

US00PP37093P2

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

(10) **Patent No.:** **US PP37,093 P2**
(45) **Date of Patent:** **Nov. 11, 2025**

(54) **BLUEBERRY PLANT NAMED ‘CBG-23-01’**

(50) Latin Name: *Vaccinium corymbosum*
Varietal Denomination: **CBG-23-01**

(71) Applicants: **Rio Vista Farms Inc.**, Selma, CA (US);
University of Georgia Research Foundation, Inc., Athens, GA (US)

(72) Inventors: **D. Scott NeSmith**, Griffin, GA (US);
Gregory Willems, Kingsbury, CA (US)

(73) Assignees: **Rio Vista Farms Inc.**, Selma, CA (US);
University of Georgia Research Foundation, Inc., Athens, GA (US)

(*) 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.: **18/884,792**

(22) Filed: **Sep. 13, 2024**

(51) **Int. Cl.**
A01H 5/08 (2018.01)
A01H 6/36 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./157**

(58) **Field of Classification Search**
USPC Plt./156, 157
See application file for complete search history.

Primary Examiner — Karen M Redden
(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear, LLP

(57) **ABSTRACT**

The new variety of blueberry ‘CBG-23-01’ is characterized by having fruit that ripens early in the season. The berries of ‘CBG-23-01’ have a sweet, aromatic flavor and mild acidity. Further, the berries of the new variety ‘CBG-23-01’ are crisp, with a smooth, firm texture.

10 Drawing Sheets

1

Latin name of the genus and species claimed: *Vaccinium corymbosum*.
Variety denomination: ‘CBG-23-01’.

REFERENCE TO RELATED APPLICATIONS

This application is related to U.S. application Ser. No. 18/884,644, filed Sep. 13, 2024, U.S. application Ser. No. 18/884,736, filed Sep. 13, 2024, U.S. application Ser. No. 18/885,153, filed Sep. 13, 2024, and U.S. application Ser. No. 18/885,323, filed Sep. 13, 2024, which are directed to blueberry varieties developed by the same breeding program.

BACKGROUND AND SUMMARY OF THE INVENTION

Disclosed herein is a new and distinct southern highbush blueberry variety (*Vaccinium corymbosum*). The varietal denomination of the new variety is ‘CBG-23-01’.

The new variety ‘CBG-23-01’ is a product of a hand-pollinated cross of seed parent ‘TH-1492’ (unpatented) and pollen parent ‘TH-1870’ (unpatented) made by D. Scott NeSmith in 2019 in Griffin, Georgia. The new variety ‘CBG-23-01’ was germinated from seed. The date of first planting of the new variety ‘CBG-23-01’ was November 2021. The new variety ‘CBG-23-01’ was selected by Gregory Willems in May 2023 in Reedley, California. Subsequent testing has demonstrated that the combination of traits disclosed herein that characterize the new variety are stable and retained true to type through successive generations of vegetative, asexual reproduction in Fresno County, California.

The new variety of blueberry ‘CBG-23-01’ is characterized by having fruit that ripens early in the season. The berries of ‘CBG-23-01’ have a sweet, aromatic flavor and mild acidity. Further, the berries of the new variety ‘CBG-

2

23-01’ are crisp, with a smooth, firm texture. The new variety ‘CBG-23-01’ has not shown notable diseases or other pest problems beyond those also common for other blueberry varieties. The new variety ‘CBG-23-01’ has a chilling requirement of about 150-200 hours below 45° F.

The phenotype of the new blueberry variety ‘CBG-23-01’ may vary somewhat with variations in environment, such as temperature and light intensity, and cultural practices, without, however, any variance in genotype.

COMPARISON TO THE PARENTS

The new variety ‘CBG-23-01’ is distinguished from its seed parent ‘TH-1492’ (unpatented) in that the fruit of the new variety is firm, compared to a medium firmness for the fruit of ‘TH-1492’. Further, the fruit of the new variety ‘CBG-23-01’ is sweeter and crunchier than the fruit of ‘TH-1492’. Additionally, the fruit of the new variety ‘CBG-23-01’ ripens earlier, on about April 28th to April 30th, compared to a mid-season ripening on about May 1st to 5th for the fruit of ‘TH-1492’. Lastly, the new variety ‘CBG-23-01’ flowers around February 26th, compared to about February 27th to March 3rd for ‘TH-1492’.

The new variety ‘CBG-23-01’ is distinguished from its pollen parent ‘TH-1870’ (unpatented) by having large to very large sized fruit, compared to the medium to large sized fruit of ‘TH-1870’. Additionally, the fruit of the new variety ‘CBG-23-01’ ripens later, on about April 28th to April 30th, compared to about April 23rd to April 28th for ‘TH-1870’. Lastly, the new variety ‘CBG-23-01’ flowers around February 26th, compared to about February 20th to 23rd for ‘TH-1870’.

COMPARISON TO CLOSEST VARIETY

The new variety ‘CBG-23-01’ resembles ‘Suzibblue’ (U.S. Plant Pat. No. 21,167) and ‘Emerald’ (U.S. Plant Pat. No.

12,165) in that they are early season southern highbush blueberry cultivars with the same vigor. However, the new variety 'CBG-23-01' flowers and ripens on about February 26th and April 30th, respectively, compared to about February 28th and May 7th for 'Suziblue' and February 15th and May 1st for 'Emerald' in Central California. Additionally, the new variety 'CBG-23-01' has larger sized berries than 'Suziblue' and 'Emerald'. Further the fruit of the new variety 'CBG-23-01' is softer than that of 'Emerald', but firmer than the fruit of 'Suziblue'.

TABLE 1

TABLE 1 shows a comparison of the characteristics of 'CBG-23-01', 'Suziblue' (PP21,167) and 'Emerald' (PP12,165). Rating scales are based on a score of 1 to 10, with 1 being the least desirable and 10 being the most desirable.			
	'Suziblue'	'Emerald'	'CBG-23-01'
Berry Size	8.0	8.0	9.1
Berry Scar	7.0	7.5	7.0
Berry Color	7.0	8.0	7.0
Berry Firmness	7.3	8.5	8.0
Berry Flavor	7.0	7.0	8.0
Cropping	8.5	8.5	7.5
Plant Vigor	8.0	8.0	8.0
Date of 50% Flowering	Feb. 28	Feb. 15	Feb. 26
Date of 50% Ripening	May 7	May 1	April 30
Fruit Development Period	69 days	60 days	65 days

TABLE 2

TABLE 2 shows a comparison of the characteristics between the new variety 'CBG-23-01' and related varieties 'CBG-23-02', 'CBG-23-03', 'CBG-23-04' and 'CBG-23-05'.					
	'CBG-23-01'	'CBG-23-02'	'CBG-23-03'	'CBG-23-04'	'CBG-23-05'
Season	Early	Early to mid-season	Early	Early to mid-season	Early to mid-season
Harvest date	April 18th-May 12th	April 28th-May 28th	April 18th-May 12th	May 3rd-June 1st	May 3rd-June 1st
Fruit size	Large, 20 mm-24 mm	Large, 19 mm-24 mm	Large, 18 mm-21 mm	Large, 18 mm-21 mm	Very large, 19 mm-22 mm
Flavor	Sweet, aromatic	Balanced sweetness and acidity	Balanced sweetness and acidity	Very sweet with mild acidity and floral undertones	Sweet with moderate acidity
Fruit Texture	Smooth, crisp	Crisp, firm	Crisp	Crisp	Smooth, crisp
Fruit Color	Deep blue	Medium blue	Light to medium blue	Medium blue	Medium blue

BRIEF DESCRIPTION OF THE ILLUSTRATIONS

The accompanying color photographic illustrations taken in Reedley, California in 2024 pertain to 2.5 year old plants, and show the overall appearance and distinct characteristics of the new variety 'CBG-23-01'. The colors in the photographs are as true as possible and may differ slightly from

the color values cited in the detailed botanical description, which accurately describes the colors of the new variety 'CBG-23-01'.

FIGS. 1-3 show the berries of the new variety 'CBG-23-01' on the plant ready for harvest.

FIG. 4 shows the growth pattern of the plant of the new variety 'CBG-23-01'.

FIGS. 5 and 6 show the plant of the new variety 'CBG-23-01' during bloom.

FIG. 7 shows the plant of the new variety 'CBG-23-01'.

FIG. 8 shows the flowers of the new variety 'CBG-23-01'.

FIG. 9 shows the average berry weight of the new variety 'CBG-23-01'.

FIG. 10 shows the average berry size of the new variety 'CBG-23-01'.

FIG. 11 shows the fruit of the new variety 'CBG-23-01' cut in half.

FIG. 12 shows the fruit of the new variety 'CBG-23-01' as a whole.

DESCRIPTION OF THE NEW VARIETY

The following traits have been consistently observed in the original plant of the new variety 'CBG-23-01' and in asexually propagated progeny via vegetative cuttings in Fresno County, California. The descriptive matter which follows pertains to 2.5-year-old 'CBG-23-01' plants grown in the vicinity of Reedley, California during 2023, with supplemental irrigation, and is believed to apply to plants of the variety grown under similar conditions of soil and climate elsewhere. The dimensions, sizes, colors, and other characteristics given are to be understood to be approximations and averages set forth as accurately as practicable.

Throughout this specification, color names beginning with a small letter signify that the name of that color as used in common speech is aptly descriptive. Color names beginning with a capital letter designate values based upon The R.H.S. Colour Chart published by The Royal Horticultural Society, London, England, Sixth Edition, 2019 reprint. The colors and other phenotypic attributes may deviate from the stated values and descriptions depending upon variation in environmental, seasonal, climatic and cultural conditions. General: The new variety 'CBG-23-01' produces fruit from about April 23rd to May 20th. Measurements were taken on 2.5-year-old plants.

Plant:

Root type.—Fibrous.

Growth rate.—Moderately vigorous.

Size.—3.2 feet tall, 8-inch plant base/crown.

Habit.—Plants are dense with vertical growth and some spreading. It has 1-3 main canes with multiple branches within 15 cm of the surface of the soil.

Productivity.—About 2.3 pounds per plant.

Cold hardiness.—Similar to other early ripening southern highbush varieties.

Chilling requirements.—Approximately 150 to 200 hours of temperatures at or below 45° F. to induce normal leafing and flowering during the spring.

Leafing.—Plants readily break numerous leaf buds simultaneously with anthesis.

Canes.—Main Cane: Diameter: Approximately 14 mm. Color: About Medium Grey-Brown 199B. First Major Branch: Diameter: Approximately 5 mm. Color: About Medium Yellow-Green N144C. 2-year-Old Cane: Diameter: Approximately 13 mm. Color:

About Medium Grey-Brown 199B. Current Season
Wood: Diameter: Approximately 4 mm. Color:
About Medium Yellow-Green 144C.

Fruiting wood.—Numerous twigs approximately 15 to
25 cm in length and internode lengths of approxi- 5
mately 15 to 25 mm are common.

Foliage:

Leaf color of mature leaves.—Top side color: About
Dark Green NN137A. Under side color: About
Medium Green 138B. 10

Leaf arrangement.—Alternate simple.

Leaf shape.—Elliptic.

Leaf venation.—Pinnate with slight netting (or slightly
reticulated).

Leaf apices.—Broadley acuminate. 15

Leaf base.—Cuneate to acute.

Leaf length.—Approximately 50 mm.

Leaf width.—Approximately 30 mm.

Leaf margin.—Crenate.

Leaf surface.—Glaucous (waxy). 20

Petiole size.—Small, approximately 3 mm long and 1
mm wide.

Petiole color.—About Light Yellow-Green 145C.

Petiole leaves margin.—Smooth or ciliate; occasion- 25
ally stalked with glands along the leaf margin.

Flower:

Date of 50% anthesis.—About February 26th in Central
California.

Flower shape.—Urceolate.

Flower bud number.—High (6-10 buds per fruiting 30
shoot).

Flowers per cluster.—Approximately 6-7.

Flower fragrance.—Yes.

Corolla.—Color: About Dark Green-White 157A for
both the inner and outer surfaces. Length: About 8 to 35
9 mm. Width: About 6 to 7 mm. Aperture width:
About 3 to 4 mm.

Peduncle.—Length: About 8 to 15 mm. Color: About
Medium Yellow-Green 144A.

Pedicel.—Length: About 5 to 5.5 mm. Color: About 40
Medium Yellow-Green 145B.

Calyx.—Calyx (with sepals) Diameter: Approximately
8 mm. Color center of calyx: About Medium Green
138B. Color of sepals: About Light Green 138C.
Average sepals per calyx: About 5. Sepal length: 45
Approximately 3 mm. Sepal width: Approximately 4
mm. Sepal color: About Medium Yellow-Green
144B. Sepal Texture: Slightly pubescent on the outer
surface; smooth on the inner surface.

Stamen.—Length: About 5.5 to 7 mm. Number per 50
flower: About 10. Filament color: About Medium
Green-White 157B.

Style.—Length: About 8 to 9 mm. Color: About
Medium Yellow-Green 145B.

Pistil.—Length: About 9 to 10 mm. Ovary color: About
Medium Green 138B.

Anther.—Length: About 3.5 to 4 mm. Number: About
10. Color: About Medium Greyed-Orange 163A.

Pollen.—Abundance: Medium. Color: About Medium
White NN155A. Self-compatibility: The cultivar has
demonstrated a small degree of self-compatibility.

Fruit:

Date of 50% maturity.—About April 30th.

Fruit development period.—About 65 days.

Berry color.—About Light Violet-Blue 98D with wax,
and about Dark Black 203C without wax.

Berry flesh color.—About Medium Green 141D.

Berry surface wax abundance.—Medium.

Berry weight.—1st Harvest: Approximately 4 g. 2nd
Harvest: Approximately 4 g.

Berry size.—Height from Calyx to Scar: Approxi-
mately 15.75 mm. Diameter: Approximately 20.25
mm.

Berry shape.—Spherical.

Fruit stem scar.—Small, dry and with no tears.

Calyx.—Approximately 3 mm deep and 6 mm wide.

Sepals.—Typically not visible; slightly turned inward
and flat when present.

Berry firmness.—Firm, 8/10 on berry rating scale.

Berry flavor.—Sweet aromatic.

Berry texture.—Smooth, firm and crisp.

Average brix.—Approximately 13.20.

Seed.—Seed Abundance in Fruit: Medium. Seed Color:
About Medium Greyed-Orange 165B. Seed Dry
Weight: Approximately 34.2 mg per 100 seeds. Seed
Size: Approximately 1.3 to 1.8 mm. Seed Quantity
Average per Berry: About 19.

Storage qualities.—Shelf life of 'CBG-23-01' is mod-
erate to long, maintaining quality under proper stor-
age conditions. The berries were tested for storage
longevity in a 39° F. (4° C.) refrigerated environment
with low humidity for 21 days. The berries retained
good texture, flavor, and firmness.

Use/market.—The berries of 'CBG-23-01' can be used
as fresh fruit for shipping, customer-pick and pro-
cessing markets. Not suitable for machine harvest.

Disease resistance.—Resistant to fungal diseases, but
otherwise no noticeable disease resistance or suscep-
tibility has been observed for 'CBG-23-01'.

We claim:

1. A new and distinct variety of blueberry plant named
'CBG-23-01' as illustrated and described herein.

* * * * *



FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5



FIG. 6



FIG. 7

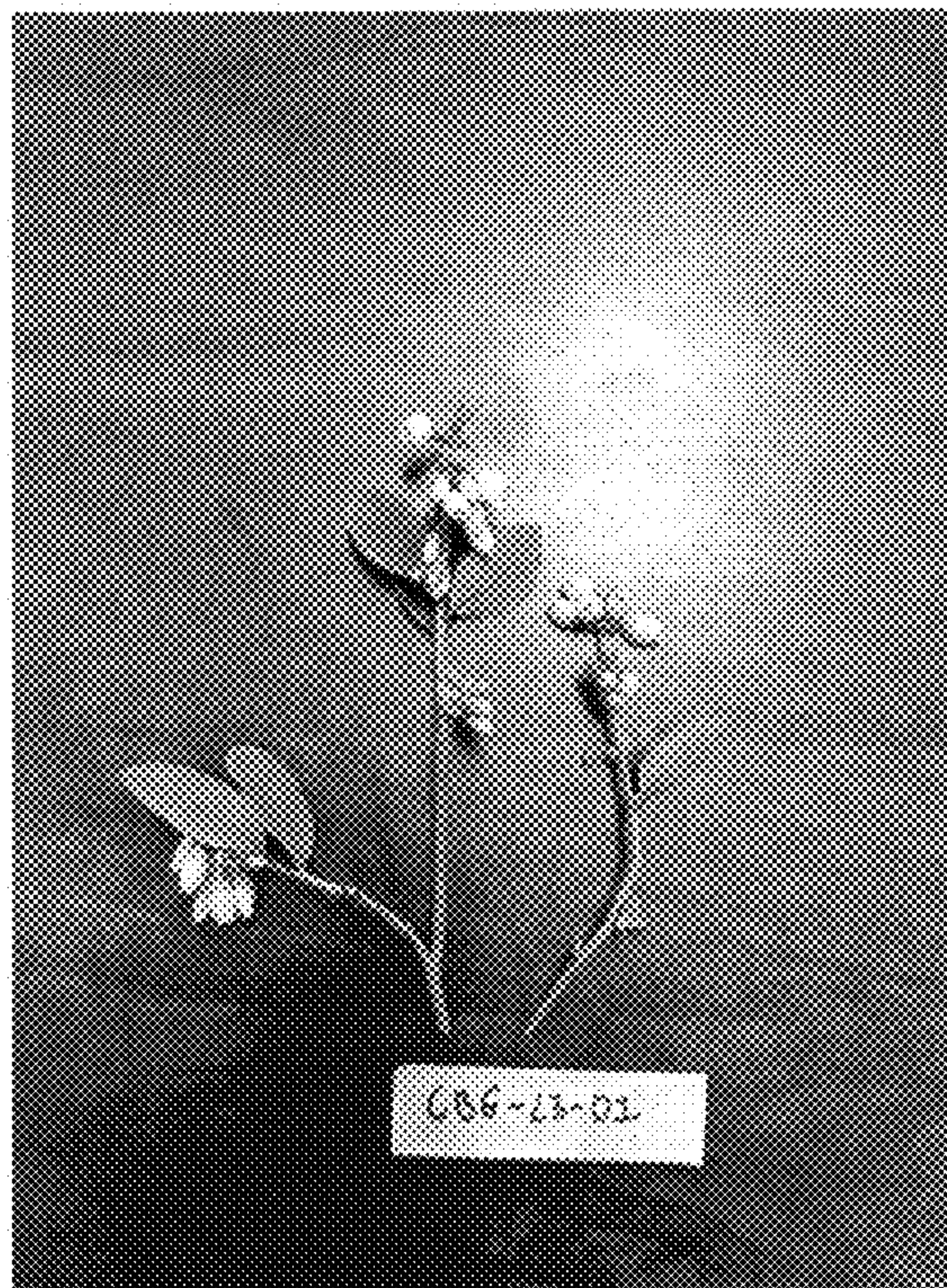


FIG. 8

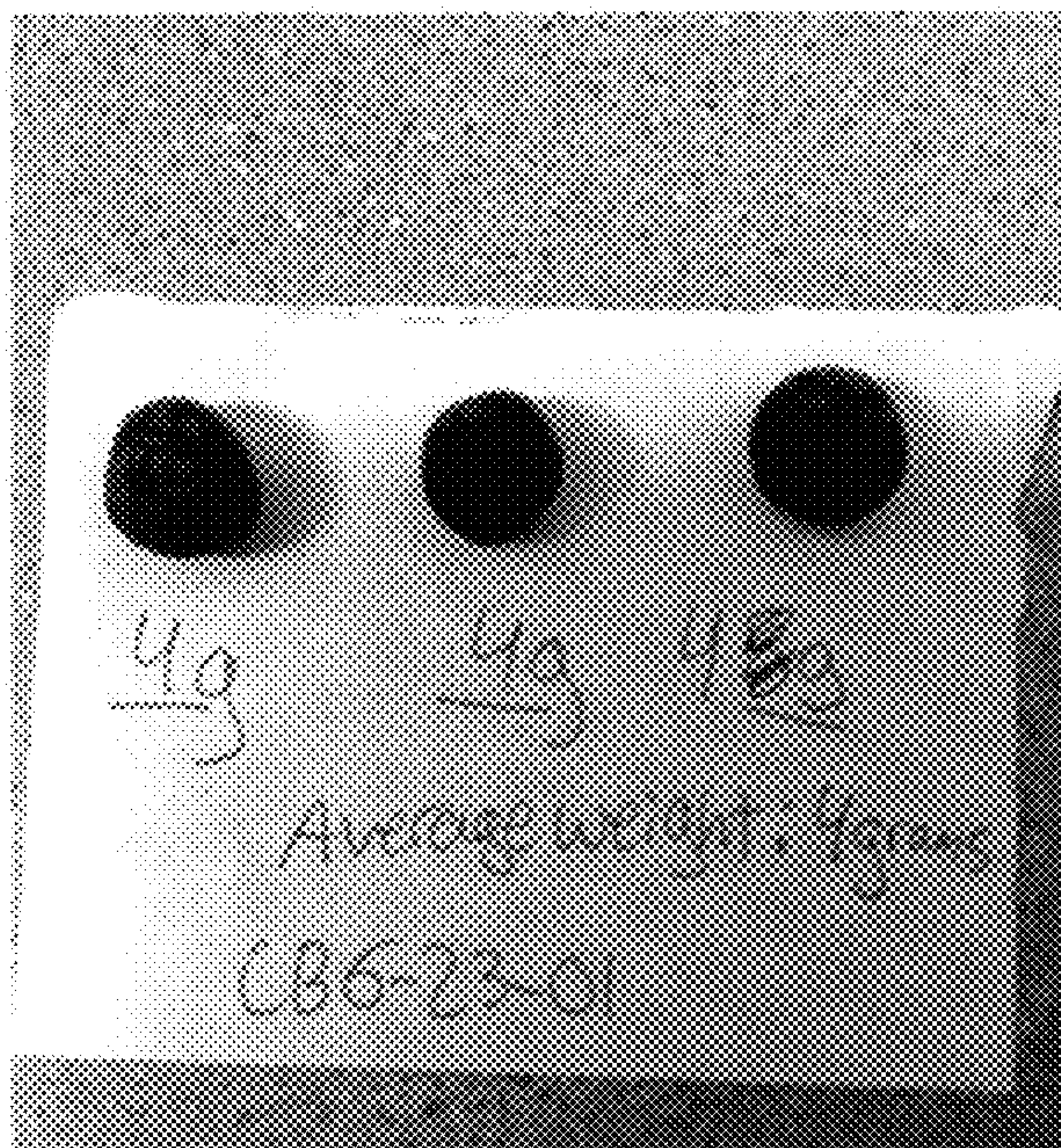


FIG. 9

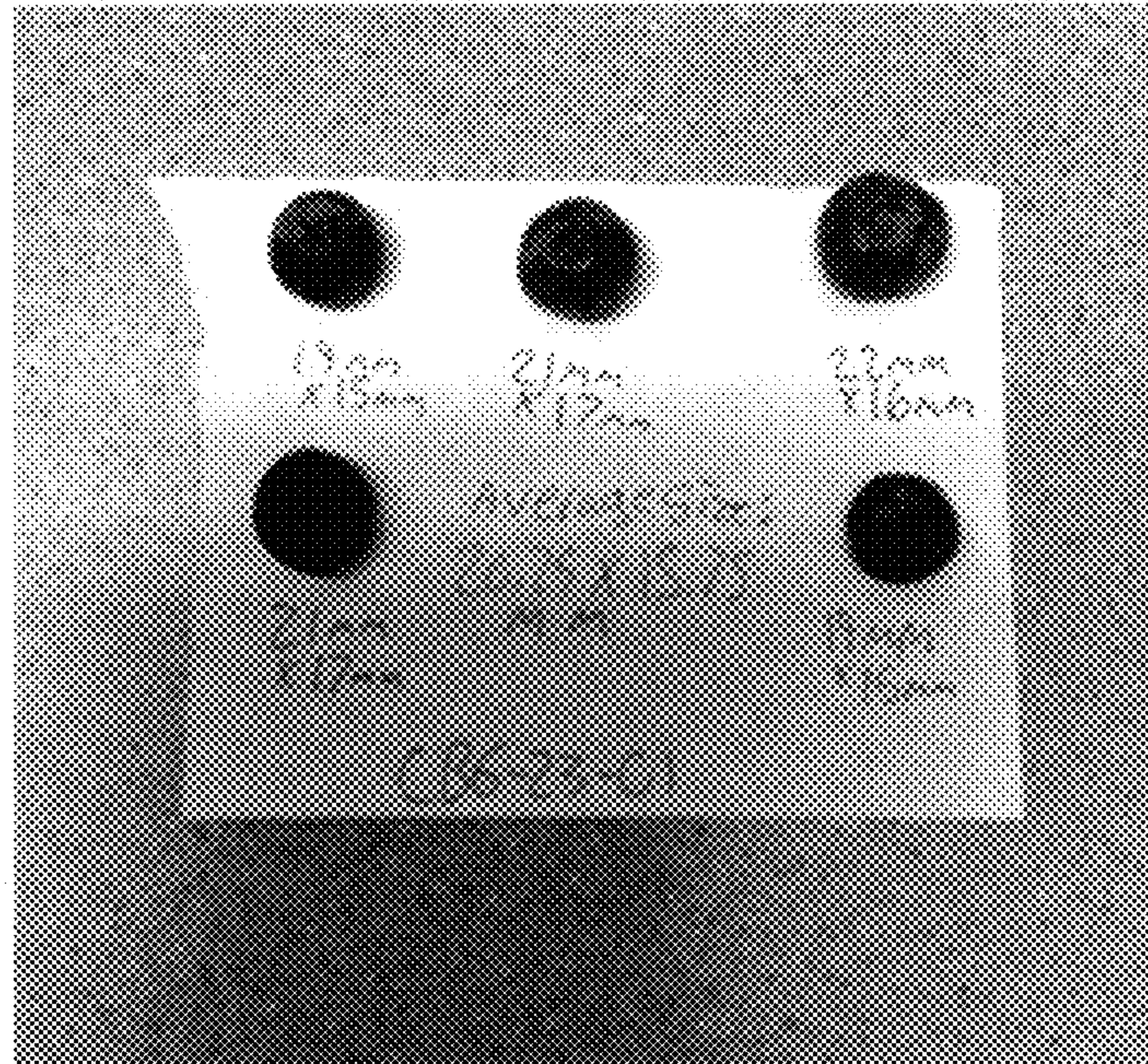


FIG. 10

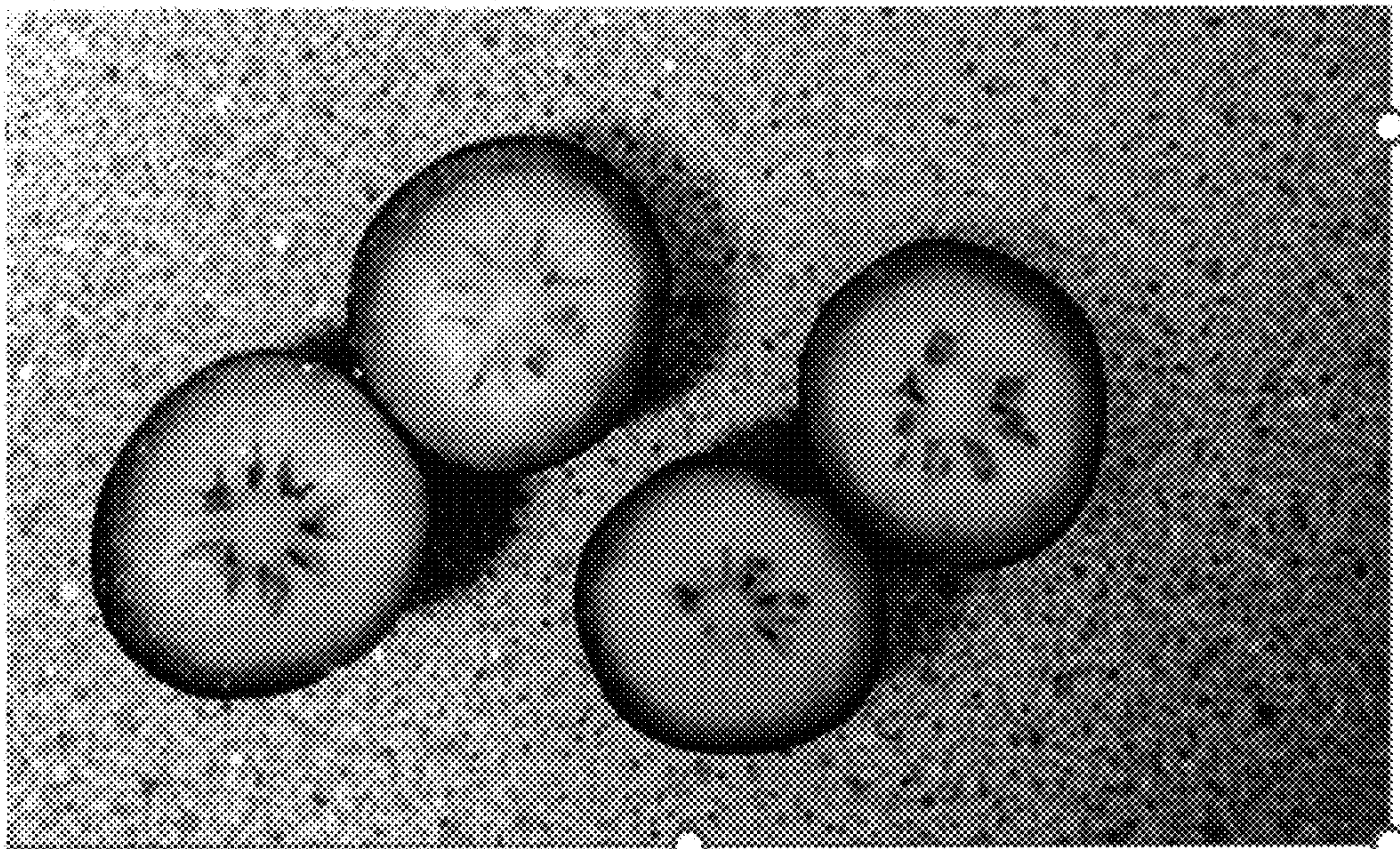


FIG. 11

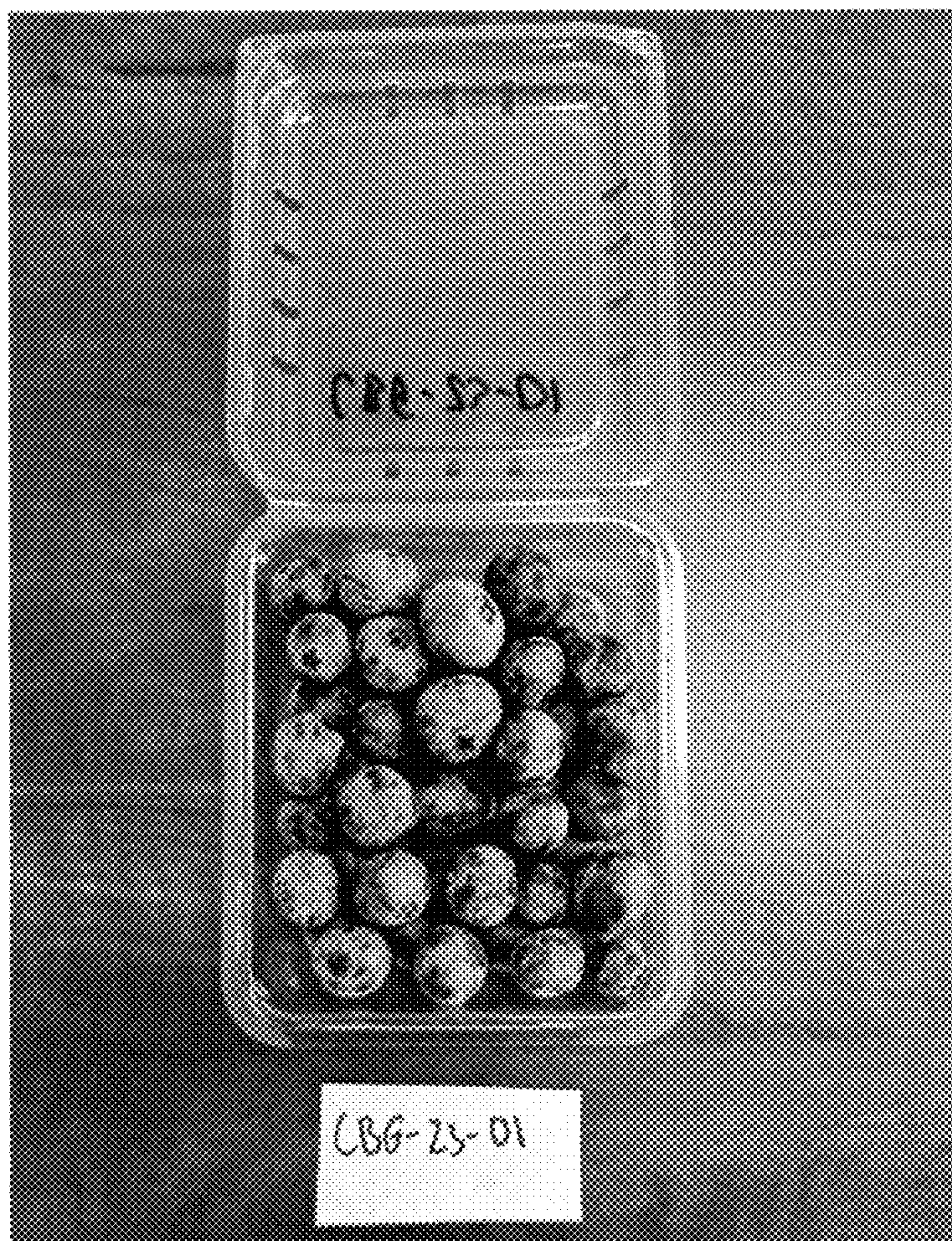


FIG. 12