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Nelson et al.

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(54) **STRAWBERRY PLANT NAMED ‘BG-4.352’**

(50) Latin Name: *Fragaria ananassa*
Varietal Denomination: **BG-4.352**

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patent is extended or adjusted under 35
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(57) **ABSTRACT**

This invention relates to a new and distinct variety of straw-
berry plant named ‘BG-4.352’. This new strawberry plant
named ‘BG-4.352’ is primarily adapted to the growing con-
ditions of the central coast of California, and is primarily
characterized by its orange red to red fruit color, large fruit
size, many seeds per berry, very early fruit production, small
foliage, and heavy pubescence on the petioles and fruiting
trusses.

4 Drawing Sheets

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BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct straw-
berry variety named ‘BG-4.352’. This new variety is a result
of a controlled cross made in 2004 in an ongoing breeding
program between strawberry variety designated ‘PS-1269’
(U.S. Plant Pat. No. 10,686) and strawberry variety design-
ated ‘BG-414.065’ (a non-patented selection). Due to the
combining of the reciprocal seed lots, it is unknown as to
which parent variety is the seed parent and which parent
variety is the pollen 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 2006. After its selection, the new variety
was asexually propagated by stolons in both Siskiyou 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 characteriz-
ing the new variety are fixed and remain true-to-type through
successive generations of asexual reproduction.

BRIEF SUMMARY OF THE INVENTION

‘BG-4.352’ is primarily adapted to the climate and growing
conditions of the central coast of California. The nearby
Pacific Ocean provides the humidity and moderate tempera-
tures needed to produce a strong, vigorous plant and maintain
fruit quality during the winter and spring production months.

The following traits have been repeatedly observed and are
determined to be unique characteristics of ‘BG-4.352’, which
in combination distinguish this strawberry plant as a new and
distinct variety:

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1. Orange red to red fruit color;
2. Large fruit size;
3. Many seeds per berry;
4. Very early fruit production;
5. Small foliage; and
6. Heavy pubescence on the petioles and fruiting trusses.

The strawberry variety that is believed to be most closely
related to the new variety ‘BG-4.352’ is ‘BG-959’ (U.S. Plant
Pat. No. 17,864). In side-by-side comparisons to the similar
strawberry variety ‘BG-959’, ‘BG-4.352’ differs by the fol-
lowing combination of characteristics as described in Table 1.

TABLE 1

Characteristic	‘BG-4.352’	‘BG-959’ (U.S. Plant Pat. No. 17,864)
Fruit: color	Ranges from orange red to red	Red
Fruit: size (grams)	30.7 (large)	27.2 (medium)
Fruit: predominant shape	Ranges from conical to cylindrical	Conical
Fruit: insertion of achenes	Ranges from level with to below the surface	Level with the surface
Time of first fruit production	Very early	Early
Plant: size	Medium	Ranges from medium to small
Foliage: color	Medium yellow green	Ranges from medium to dark green
Fruiting truss: position relative to foliage	Ranges from level with to above	Level with
Fruiting truss: pubescence	Strong	Medium

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

‘BG-4.352’ differs from its parents, ‘PS-1269’ and ‘BG-414.065’ by the following combination of characteristics as described in Table 2.

TABLE 2

Characteristic	‘BG-4.352’	‘PS-1269’ (U.S. Plant Pat. No. 10,686)	‘BG-414.065’
Type of bearing	Not remontant (short day)	Partially remontant (summer bearing)	Not remontant (short day)
Fruit size	Large	Medium	Small
Plant size	Medium	Ranges from medium to large	Large
Fruit color	Ranges from orange red to red	Red	Red

BRIEF DESCRIPTIONS OF THE PHOTOGRAPHS

The accompanying color photographs illustrate the overall appearance of typical specimens of the new strawberry variety ‘BG-4.352’ 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-4.352’. The depicted plant and plant parts of the new strawberry variety ‘BG-4.352’ are approximately five to six months old. The photographs were taken in Ventura County, Calif.

FIG. 1 shows typical fruiting field characteristics of ‘BG-4.352’, taken in the month of April 2014;

FIG. 2 shows a close-up view of the typical leaf structure of ‘BG-4.352’, taken in the month of April 2014;

FIG. 3 shows typical mature and immature field fruit of ‘BG-4.352’, taken in the month of March 2014; and

FIG. 4 shows typical internal and external mature fruit characteristics of ‘BG-4.352’, taken in the month of March 2014.

DETAILED BOTANICAL DESCRIPTION

The new variety ‘BG-4.352’ has not been observed under all possible environmental conditions. The characteristics of the new variety ‘BG-4.352’ 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 3 through 9 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-4.352’, unless otherwise noted, are based on observations taken during the 2014 growing season in Ventura County, Calif. These measurements and ratings were taken from plants of ‘BG-4.352’ dug from a high-elevation nursery located in Siskiyou County, Calif. during early October 2013 and planted approximately four to five days later in Ventura County, Calif. The approximate age of the observed plants is five to six months. Yield observations and fruit quality characteristics

are averaged from five years of data collected from the 2010 through 2014 growing seasons. Flower measurements and characteristics are from secondary flowers unless otherwise noted. Fruit characteristics and measurements are from secondary fruit, unless otherwise noted.

Color terminology where noted follows The Royal Horticultural Society Colour Chart, London (2007).

The following Tables 3 through 9 describe fruit, plant, stolon, foliage, fruiting truss, flower, and pest and disease characteristics of the new strawberry ‘BG-4.352’.

TABLE 3

FRUIT CHARACTERISTICS	
Characteristic	‘BG-4.352’
Color of mature fruit	RHS 45A, ranges from orange red to red
Color of internal flesh	RHS 45B, medium red
Color of core	RHS 39A, medium red
Fruit length (cm)	4.7
Fruit width (cm)	3.9
Fruit size	Large
Fruit length/width ratio	1.20, ranges from slightly longer than broad to much longer than broad
Calyx diameter (cm)	4.1
Average fruit weight (gm)	30.7
Achene color, shaded side	RHS 153B, yellow green group
Achene color, sun-exposed side	RHS 182A, greyed red group
Achene weight (mg)	0.42
Average achenes per berry	583
Marketable fruit yield (gm/plant)	1,096
Predominant fruit shape	Ranges from conical to cylindrical
Difference in shapes between primary and secondary fruit	Slight
Band without achenes	Absent or very narrow
Evenness of fruit surface	Even or very slightly uneven
Evenness of fruit color	Even or very slightly uneven
Fruit glossiness	Medium
Insertion of achenes	Ranges from below surface to level with surface
Position of calyx attachment	Inserted
Attitude of sepals	Outward
Size of calyx relative to fruit diameter	Same size
Adherence of calyx (when fully ripe)	Strong
Firmness of fruit flesh	Ranges from medium to firm
Distribution of red color of the flesh	Marginal and central
Hollow center expression	Moderate
Fruit flavor	Good
Soluble solids (% Brix)	6.7
Time of first flower	Very early
Time of first harvest	Very early
Harvest period	January to June
Harvest maturity	Early season
Type of bearing	Not remontant (short day)

TABLE 4

PLANT CHARACTERISTICS	
Characteristic	‘BG-4.352’
Plant height (cm)	15.1
Plant spread (cm)	30.8
Plant size	Medium
Plant habit	Semi-upright
Plant density	Medium
Plant vigor	Medium

TABLE 5

STOLON CHARACTERISTICS	
Characteristic	‘BG-4.352’
Stolon color	RHS 146D, yellow green group
Stolon anthocyanin coloration	RHS 180C, greyed red group
Stolon anthocyanin intensity	Medium
Stolon pubescence	Dense
Attitude of hairs	Slightly outward
Average stolon quantity	Medium
Average stolon diameter at bract (mm)	3.4

TABLE 6

FOLIAGE CHARACTERISTICS	
Characteristic	‘BG-4.352’
Foliage:	
Color of upper surface	RHS 146A, medium yellow green
Color of underside	RHS 138B, green group
Number of leaflets	3
Shape in cross section	Ranges from slightly concave to slightly convex
Intervinal blistering	Medium
Leaf glossiness	Medium
Leaf variegation	Absent
Terminal Leaflet:	
Length (cm)	5.6
Width (cm)	5.1
Leaf size	Small
Length/width ratio	1.09, longer than broad
Shape of base	Obtuse
Margins (shape of teeth)	Rounded (crenate)
Serrations per leaf	20.7
Petiole:	
Petiole color	RHS 144B, yellow green group
Petiole length (cm)	8.7
Petiole diameter (mm)	2.8
Petiolule color	RHS 144B, yellow green group
Petiolule length (mm)	7.8
Attitude of hairs	Strongly outward
Petiole pubescence	Ranges from heavy to moderate
Stipule:	
Color	RHS 146B, yellow green group
Anthocyanin coloration	RHS 58A, red purple group
Anthocyanin intensity	Medium
Length (mm)	16.4
Width (mm)	10.8

TABLE 7

FRUITING TRUSS CHARACTERISTICS	
Characteristic	‘BG-4.352’
Anthocyanin coloration	RHS 182C, greyed red group
Anthocyanin intensity	Medium
Length at maturity (cm)	21.2
Position relative to foliage	Ranges from level with to above
Number of flowers	Medium
Pedicel attitude of hairs	Strongly outward
Pubescence	Strong
Attitude at first pick	Prostrate

TABLE 8

FLOWER CHARACTERISTICS	
Characteristic	‘BG-4.352’
Petal color	RHS NN155C, white group
Sepal color	RHS 137A, green group
Receptacle color	RHS 147C, yellow green group
Anther color	RHS 13A, yellow group
Corolla diameter (mm)	29.6, medium
Calyx diameter (mm)	32.4
Petal length (mm)	9.7
Petal width (mm)	10.3
Petal length/width ratio	0.95, broader than long
Petals per flower	6.0
Sepal length (mm)	10.6
Sepal width (mm)	4.7
Sepal length/width ratio	2.26
Sepals per flower	11.6
Size of calyx relative to corolla	Larger
Relative position of petals	Overlapping
Stamen	Present
Size of inner calyx relative to outer calyx	Ranges from smaller to same

TABLE 9

PEST AND DISEASE REACTIONS	
Characteristic	‘BG-4.352’
Powdery mildew	Moderately susceptible
Verticillium wilt	Moderately susceptible
Angular leaf spot	Susceptible
Botrytis fruit rot	Moderately susceptible
Two-spotted spider mite	Moderately susceptible

We claim:
1. A new and distinct strawberry plant named ‘BG-4.352’, as herein described and illustrated by the characteristics set forth above.

* * * * *

FIG. 1



FIG. 2

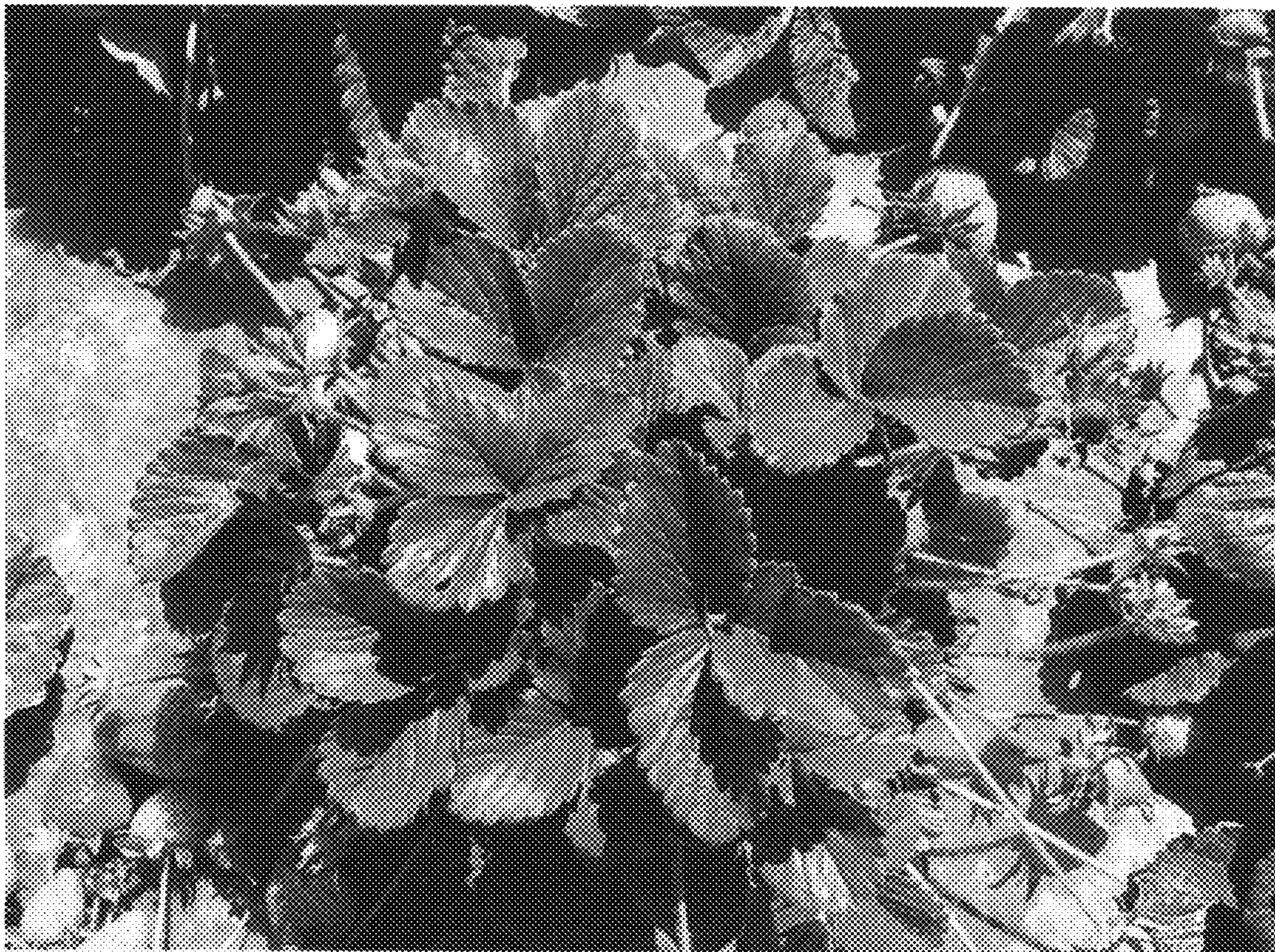


FIG. 3

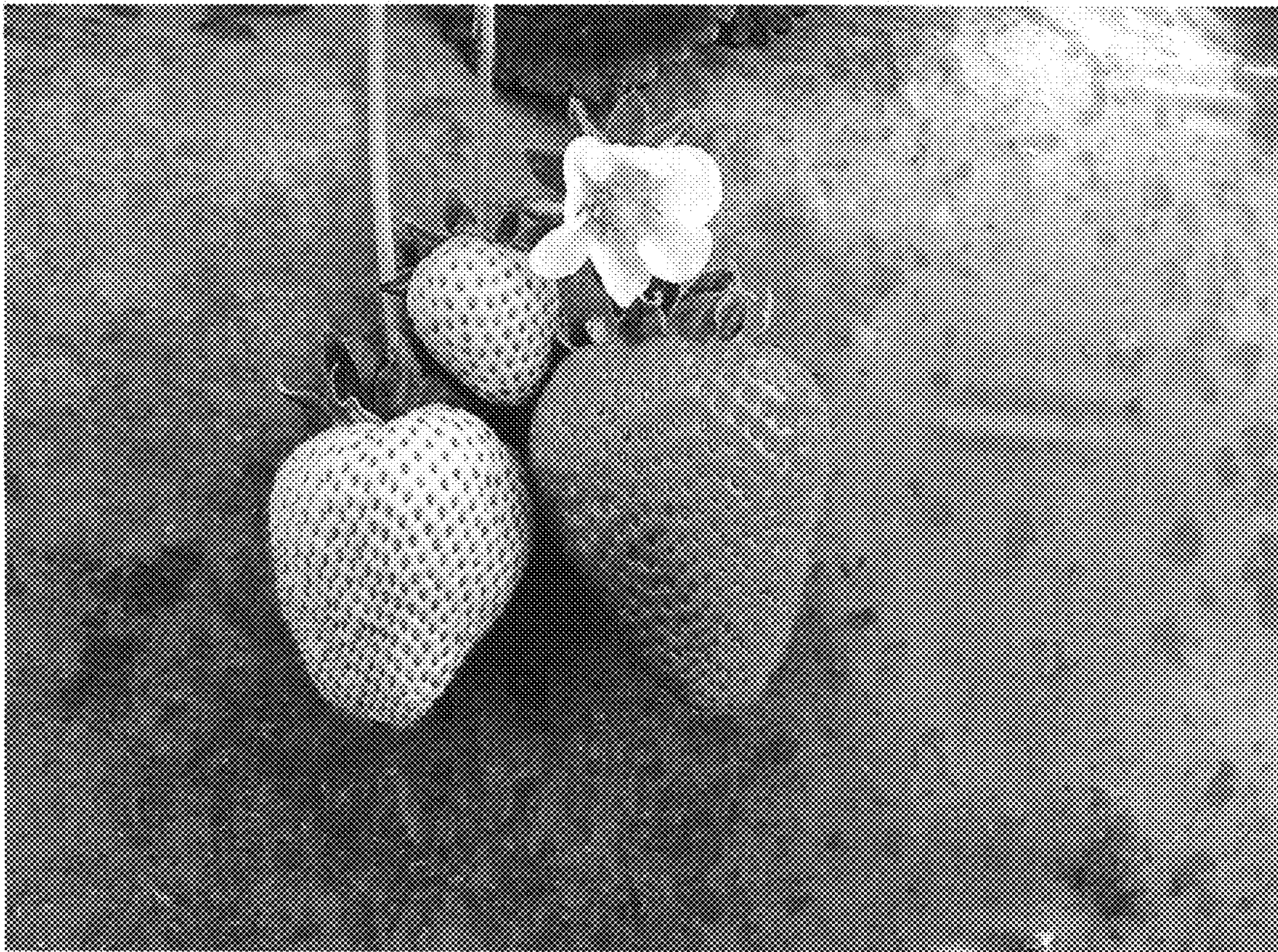


FIG. 4

