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**Nelson et al.**

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(54) **STRAWBERRY PLANT NAMED ‘BG-10.3169’**

(50) Latin Name: *Fragaria ananassa*  
Varietal Denomination: **BG-10.3169**

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See application file for complete search history.

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(57) **ABSTRACT**

This invention relates to a new and distinct variety of  
strawberry plant named ‘BG-10.3169’. This new strawberry  
plant named ‘BG-10.3169’ is primarily adapted to the grow-  
ing conditions of the central coast of California, and is  
primarily characterized by its very large fruit size with  
strong fruit gloss, very good fruit flavor with firm flesh,  
moderately creased fruit, early time of first flower and fruit,  
medium plant size with dark yellow green foliage, and  
fruiting truss flowers typically visible above the foliage.

**4 Drawing Sheets**

**1**

Latin name of the genus and species of the plant claimed:  
*Fragaria ananassa*.

Variety denomination: ‘BG-10.3169’.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct straw-  
berry variety named ‘BG-10.3169’. This new variety is a  
result of a controlled cross made in 2010 in an ongoing  
breeding program between strawberry variety designated  
‘BG-4.370’ (U.S. Plant Pat. No. 27,441) as the seed (female)  
parent, and strawberry variety designated ‘BG-1975’ (U.S.  
Plant Pat. No. 17,725) as the pollen (male) parent. The  
variety is botanically known as *Fragaria ananassa*.

The seedling resulting from the aforementioned cross was  
selected from a controlled breeding plot in Ventura County,  
Calif. in the winter of 2012. After its selection, the new  
variety was asexually propagated by stolons in both Siski-  
you County, Calif. and San Joaquin County, Calif. The new  
variety was extensively tested over the next several years in  
fruiting fields in Ventura County, Calif. This propagation has  
demonstrated that the combination of traits disclosed herein  
as characterizing the new variety are fixed and remain  
true-to-type through successive generations of asexual  
reproduction.

**BRIEF SUMMARY OF THE INVENTION**

‘BG-10.3169’ is primarily adapted to the climate and  
growing conditions of the central coast of California. The  
nearby Pacific Ocean provides the humidity and moderate  
temperatures needed to produce a strong, vigorous plant and  
maintain fruit quality during the winter and spring produc-  
tion months.

**2**

The following traits have been repeatedly observed and  
are determined to be unique characteristics of ‘BG-10.3169’,  
which in combination distinguish this strawberry plant as a  
new and distinct variety:

1. Very large fruit size with strong fruit gloss;
2. Very good fruit flavor with firm flesh;
3. Moderately creased fruit;
4. Early time of first flower and fruit;
5. Medium plant size with dark yellow green foliage; and
6. Fruiting truss flowers typically visible above the foli-  
age.

The strawberry variety that is believed to be most closely  
related to the new variety ‘BG-10.3169’ is ‘BG-3.324’ (U.S.  
Plant Pat. No. 23,256). In side-by-side comparisons to the  
similar strawberry variety ‘BG-3.324’, ‘BG-10.3169’ differs  
by the following combination of characteristics as described  
in Table 1.

**TABLE 1**

Characteristic	‘BG-10.3169’	‘BG-3.324’ (U.S. Plant Pat. No. 23,256)
Fruit: season	31.1	29.1
Fruit: average size (gm)		
Fruit: flavor	Very good	Good
Fruit: gloss	Strong	Moderate
Fruit: firmness of flesh	Firm	Ranges from firm to very firm
Fruit: expression of hollow center	Weak	Strong
Foliage: color of upper surface	Dark yellow green	Ranges from light to medium yellow green
Fruiting truss: anthocyanin intensity	Absent or very weak	Medium
Fruiting truss: position	Strongly above	Ranges from even

TABLE 1-continued

Characteristic	'BG-10.3169'	'BG-3.324' (U.S. Plant Pat. No. 23,256)
relative to foliage		with to above
Disease reactions:	Moderately	Susceptible
Fusarium wilt	susceptible	

For identification, a series of molecular markers have been determined for this new variety.

'BG-10.3169' differs from its parents, 'BG-4.370' and 'BG-1975' by the following combination of characteristics as described in Tables 2 and 3.

TABLE 2

Characteristic	'BG-10.3169'	'BG-4.370' (U.S. Plant Pat. No. 27,441)
Fruit: marketable yield	Ranges from medium to high	Medium
Plant: vigor	Medium	Small
Fruit: flavor	Very good	Fair
Fruit: color	Red	Ranges from orange red to red

TABLE 3

Characteristic	'BG-10.3169'	'BG-1975' (U.S. Plant Pat. No. 17,725)
Fruit: size	Large	Medium
Fruit: marketable yield	Ranges from medium to high	Medium
Fruit: evenness of surface	Ranges from slightly to strongly uneven	Slightly uneven
Fruiting truss: position relative to foliage	Strongly above	Ranges from even with to above

#### BRIEF DESCRIPTIONS OF THE PHOTOGRAPHS

The accompanying color photographs illustrate the overall appearance of typical specimens of the new strawberry variety 'BG-10.3169' at various stages of development, as true as it is reasonably possible with color reproductions of this type. Color in the photographs may differ slightly from the color value cited in the botanical descriptions which accurately describe the color of 'BG-10.3169'. The depicted plant and plant parts of the new strawberry variety 'BG-10.3169' are approximately six months old. The photographs were taken in Ventura County, Calif.

FIG. 1 shows typical fruiting field characteristics of 'BG-10.3169', taken in the month of March 2019;

FIG. 2 shows a close-up view of a typical plant of 'BG-10.3169', taken in the month of March 2019;

FIG. 3 shows typical mature and immature field fruit of 'BG-10.3169', taken in the month of March 2019; and

FIG. 4 shows typical internal and external mature fruit characteristics of 'BG-10.3169', taken in the month of March 2019.

#### DETAILED BOTANICAL DESCRIPTION

The new variety 'BG-10.3169' has not been observed under all possible environmental conditions. The characteristics of the new variety 'BG-10.3169' may vary in detail,

depending upon variations in environmental factors, including weather (temperature, humidity and light intensity), day length, soil type and location. In addition, the characteristics of any parental variety or comparison variety included in Tables 1, 2 and 3 of the present invention may vary in detail, depending upon variations in environmental factors, including weather (temperature, humidity and light intensity), day length, soil type and location.

The aforementioned photographs, together with the following description of the new variety 'BG-10.3169', unless otherwise noted, are based on observations taken during the 2019 growing season in Ventura County, Calif. These measurements and ratings were taken from plants of 'BG-10.3169' dug from a high-elevation nursery located in Siskiyou County, Calif. during early October 2018 and planted approximately four to five days later in Ventura County, Calif. The approximate age of the observed plants is six months. Yield observations including average weight and marketable yield, along with fruit quality characteristics including soluble solids, are averaged from five years of data collected from the 2014 through 2018 growing seasons. Flower measurements and characteristics are from secondary flowers unless otherwise noted. Fruit characteristics and measurements are from secondary fruit, unless otherwise noted.

Where noted, color terminology follows The Royal Horticultural Society Colour Chart, London (2007).

The following characteristics describe fruit, plant, stolon, foliage, fruiting truss, flower, reproductive organs and pest and disease characteristics of the new strawberry 'BG-10.3169'.

#### Fruit characteristics:

*Color of mature fruit.*—RHS 45B (red).

*Color of internal flesh (excluding core).*—RHS 45C (medium red).

*Color of core.*—RHS 35C (medium red).

*Average length (cm).*—4.2.

*Average width (cm).*—4.1.

*Size.*—Very large.

*Average length/width ratio.*—1.07 (ranges from as long as broad to slightly longer than broad).

*Average calyx diameter (cm).*—4.7.

*Season average weight (gm).*—31.1.

*Achene color, shaded side.*—RHS 153B (yellow green group).

*Achene color, sun-exposed side.*—RHS 183B (greyed purple group).

*Average achene weight (mg).*—0.52.

*Average achenes per berry.*—448.

*Season marketable yield (gm/plant).*—1,040.

*Predominant shape.*—Cordate (cordiform).

*Difference in shape between primary and secondary fruit.*—Moderate.

*Band without achenes.*—Absent or very narrow.

*Evenness of surface.*—Ranges from slightly uneven to strongly uneven.

*Evenness of color.*—Even or very slightly uneven.

*Glossiness.*—Strong.

*Insertion of achenes.*—Ranges from below surface to level with surface.

*Position of calyx attachment.*—Inserted.

*Attitude of sepals.*—Ranges from outward to upward.

*Size of calyx in relation to fruit diameter.*—Slightly larger.

*Adherence of calyx (when fully ripe).*—Strong.

- Firmness of flesh.*—Firm.
- Distribution of red color of the flesh.*—Marginal and central.
- Hollow center expression.*—Ranges from weak to moderate.
- Flavor.*—Very good.
- Soluble solids (% Brix).*—8.6.
- Time of first flowering.*—Early (late November in Ventura County, Calif.).
- Time of first fruit.*—Early (late December in Ventura County, Calif.).
- Harvest period.*—Late December to May (in Ventura County, Calif.).
- Harvest maturity.*—Early season (March).
- Type of bearing.*—Not remontant.
- Plant characteristics:
- Average height (cm).*—18.9.
- Average spread (cm).*—29.2.
- Size.*—Medium.
- Habit.*—Upright.
- Density.*—Medium.
- Vigor.*—Medium.
- Stolon characteristics:
- Color.*—RHS 146C (yellow green group).
- Anthocyanin coloration.*—RHS 179A (greyed red group).
- Anthocyanin intensity.*—Strong.
- Pubescence.*—Medium.
- Attitude of hairs.*—Upward.
- Average quantity in nursery (per square foot).*—5 to 6 (medium).
- Average diameter at the bract (mm).*—3.0 (medium).
- Terminal leaflet characteristics:
- Average length (cm).*—5.0.
- Average width (cm).*—4.6.
- Average area terminal (cm<sup>2</sup>).*—22.6.
- Average length/width ratio.*—1.09 (longer than broad).
- Shape of base.*—Obtuse.
- Margins (shape of teeth).*—Obtuse (serrate to crenate).
- Average serrations per leaf.*—19.3.
- Foliage characteristics:
- Color of upper surface.*—RHS 147A (dark yellow green).
- Color of underside.*—RHS 147C (yellow green group).
- Number of leaflets.*—Ranges from 3 to 4.
- Leaf size.*—Small.
- Average length (cm).*—7.3.
- Average width (cm).*—9.7.
- Average area foliage (cm<sup>2</sup>).*—71.3.
- Shape in cross section.*—Slightly concave to flat.
- Interveinal blistering.*—Medium.
- Leaf glossiness.*—Ranges from medium to strong.
- Leaf variegation.*—Absent.
- Petiole characteristics:
- Petiole color.*—RHS 144A (yellow green group).
- Average length (cm).*—8.9.
- Average diameter (mm).*—2.7.
- Petiolule color.*—RHS 144A (yellow green group).
- Petiolule average length (mm).*—5.3.
- Attitude of hairs.*—Slightly outward.
- Frequency of bract leaflets.*—Occasional (30% occurrence).

- Size of bract leaflets.*—Average length=0.4 cm.
- Pubescence.*—Ranges from heavy to moderate.
- Stipule characteristics:
- Color.*—RHS 145D (yellow green group).
- Anthocyanin coloration.*—RHS 58B (red purple group).
- Anthocyanin intensity.*—Ranges from weak to medium.
- Average length (mm).*—12.7.
- Average width (mm).*—9.2.
- Fruiting truss characteristics:
- Anthocyanin coloration.*—N/A.
- Anthocyanin intensity.*—Absent or very weak.
- Average length at maturity (cm).*—23.0.
- Position relative to foliage.*—Above.
- Flower quantity (average per plant season long).*—45 to 50 (medium).
- Pedicel attitude of hairs.*—Upward.
- Pubescence.*—Medium.
- Attitude at first pick.*—Prostrate.
- Flower characteristics:
- Petal color.*—RHS NN155C (white group).
- Sepal color.*—RHS N137C (green group).
- Corolla (flower) average diameter (mm).*—29.0 (ranges from medium to large).
- Calyx average diameter (mm).*—39.4.
- Petal average length (mm).*—12.0.
- Petal average width (mm).*—11.3.
- Petal average length/width ratio.*—1.06 (Ranges from as long as broad to longer than broad).
- Average petals per flower.*—6.6.
- Sepal average length (mm).*—16.3.
- Sepal average width (mm).*—7.0.
- Sepal average length/width ratio.*—2.35.
- Average sepals per flower.*—13.1.
- Size of calyx relative to corolla.*—Larger.
- Size of inner calyx relative to outer calyx.*—Smaller.
- Relative position of petals (flowers with 5 or 6 petals).*—Overlapping.
- Reproductive organs:
- Receptacle color.*—RHS 147C (yellow green group).
- Pollen color.*—RHS 14A (yellow orange group).
- Stamen.*—Present.
- Pollen amount.*—Abundant.
- Disease and pest reactions:
- Powdery mildew (Sphaerotheca macularis).*—Moderately susceptible.
- Angular leaf spot (Xanthomonas fragariae).*—Moderately susceptible.
- Botrytis fruit rot (Botrytis cinerea).*—Moderately susceptible.
- Fusarium wilt (Fusarium oxysporum).*—Moderately susceptible.
- Anthraxnose crown rot (Colletotrichum fragariae).*—Moderately susceptible.
- Two-spotted spider mite (Tetranychus urticae).*—Moderately susceptible.

We claim:

1. A new and distinct strawberry plant named 'BG-10.3169', as herein described and illustrated by the characteristics set forth above.

\* \* \* \* \*

FIG. 1



FIG. 2



FIG. 3

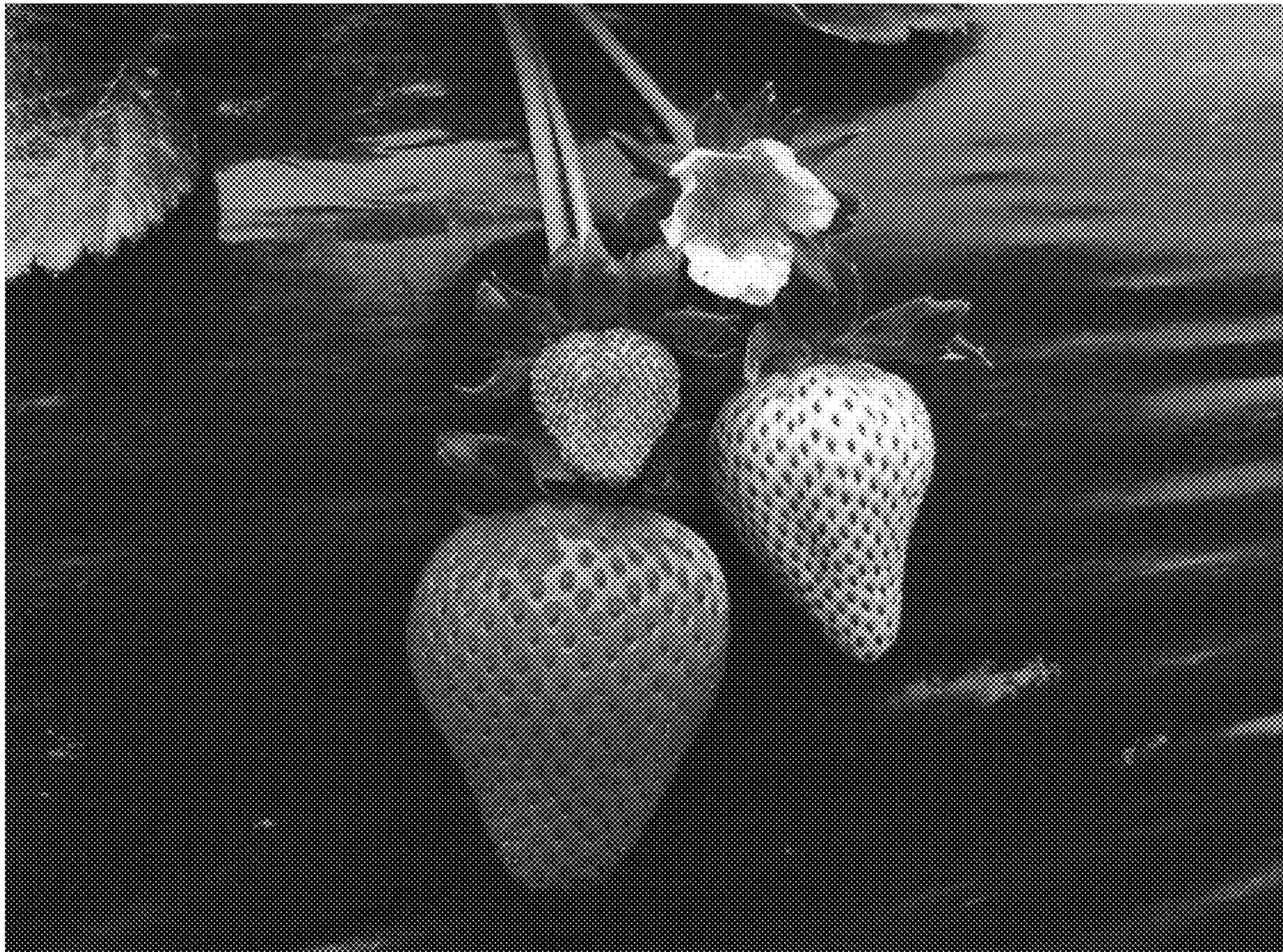


FIG. 4

