

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

(10) **Patent No.:** **US PP33,176 P2**
(45) **Date of Patent:** **Jun. 22, 2021**

(54) **DRAGON FRUIT PLANT NAMED ‘DF 16’**

(50) Latin Name: *Hylocereus undatus*
Varietal Denomination: **DF16**

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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 0 days.

(21) Appl. No.: **16/974,267**

(22) Filed: **Dec. 10, 2020**

(51) **Int. Cl.**
A01H 6/24 (2018.01)
A01H 5/08 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./156**

(58) **Field of Classification Search**
USPC Plt./156
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct dragon fruit plant is described. The variety resulted from selection among a population of seedlings derived from a controlled cross carried out in 2013 between RF (seed parent) (not patented) and ‘LD1’ (pollen parent) (not patented) in Tien Giang, Viet Nam. The variety was selected due to its appearance, eating quality and canker tolerance.

4 Drawing Sheets

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Genus and species plant named: *Hylocereus undatus*.
Variety denomination: ‘DF16’.

BACKGROUND OF THE INVENTION

The variety resulted from selection among a population of seedlings derived from a controlled cross carried out in 2013 between ‘RF’ (seed parent) (not patented) and ‘LD1’ (pollen parent) (not patented) in Tien Giang, Viet Nam. ‘DF16’ was identified in 2016 as having potential as a new variety due to its attractive fruit appearance, good eating quality and canker tolerance. ‘DF16’ was first asexually propagated by cuttings in 2017, in Tien Giang, Viet Nam. The resulting plants were planted in clonal trials and underwent further evaluation. The plants were subsequently also found to be true to type demonstrating that the characteristics of the new variety are stable and transmitted without change through succeeding propagations.

SUMMARY OF THE INVENTION

‘DF16’ is characterized by its attractive medium sized fruit with light pink flesh and excellent flavour; dark pink to red skin color and tolerance to canker (*Neoscytalidium dimidiatum*).

Asexual reproduction of this new variety by cuttings, and in vitro shows that the aforementioned characteristics are true to form and are established and transmitted through succeeding propagation.

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COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

TABLE 1

Comparison table between female parent and variety

Characteristic	‘RF’	‘DF16’
Flesh color	Near white, NN155D	Near light pink, 55C
Fruit length	Short, average 78 mm	Medium, average 94 mm
Stem length of segment	Medium, average 889 mm	Medium, average 790 mm

TABLE 2

Comparison table between male parent and variety

Characteristic	‘LD1’	‘DF6’
Flesh color	Near dark red, 53B	Near light pink, 55C
Stem length of segment	Short, average 715 mm	Medium, average 790 mm
Young stem reddish color	Medium to strong	Absent to weak

TABLE 3

Comparison table between commercial variety ‘LD5’ (not patented) and variety

Characteristic	‘LD5’	‘DF16’
Young stem reddish color	Medium	Absent to weak

TABLE 3-continued

Comparison table between commercial variety 'LD5' (not patented) and variety		
Characteristic	'LD5'	'DF16'
Fruit length of apical bracts	Long, average 66 mm	Short, average 35 mm

BRIEF DESCRIPTION OF PHOTOGRAPHS

The accompanying photographs show typical specimens of the tree, foliage and fruit of the new variety as depicted in colors as nearly true as is reasonably possible to make the same in a color illustration of this character.

- FIG. 1: 'DF16' cut fruit segments.
- FIG. 2: 'DF16' cut fruit.
- FIG. 3: 'DF16' whole fruit.
- FIG. 4: 'DF16' fruit two-year-old plant.

DETAILED DESCRIPTION

The following is a description of the new variety with color terminology in accordance with The Royal Horticultural Society Colour Charts (R.H.S.C.C.) 2015 edition.

The specimens described were grown in Tien Giang, Viet Nam. The observations were made in the 2018-2020 season on 1-2 year-old plant.

Plant:

- Form.—Drooping.
- Vigour.—Strong.
- Habit.—Climbing cactus.

Young stem:

- Reddish color.—Absent to weak intensity.

Stem: Observation made on mature stems segment at end of year's growth.

- Shape.—Three broad thin ribs.
- Length of segment.—Medium, average 790 mm.
- Width.—Medium, average 44 mm.
- Waxiness.—Weak.
- Texture of surface.—Smooth.
- Distance between areoles.—Medium, average 53 mm.
- Arch height.—Medium, average 4 mm.
- Margin of rib.—Convex.
- Intensity of grey color of areoles.—Dark intensity.

Areoles and spines: Observations made on intact mature stems.

- Number of spines.—Medium to many, average 4.
- Spine length.—Long, average 5 mm.
- Spine main color.—Near brown N201A.

Flower bud: Observation made 17 days after flower bud burst.

- Shape.—Elliptic.
- Shape at apex.—Acute.
- Color.—Near light green 144A.
- Length of pericarpel.—Short, average 33 mm.
- Width of pericarpel.—Short, average 28 mm.
- Length of perianth.—Medium, average 27 mm.

Flower: Observations made at full flower opening.

- Intensity of red color of bract.—Weak to medium intensity.
- Shape.—Bell shaped.
- Petal color.—Near white NN155D.
- Sepal main color.—Near light green N144D.
- Sepal pattern of secondary color.—None.
- Length of style.—Medium, average 25 mm.
- Number of stigma lobes.—Medium, average 25 mm.
- Color of stigma lobe.—Green.
- Position of anthers in relation to stigma.—Same level.
- Flowering time.—Mid April; nocturnal.

Fruit: Observations made on 5 intact fruit fully mature for consumption 3 to 5 days after first color change.

- Length.—Medium, average 94 mm.
- Width.—Narrow to medium, average, 62 mm.
- Weight.—Medium, average 290 g.
- Ratio length/width.—Medium.
- Number of bracts.—Medium, average 23.
- Length of apical bracts.—Short, average 35 mm.
- Position of bracts towards the peel.—Slightly held out, average 2 mm.
- Main color of middle bracts.—Near red 53D.
- Width of the base of the bracts.—Narrow, average 25 mm.
- Thickness of peel.—Thick, average 2 mm.
- Color of peel (excluding bracts).—Near pink 63B.
- Color of flesh.—Near light pink 55C.
- Sweetness.—High, brix 19.
- Apical cavity.—Medium, average 19 mm.
- Seed size.—Small to medium.
- Harvest.—Mid May to the end of November. Harvested in the same window as 'LD1' and 'LD5'.

Use: Fresh market.

- Disease.—Tolerant to canker *Neoscytalidium dimidiatum*.

The invention claimed is:

- 1. A new and distinct dragon fruit plant substantially as illustrated and described herein.

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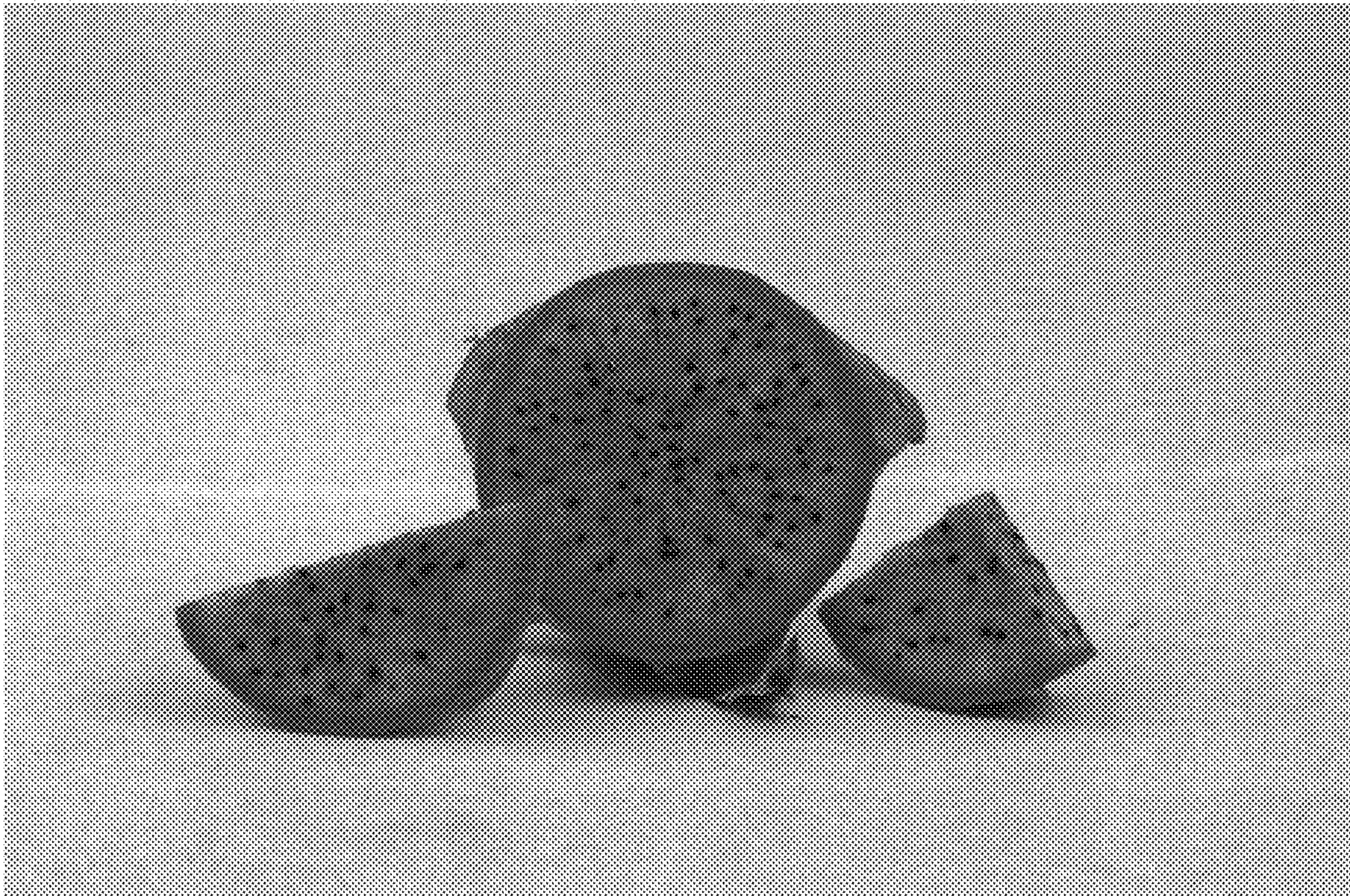


Fig. 1

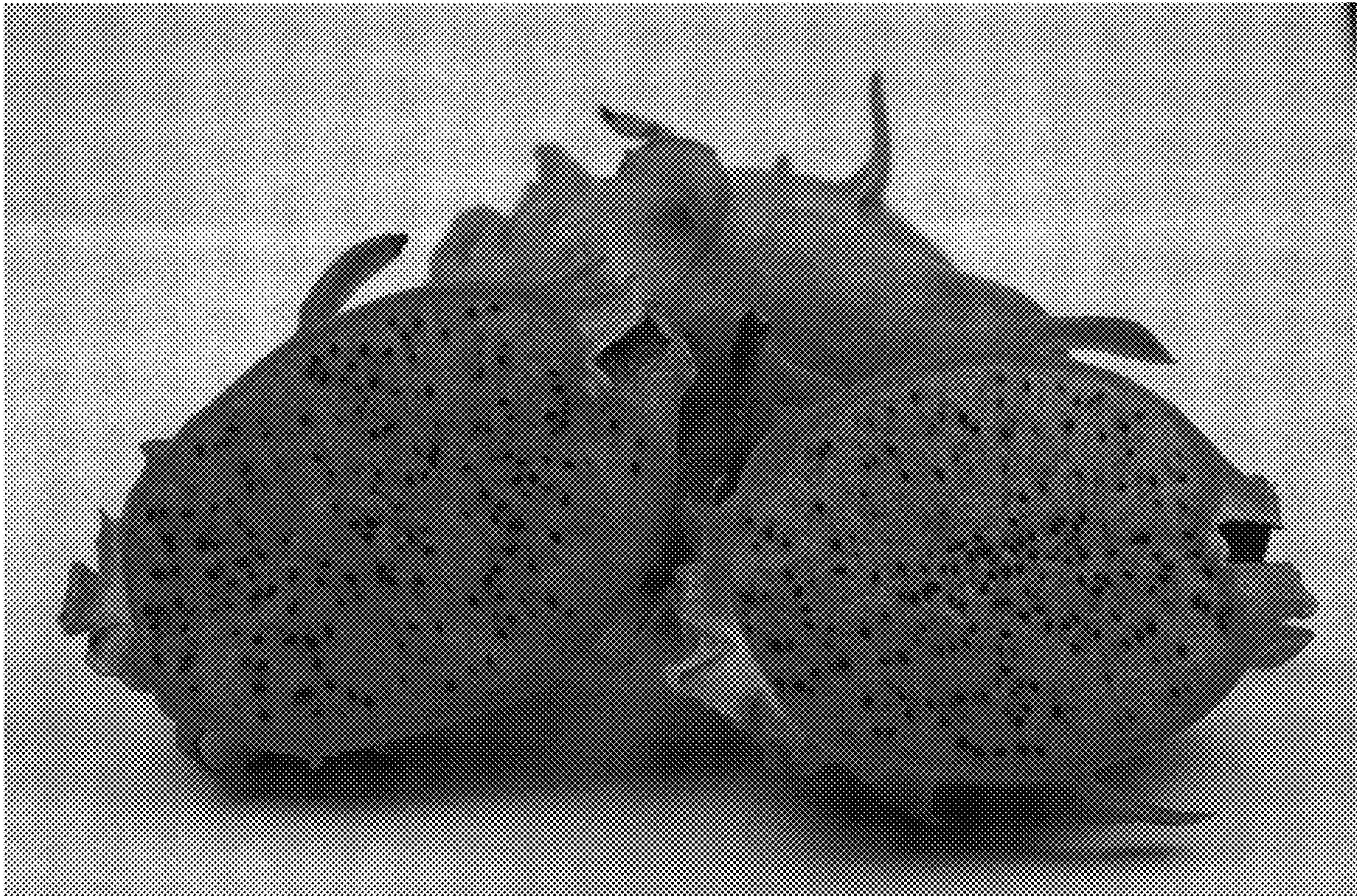


Fig. 2



Fig. 3



Fig. 4