disease.*—No particular susceptibilities were noted. The present variety is not very sensitive to *Monilia* or rot. The pistil cavity is completely closed, generally without any cork formation.

Although the new variety of white flat nectarine tree possesses the described characteristics when grown under the ecological conditions prevailing near Elne, Pyrénées-Orientales departement, France, it should be understood that variations of the usual magnitude and characteristics incident to changes in growing conditions, fertilization, pruning, pest control and horticultural management are to be expected.

I claim:

1. A new and distinct variety of white flat nectarine tree as illustrated and described, characterized by fruits with high eating quality and very long shelf life without alteration before and after harvesting, with a very well closed pistil cavity, with a semi-sweet white flesh having a red pigmentation, in particular around the stone cavity in a star shape, and an attractive luminous skin with a very high percentage of purple red blush on skin surface, on a red background. 35 40

\* \* \* \* \*



Fig. 1

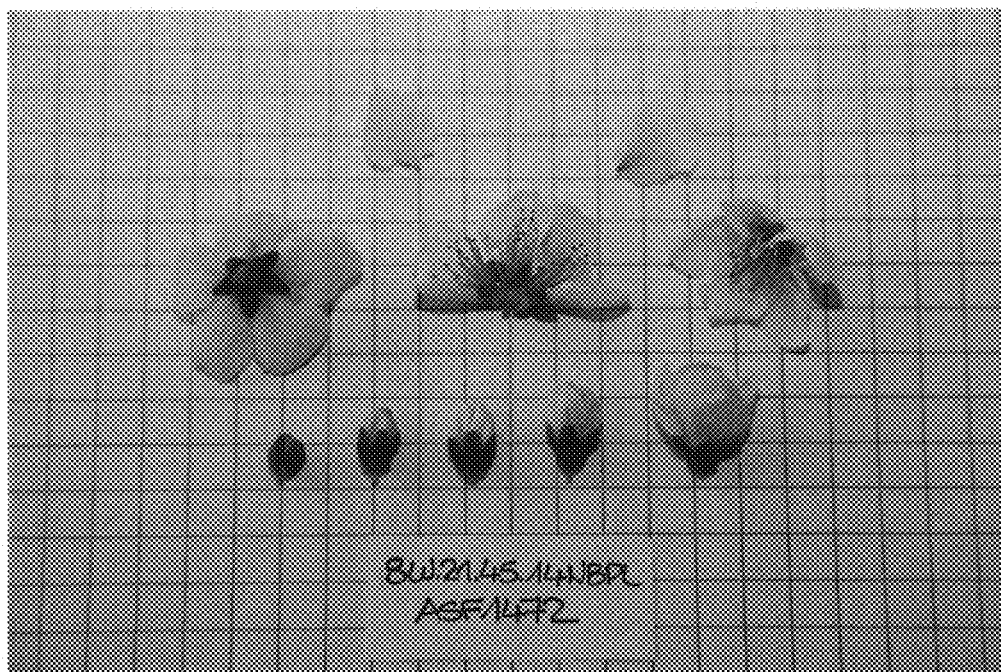


Fig. 2

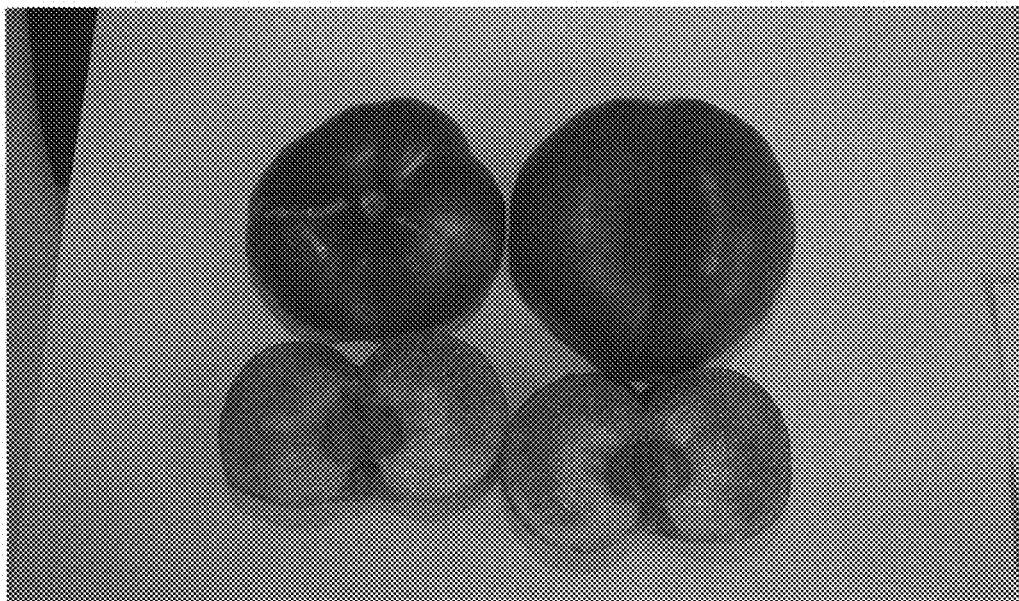


Fig. 3



Fig. 4