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(12) **United States Plant Patent**  
**Maillard et al.**(10) **Patent No.:** US PP26,772 P3  
(45) **Date of Patent:** May 31, 2016

- (54) **PEACH TREE NAMED 'FLATDIVA'**
- (50) Latin Name: *Prunus persica* (L.) Batsch  
Varietal Denomination: FLATDIVA
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- (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 151 days.
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- (22) Filed: **Mar. 24, 2014**
- (65) **Prior Publication Data**  
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- (51) **Int. Cl.**  
**A01H 5/00** (2006.01)

- (52) **U.S. Cl.**  
USPC ..... **Plt./195**
- (58) **Field of Classification Search**  
USPC ..... Plt./195  
See application file for complete search history.

(56) **References Cited****PUBLICATIONS**

PLUTO Plant Variety Database Jul. 22, 2015 2 pages.\*

\* cited by examiner

*Primary Examiner* — Annette Para(74) *Attorney, Agent, or Firm* — Westerman, Hattori, Daniels & Adrian, LLP(57) **ABSTRACT**

A new and distinct variety of white flat peach tree denominated 'FLATDIVA' which have fruits with high eating quality and very long shelf life without alteration before and after harvesting, with a semi-sweet greenish white flesh, with a red pigmentation into and around the stone cavity, and an attractive skin with a high percentage of purple red blush on skin surface, on a washed red background.

**2 Drawing Sheets****1**

Botanical classification: *Prunus persica* (L.) Batsch.  
Variety denomination: 'FLATDIVA'.

**BACKGROUND OF THE NEW VARIETY**

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

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, slightly greenish, with a very slightly red pigmentation around and into the stone cavity, for fresh market at the end of August or early in September in the Pyrénées-Orientales department, France.

**ORIGIN OF THE VARIETY**

The 'FLATDIVA' white flat peach 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 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

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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 'FLATDIVA' variety results from a pollinated cross between the 'FLATSTAR' white flat peach tree, also known as 'ASFPBF0798' (U.S. Plant Pat. No. 22,496) which was used as the seed parent, and the 'NECTARFLORA' white nectarine tree (U.S. Plant Pat. No. 22,504) which was used as the pollen parent.

'FLATDIVA' was provisionally designated, tested and genetically identified by a genetic profile, under number 02.2W.20.11.

The 'FLATDIVA' 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 Régalines, Route d'Alenyà, 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 'FLATDIVA' white flat peach tree blooms at the end of February or early in March near Elne in the Pyrénées-Orientales department, France. The bloom-

ing period is considered medium. However, it was observed that its date of blooming seems to be highly dependant on climatic conditions.

The first fruit of 'FLATDIVA' ripens generally late season, at the end of August or early in September. More particularly, ripening time usually begins from August 12<sup>th</sup> to September 2<sup>nd</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 showing a branch of a tree of the new variety in orchard, bearing a fruit;

FIG. 2 is a color photograph that shows a close view of typical fruits after harvesting;

FIG. 3 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. 4 a close view of three typical specimens of the fruit of the new variety 'FLATDIVA' at ripening time, one fruit having been cut in half with the pit being left in one of the halves for depicting leaves, fruit flesh, pit and pit cavity of the new variety.

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 'FLATDIVA' 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 early in March. The type of flower is showy with medium petal size. Petals are dark pink. Leaf glands are present and reniform. The fruit flesh is greenish white and generally with a red pigmentation onto the stone cavity and around, on approximately 6.0 millimeters. The fruit skin is thick, with a purple red blush on a washed red background. The stone is semi-clingstone and his size is small to medium. Fruit taste is semi-sweet, very aromatic and with a high level of sugars.

Compared to 'ASFPBF0798' variety (U.S. Plant Pat. No. 22,496), its female parent, 'FLATDIVA' variety blooms 5 days later and the fruits of 'FLATDIVA' variety ripen approximately 10 days later. The maturity of 'FLATDIVA' variety is considered late. The fruits skin color of 'FLATDIVA' variety is more intense compared to skin color of 'ASFPBF0798' variety. Moreover, the fruits of 'FLATDIVA' variety are a little more sugary than the fruits of 'ASFPBF0798' variety.

Compared to its male parent 'NECTARFLORA' while round nectarine tree (U.S. Plant Pat. No. 22,504), the new variety 'FLATDIVA' is a white flat peach tree. The 'NECTARFLORA' variety is considered as an early season variety, regarding the fruit maturity. The fruits of 'NECTARFLORA' generally ripen at the end of June. On the contrary,

the first fruits of 'FLATDIVA' generally ripen at the beginning of September. Thus, the 'FLATDIVA' variety is considered as a late season variety, regarding the fruit maturity. The flowers of 'NECTARFLORA' bloom early in the season whereas the time of blooming for the new variety 'FLATDIVA' is considered medium. The leaf glands of 'FLATDIVA' variety are reniform in shape, contrary to the leaf glands of 'NECTARFLORA' which are circular in shape. Moreover, the flesh of the 'FLATDIVA' fruits is considered greenish white whereas the flesh of 'NECTARFLORA' is generally considered white.

Compared to 'FLATMOON' (not patented) variety, 'FLATDIVA' variety blooms approximately at the same time and 'FLATDIVA' fruits ripen 5 days earlier. The fruits skin color of 'FLATDIVA' variety is more intense compared to skin color of 'FLATMOON' variety. Moreover, the 'FLATDIVA' variety shows a particularly strong attachment to the stalk, in other words no stalk wrenching occurs. On the contrary, 'FLATMOON' variety is susceptible to stalk wrenching. Consequently, the 'FLATDIVA' variety is very little sensitive to rot whereas the 'FLATMOON' variety is sensitive to rot. After the harvest, the lifespan of 'FLATMOON' fruits is short whereas the 'FLATDIVA' fruits have a long life both on the trees and after the harvest. Finally, 'FLATDIVA' fruits are more sugary (Brix between 17 and 19 degrees) than 'FLATMOON' fruits (Brix between 14 and 15 degrees).

#### DETAILED DESCRIPTION

Referring more specifically to the pomological details of this new and distinct variety of white flat peach 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 département, 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. Color Chart (Fourth Edition) provided by The Royal Horticultural Society of Great Britain.

##### Tree:

*Size.*—Generally.—Considered large. 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 reduces 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 strong.

*Productivity.*—Very Productive. 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. 'FLATDIVA' variety is not much sensitive to cracking of pistil cavity, to cork formation into peduncle cavity or to monilia.<sup>5</sup>

*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.<sup>10</sup>

*Form.*—The 'FLATDIVA' variety has naturally a semi-flared shape.<sup>15</sup>

*Density.*—Considered dense.<sup>15</sup>

*Hardiness.*—The present tree was grown and evaluated in France. The variety appears to be hardy under the central Pyrénées-Orientales département 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 'FLATDIVA' trees seem to be very resistant to critical frosty weather.<sup>20</sup>

Trunk:<sup>25</sup>

*Diameter.*—Approximately 63.0 millimeters in diameter when measured at a distance of approximately 30.0 centimeters above the soil level.<sup>30</sup>

*Bark texture.*—Considered slightly rough, with lenticels.<sup>35</sup>

*Lenticels.*—Numerous lenticels are present. The lenticels range in size from approximately 2.0 to 4.0 millimeters in width, and about 1.5 millimeters in height.<sup>40</sup>

*Lenticel color.*—The outside of lenticels has a silver-grey color (RHS Grey 201 D or RHS Black 202 D), whereas the inside is considered brown (RHS Greyed Orange 166 B).<sup>40</sup>

*Bark coloration.*—The bark has a silver-grey color (RHS Grey 201 C or RHS Black 202 C) slightly darker than the outside of lenticels color.<sup>45</sup>

Branches:

*Size.*—Mature branches and current season shoots are considered medium for the variety.<sup>50</sup>

*Diameter.*—Average as compared to other peach varieties. The current season shoots have a diameter from 5.0 to 7.0 millimeters, and mature branches have a diameter from 15.0 to 19.0 millimeters.<sup>55</sup>

*Surface texture.*—Average, wood which is several years old has no furrowed appearance.<sup>55</sup>

*Crotch angles.*—Primary branches are considered variable, but the crotch angles are generally between 60 degrees and 80 degrees from the horizontal axis. This particular characteristic is not considered distinctive of the variety, however.<sup>60</sup>

*Current season shoots.*—Internode length: Generally between 25.0 and 35.0 millimeters. Color of mature branches: Grey brown (RHS Grey Brown 199 A to RHS Grey Brown 199 B).<sup>65</sup>

*Current seasons shoots.*—Color. — The color of new shoot tips is considered pale green (RHS Green 144 A

to RHS Green 144 C) on lower part of new shoot tips, whereas the upper part is darker and colored in brown-purple more or less deep (RHS Greyed Red 187 A to RHS Greyed Red 187 B or RHS Greyed Red 182 A to RHS Greyed Red 182 C), depending on the level on the tip and the sunlight exposure.

Leaves:

*Size.*—Considered medium for the species. The ratio leaf length/leaf width is 4.06.

*Leaf length.*—Approximately 142.0 to 191.0 millimeters without leaf petiole. The medium length is about 162.1 millimeters.

*Leaf width.*—Approximately 34.0 to 43.0 millimeters. The medium width is 39.9 millimeters.

*Leaf base shape.*—Concave.

*Leaf form.*—Lanceolate.

*Leaf tip form.*—Short and acuminate.

*Leaf color.*—Upper leaf surface. — Yellow Green (RHS Yellow Green 147 A). Lower surface. — A lighter green (RHS Yellow Green 147 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 D). The color may evolve with maturity.

*Leaf margins.*—Slightly undulating.

*Form.*—Considered slightly dentate.

*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 13.0 millimeters. Diameter. — About 2.0 millimeters.

*Petioles color.*—Upper petiole surface. — Light green (RHS Yellow Green 144 A to RHS Yellow Green 144 B). Lower surface. — Light green (RHS Yellow Green 145 A to RHS Yellow Green 145 B).

*Leaf glands.*—*Size.* — Considered medium to large. Their length is about 2.0 millimeters and their width is about 1.0 millimeter. Number. — Generally 2 glands per leaf. Type. — Reniform. Margins. — Smooth and regular. Color. — On young leaves, leaf glands color is considered a light green (RHS Green 145 B). On older leaves, leaf glands color turns to a dark brown (RHS Grey Brown 199 A to RHS Grey Brown 199 B).

*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 variables dimensions. Just before blooming, floral buds are between 10.0 and 11.0 millimeters wide and between 21.0 and 22.0 millimeters long. Color. — This characteristic is dependent upon the proximity to bloom. At pre-floral stage of development, the bottom of the flowers buds, formed by the sepals, is of purple-brown color (RHS Greyed Purple 183 A to RHS Greyed Purple 183 C or RHS Greyed Purple 187 B or RHS Grey Brown Group 199 A near the base). The corolla, formed by the petals, is generally of pink

color (RHS Red Purple 65 B or RHS Red Purple 69 C). Petals 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 early in March. The first bloom was observed on Mar. 11, 2012.

*Blooming time.*—Considered medium in relative comparison to other commercial peach 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 2012, from Mar. 11 until Mar. 19 and then from Feb. 21 until Mar. 8, 2013.

*Duration of bloom.*—Approximately between 9 to 15 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 medium. Flower diameter at full bloom is approximately 27.0 to 34.0 millimeters.

*Bloom quantity.*—Considered abundant, approximately between 40 and 45 flowers per meter, with a high rate of fruit set.

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

*Petal size.*—Generally. — Considered medium. Length: Generally between 20.0 and 22.0 millimeters. The medium length is 21.0 millimeters. Width: Generally between 14.0 and 17.0 millimeters. The medium width is about 15.3 millimeters.

*Petal form.*—Round-shaped to elongated.

*Petal count.*—Generally 5.

*Petal texture.*—Smooth, soft and glabrous.

*Petal color.*—Both surfaces of the petal are colored with a dark Pink (RHS Red Purple 73 B to RHS Red Purple 73 D) when young, becoming slightly darker until the end of blooming.

*Fragrance.*—Sweet.

*Petal claw.*—Form. — The claw is considered to have a triangular form, narrow at the base. Length. — About 2.0 millimeters. Width. — About 1.0 millimeter at the base. Color. — The petal claw usually shows a similar color than the petal color (RHS Red Purple 73 B to RHS Red Purple 73 C).

*Petal margins.*—Generally considered wavy, sinuate.

*Petal apex.*—Generally. — The petal apices are generally round or in a slight curve.

*Flower pedicel.*—Length. — Considered medium and having an average length of approximately 3.0 millimeters. Diameter. — Considered average, approxi-

mately 1.5 to 2.0 millimeters. Color. — Light green (RHS Yellow Green N144 B to RHS Yellow Green N144 B).

*Calyx.*—Internal surface texture. — Smooth and glabrous. Color. — The inner surface of the calyx is green yellow (RHS Yellow Group 13 A to RHS Yellow Group 13 B or RHS Yellow Orange Group 17 A or RHS Yellow Green 150 A to RHS Yellow Green 150 B). The outer surface of the calyx is considered of purple-brown color (RHS Greyed Purple 183 A to RHS Greyed Purple 183 C or RHS Greyed Purple 187 B) and yellow green near the base of the calyx (RHS Yellow green 144 A to RHS Yellow Green 144 B).

*Sepals.*—Surface texture. — The outer surface has a short, fine pubescent texture. Size. — Medium. Length. — Approximately 5.0 millimeters. Width. — Approximately 4.0 millimeters. Form. — Conic and round at the top. Color. — Both sides of sepals are colored with a matt Red (RHS Greyed Purple 183 A to RHS Greyed Purple 183 C or RHS Grey Purple 187 B).

*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 N34 A or RHS Greyed Red Group 178 A).

*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 13.0 and 18.0 millimeters in length. Filaments length is generally higher than the pistil's length. Color: Considered white (RHS White N 155 D) or pale pink (RHS Red Purple 62 C to RHS Red Purple 62 D). The color becomes darker during the blooming. Average number of stamens per flower. — Generally between 42 and 48.

*Pistil.*—Number. — Usually 1. Generally. — Average in size. Length. — Approximately 11.0 to 14.0 millimeters including the ovary. Generally smaller than or equal to filaments in length. Color. — Considered a very pale green (RHS Yellow Green Group 151 D). The color evolves during the blooming to become more and more pale green (RHS Yellow Green Group 150 D) and sometimes very slightly pink (RHS Red Group 36 D) at the end of blooming. Ovary. — The pubescence is present.

*Fruit:*

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

*Date of first picking.*—Aug. 12, 2011.

*Date of last picking.*—The date of harvest varies slightly with the prevailing climatic conditions. The 'FLAT-DIVA' variety has a late date of picking, and a grouped maturity. The maturity is grouped within 7 to 10 days and the harvest is generally performed in two runs. Last known picking times carry on Aug. 12 to Aug. 20, 2011, then on Aug. 26 to Sep. 2, 2012, then on Sep. 2 to Sep. 11, 2013.

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

*Average cheek diameter.*—Approximately 72.0 to 76.0 millimeters.

*Average axial diameter.*—Approximately 43.0 to 46.0 millimeters.

*Typical weight.*—Generally between 140.0 and 150.0 grams. This characteristic is high dependent upon the prevailing cultural practices, and therefore is not particularly distinctive of the variety. 5

*Fruit form.*—Generally.—Round and flattened, generally with few bump. The fruit is generally uniform in symmetry, viewed from the suture's plane.

*Suture.*—Fruit suture: Wide-mouthed and slightly 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, which is purple red (RHS Greyed Purple N186 C or RHS Greyed Purple 187 A). 10

*Ventral surface.*—Form.—Smooth.

*Apex.*—Slightly depressed.

*Base.*—Semi-flared, shallow. 20

*Stem cavity.*—Average depth of the stem cavity is about 9.0 to 12.0 millimeters. Average width is about 14.0 to 16.0 millimeters.

*Fruit skin.*—Thickness.—Considered thick and strong, and the adherence of skin to flesh is strong to medium, depending on the fruit maturity. Texture.—Very smooth for a peach variety. Taste.—Semi-sweet, sugary. Tendency to crack.—None observed. 25

*Color.*—Blush color.—This blush color is purple red (RHS Greyed Purple N186 C or RHS Greyed Purple 187 A). The purple red blush covers 90% of the fruit skin surface on a washed red background (RHS Greyed Red 181 A) on approximately 10% 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 10% of the fruit skin surface, and is considered washed red (RHS Greyed Red 181 A). 30

*Fruit stem.*—Medium in length, approximately 6.0 to 7.0 millimeters. Diameter: Approximately 4.0 millimeters. Color: Pale green (RHS Yellow Green 145 A to RHS Yellow Green 145 B). 40

*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.—Very pronounced. Eating quality.—Considered very good, aromatic. Flavor.—Considered semi-sweet. The Brix is generally superior to 17 and acidity comprised between 6 and 9 meq/100 ml. Juice.—Juicy to very juicy at complete maturity. Brix.—Generally 18.0 to 19.0 degrees. This characteristic varies slightly with the number of fruit per tree; prevailing cultural practices; and the surrounding climatic conditions. Flesh color.—The flesh is considered greenish white (RHS Green White 157 D) usually with a red pigmentation (RHS Red 46 A) both into the stone cavity and around the stone cavity, on approximately 6.0 millimeters around the stone cavity. 50

#### Stone:

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

*Size.*—Considered small to medium for the variety. The stone size varies significantly depending upon the tree vigor, crop load and prevailing growing conditions. 65

*Length.*—Approximately 20.0 to 21.0 millimeters.

*Width.*—Approximately 18.0 to 19.0 millimeters.

*Diameter.*—Approximately 13.0 to 14.0 millimeters.

*Form.*—Flattened.

*Base.*—Straight.

*Apex.*—Shape.—The stone apex is flattened.

*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.

*Ventral edge.*—Width.—Between 3.0 and 4.0 millimeters at mid-suture.

*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).

*Tendency to split.*—Splitting is absent.

*Kernel.*—Size.—The kernel is considered small to medium. Length.—Approximately 9.0 millimeters. Width.—Approximately 8.0 millimeters. Thickness.—Approximately 7.0 millimeters. Form.—Considered flattened and elliptic. Sometimes double. Pellicle.—The pellicle of the kernel has a short pubescence. Color.—The kernel skin is orange-brown colored (RHS Greyed Orange 165 A to RHS Greyed Orange 165 B). The almond, which is the seed of the kernel, is white (RHS White 155 D) and has a bitter tasting. The kernel and its embryo are mature at the time of fruit maturity.

*Use.*—The subject variety 'FLATDIVA' is considered to be a white flat peach tree having a late season of maturity, and which produces fruits that are considered firm, attractively colored in 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 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 2 weeks at 2.0 degree Celsius.

*Shipping quality.*—Considered very good. The fruit of the new white flat peach 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 2 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.

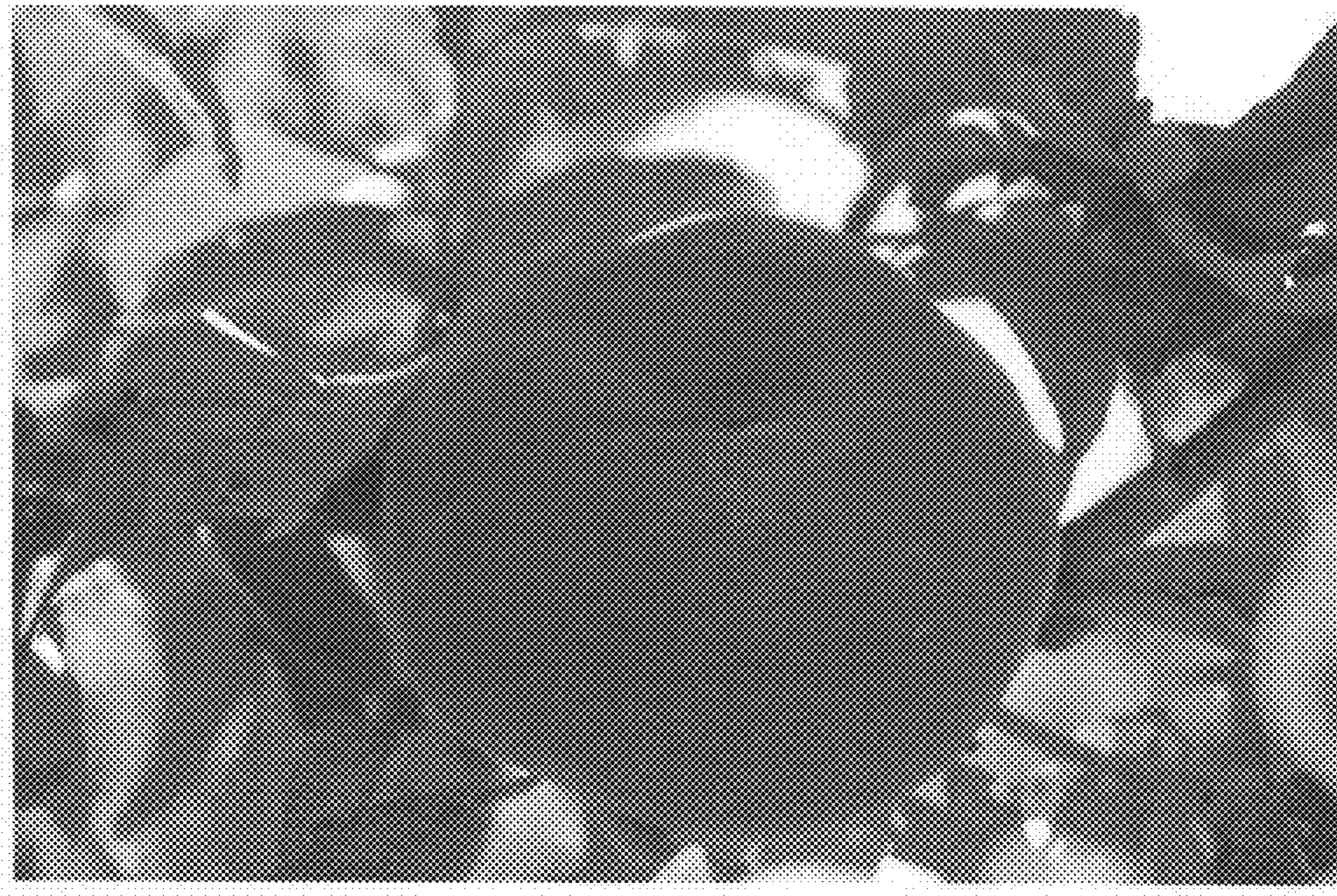
Although the new variety of white flat peach tree possesses the described characteristics when grown under the ecological conditions prevailing near Elne, Pyrénées-Orientales departement, France, it should be understood that variations of the usual magnitude and characteristics incident to changes in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

10

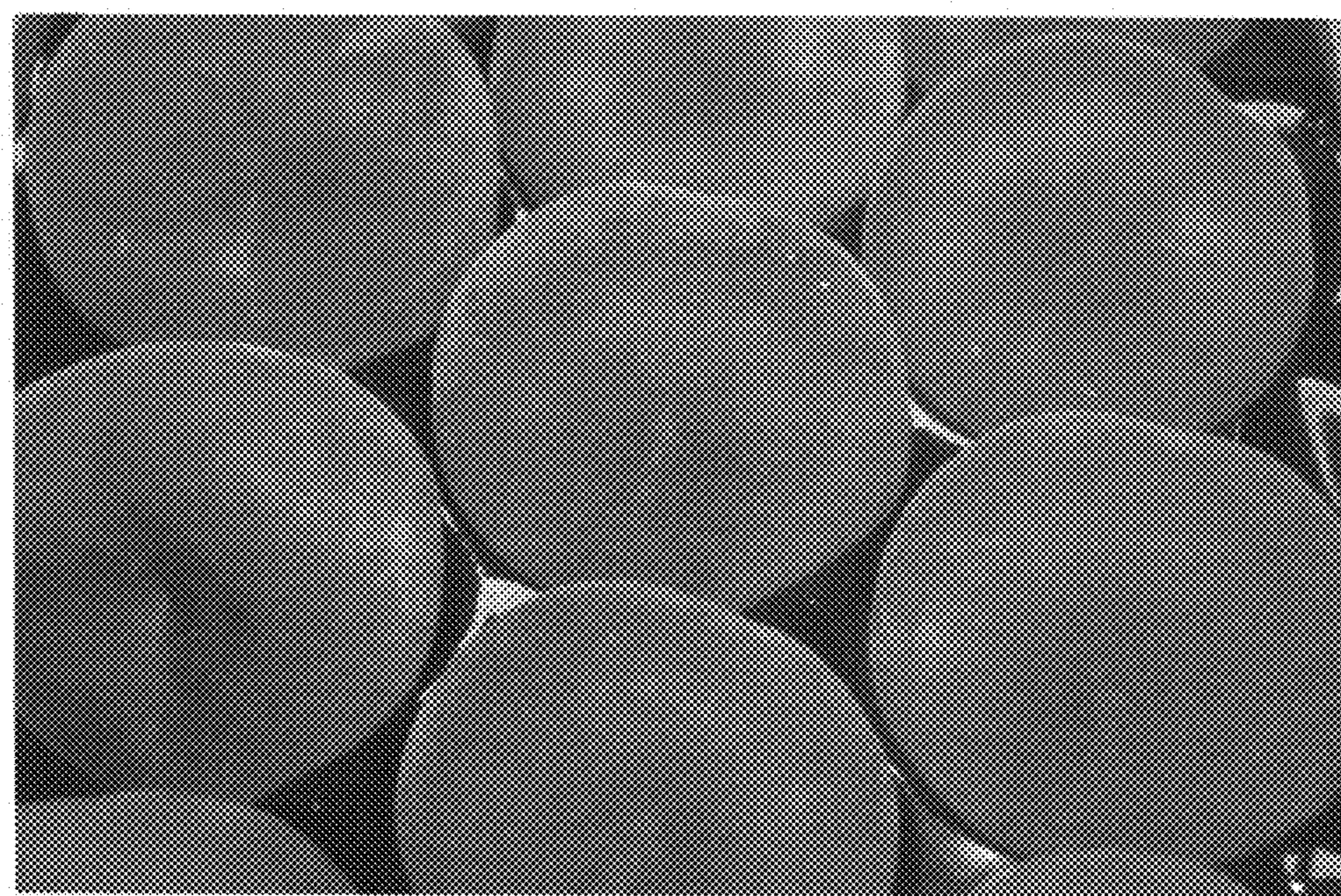
We claim:

1. A new and distinct variety of white flat peach 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 semi-sweet greenish white flesh, with a red pigmentation into and around the stone cavity, and an attractive skin with a high percentage of purple red blush on skin surface, on a washed red background.

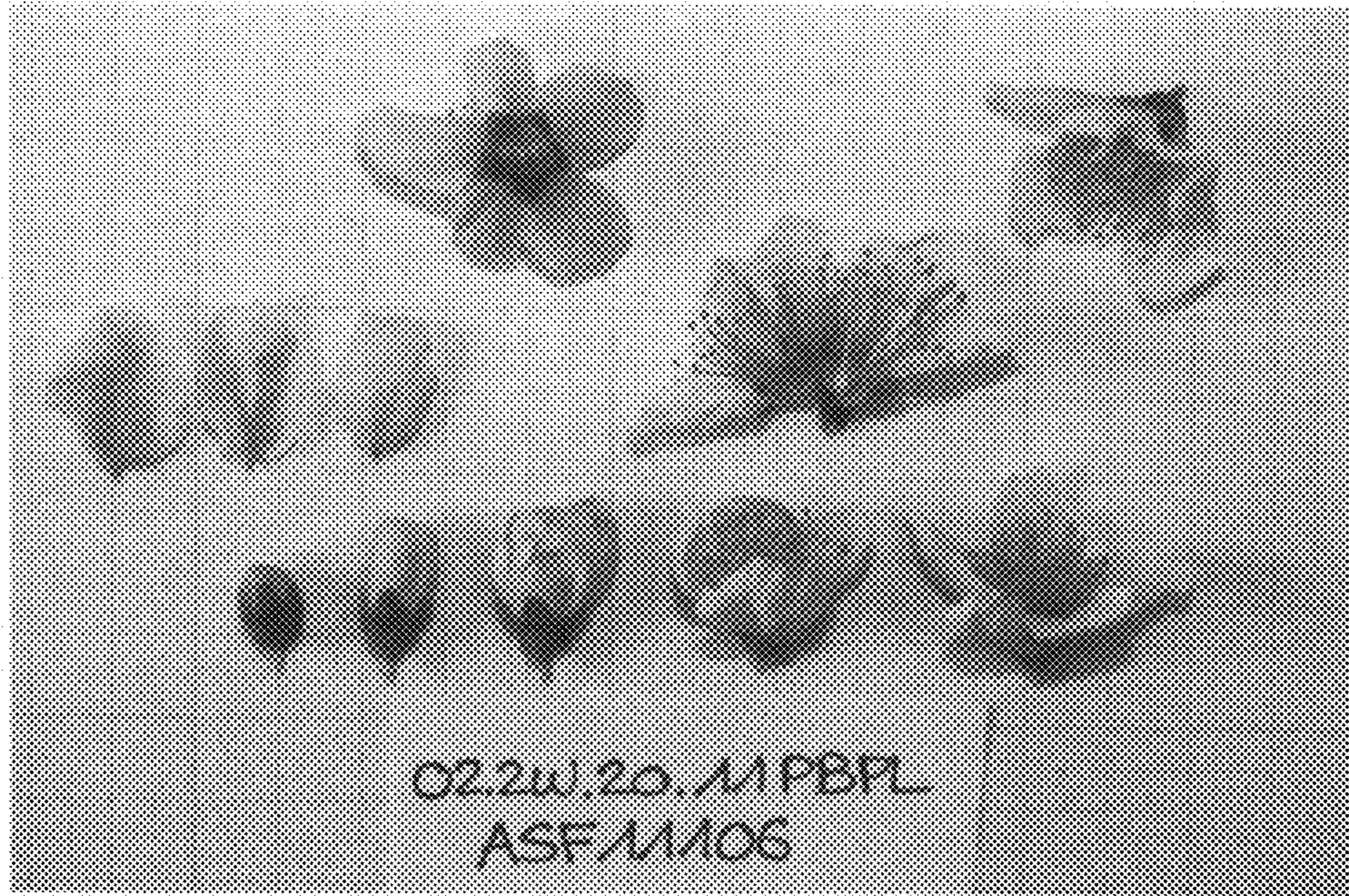
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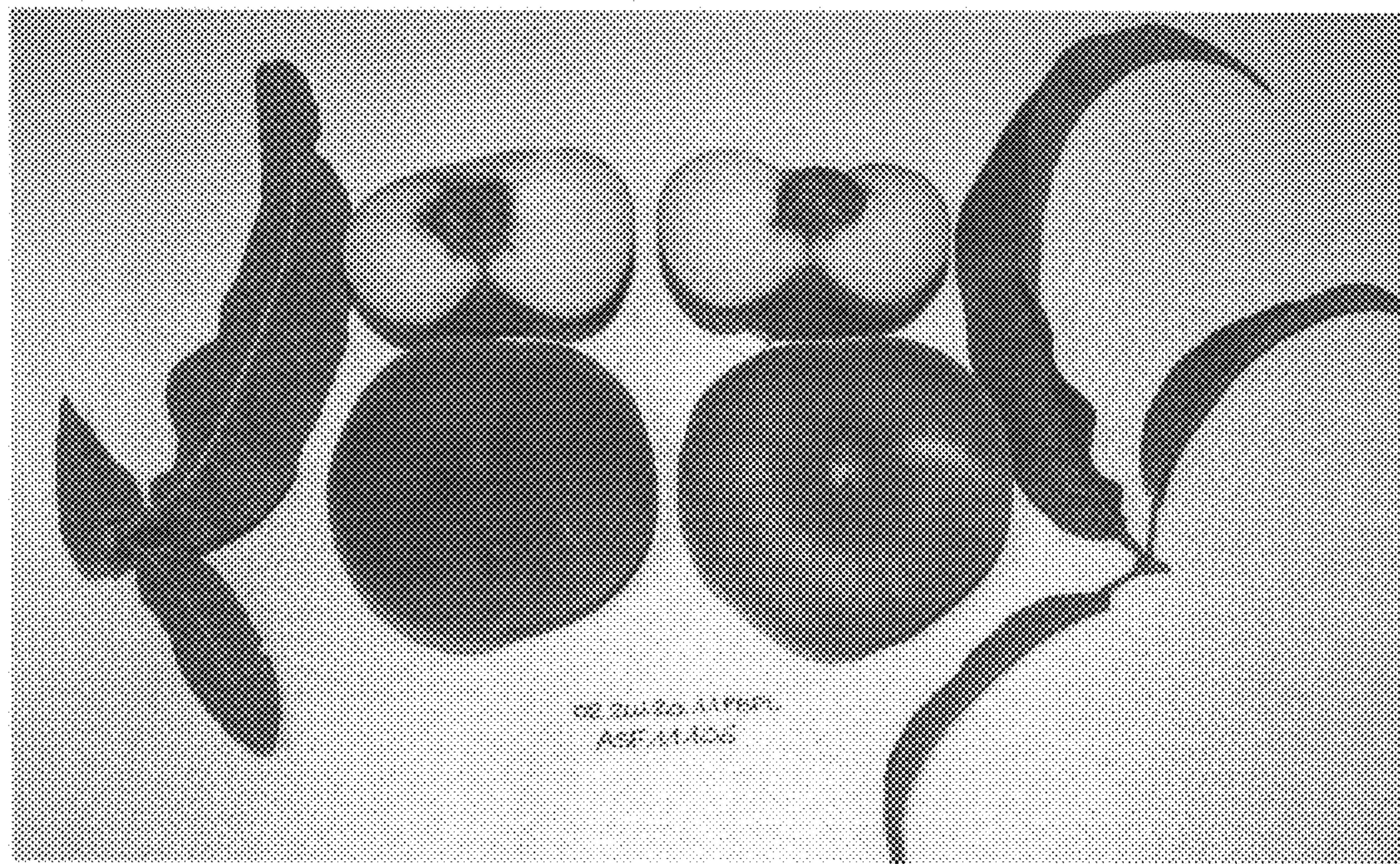
**Fig. 1**



**Fig. 2**



**Fig. 3**



**Fig. 4**