



(12) **United States Plant Patent**
Bernuetz

(10) **Patent No.:** **US PP34,098 P2**
(45) **Date of Patent:** **Apr. 5, 2022**

(54) **EUPHORBIA PLANT NAMED ‘BONPR 1639’**
(50) Latin Name: *Euphorbia pulcherrima* Willd. ex
Klotzsch X *Euphorbia coranstra*
Varietal Denomination: **BONPR 1639**
(71) Applicant: **Andrew Bernuetz**, Silverdale (AU)
(72) Inventor: **Andrew Bernuetz**, Silverdale (AU)
(73) Assignee: **Bonza Botanicals Pty., Ltd.**, Yellow
Rock (AU)
(*) 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.: **17/379,315**
(22) Filed: **Jul. 19, 2021**
(51) **Int. Cl.**
A01H 5/02 (2018.01)
A01H 6/38 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./306**
CPC *A01H 6/385* (2018.05)
(58) **Field of Classification Search**
USPC **Plt./306**
CPC *A01H 5/02*
See application file for complete search history.

Primary Examiner — Kent L Bell
(74) *Attorney, Agent, or Firm* — C. Anne Whealy

(57) **ABSTRACT**
A new and distinct cultivar of *Euphorbia* plant named
‘Bonpr 1639’, characterized by its relatively compact,
upright and mounded plant habit; vigorous growth habit;
freely branching habit; inflorescences with purplish red-
colored flower bracts with random light purplish pink-
colored spots, flecks and sectors; relatively small cyathia;
and good post-production longevity.

2 Drawing Sheets

1

Botanical designation: *Euphorbia pulcherrima* Willd. ex
Klotzsch X *Euphorbia coranstra*.
Cultivar denomination: ‘BONPR 1639’.

STATEMENT REGARDING PRIOR
DISCLOSURES BY THE
INVENTOR/APPLICANT & ASSIGNEE

A Japanese Plant Breeder’s Rights application for the
instant plant was filed by the Assignee of the instant appli-
cation, Bonza Botanicals Pty., Ltd. of Yellow Rock, New
South Wales, Australia on Sep. 24, 2020, application number
34954. Foreign priority is not claimed to this application.

The Inventor/Applicant and Assignee assert that no pub-
lications nor advertisements relating to sales, offers for sale
or public distribution occurred more than one year prior to
the effective filing date of this application. Any information
about the claimed plant would have been obtained from a
direct or indirect disclosure from the Inventor/Applicant
and/or the Assignee. Inventor/Applicant and Assignee claim
a prior art exception under 35 U.S.C. 102(b)(1) for disclo-
sure and/or sales prior to the filing date but less than one year
prior to the effective filing date.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *Euphorbia* plant, an interspecific hybrid botanically
known as *Euphorbia pulcherrima* Willd. ex Klotzsch X
Euphorbia coranstra, and hereinafter referred to by the
cultivar name ‘Bonpr 1639’.

The new *Euphorbia* plant is a product of a planned
breeding program conducted by the Inventor in Yellow
Rock, New South Wales, Australia. The objective of the
program is to create and develop new interspecific *Euphor-*
bia plants with compact, upright and mounded plant habit
and attractive flower bracts.

2

The new *Euphorbia* plant is a naturally-occurring whole
plant mutation of a proprietary selection of *Euphorbia*
pulcherrima Willd. ex Klotzsch X *Euphorbia coranstra*
identified as code number 15-38, not patented. The new
5 *Euphorbia* plant was discovered and selected by the Inven-
tor as a single flowering plant from within a population of
plants of the mutation parent selection in a controlled
greenhouse environment in Yellow Rock, New South Wales,
Australia in October, 2016.

10 Asexual reproduction of the new *Euphorbia* plant by
terminal vegetative cuttings in a controlled greenhouse
environment in Yellow Rock, New South Wales, Australia
since October, 2016 has shown that the unique features of
15 this new *Euphorbia* plant are stable and reproduced true to
type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

20 Plants of the new *Euphorbia* have not been observed
under all possible combinations of environmental conditions
and cultural practices. The phenotype may vary somewhat
with variations in environmental conditions such as tem-
perature, daylength and light intensity, without, however,
25 any variance in genotype.

The following traits have been repeatedly observed and
are determined to be the unique characteristics of ‘Bonpr
1639’. These characteristics in combination distinguish
‘Bonpr 1639’ as a new and distinct *Euphorbia* plant:

- 30 1. Relatively compact, upright and mounded plant habit.
2. Vigorous growth habit.
3. Freely branching habit.
4. Inflorescences with purplish red-colored flower bracts
with random light purplish pink-colored spots, flecks
and sectors.
- 35 5. Relatively small cyathia.
6. Good post-production longevity.

Plants of the new *Euphorbia* differ primarily from plants of the mutation parent selection in flower bract color as flower bracts of plants of the new *Euphorbia* are purplish red in color with random light purplish pink-colored spots, flecks and sectors whereas flower bracts of plants of the mutation parent selection are pink in color with random white-colored spots, flecks and sectors.

Plants of the new *Euphorbia* can be compared to plants of the *Euphorbia pulcherrima* Willd. ex Klotzsch X *Euphorbia coranstra* 'Bonprilipcom', disclosed in U.S. Plant Pat. No. 21,327. In side-by-side comparisons, plants of the new *Euphorbia* differ primarily from plants of 'Bonprilipcom' in the following characteristics:

1. Plants of the new *Euphorbia* are larger than plants of 'Bonprilipcom'.
2. Plants of the new *Euphorbia* have thicker lateral stems than plants of 'Bonprilipcom'.
3. Plants of the new *Euphorbia* have smaller leaves than plants of 'Bonprilipcom'.
4. Plants of the new *Euphorbia* have smaller flower bracts than plants of 'Bonprilipcom'.
5. Plants of the new *Euphorbia* and 'Bonprilipcom' differ in flower bract color as flower bracts of plants of the new *Euphorbia* are purplish red in color with random light purplish pink-colored spots, flecks and sectors whereas flower bracts of plants of 'Bonprilipcom' are solid pink in color.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Euphorbia* plant showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new *Euphorbia* plant.

The photograph on the first sheet (FIG. 1) is a side perspective view of a typical flowering plant of 'Bonpr 1639' grown in a container.

The photograph on the second sheet (FIG. 2) is a close-up view of a typical flowering plant of 'Bonpr 1639'.

DETAILED BOTANICAL DESCRIPTION

Plants used in the aforementioned photographs and described herewith in detail were grown during the autumn and early winter in 12-cm containers in an outdoor nursery in Higashiomi, Shiga, Japan and under cultural practices typical of commercial *Euphorbia* production. During the production of the plants, day temperatures averaged 23° C. and night temperatures averaged 13° C. Plants were six months old when the photographs and the description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2015 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Euphorbia pulcherrima* Willd. ex Klotzsch X *Euphorbia coranstra* 'Bonpr 1639'.

Parentage: Naturally-occurring whole plant mutation of a proprietary selection of *Euphorbia pulcherrima* Willd. ex Klotzsch X *Euphorbia coranstra* identified as code number 15-38, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots, summer.—About ten days at temperatures about 20° C. to 21° C.

Time to initiate roots, winter.—About twelve days at temperatures about 20° C. to 21° C.

Time to produce a rooted young plant, summer.—About 24 days at temperatures about 20° C. to 21° C.

Time to produce a rooted young plant, winter.—About four weeks at temperatures about 20° C. to 21° C.

Root description.—Fibrous; typically white in color, actual color of the roots is dependent on substrate composition, water quality, fertilizers, substrate temperature and physiological age of roots.

Rooting habit.—Freely branching; medium density.

Plant description:

Plant habit and form.—Relatively compact, upright and mounded plant habit; inverted triangle; inflorescences positioned above the foliar plane; vigorous growth habit.

Plant height.—About 17 cm.

Plant diameter or spread.—About 25 cm.

Lateral branch description.—Branching habit: Freely branching habit, about four lateral branches develop per plant. Length: About 10.1 cm. Diameter: About 3.9 mm. Internode length: About 1.6 cm. Aspect: Mostly upright to somewhat outward. Strength: Strong. Texture: Smooth, glabrous. Color: Close to NN137B.

Leaf description.—Arrangement: Alternate, simple. Length: About 7 cm. Width: About 4.7 cm. Shape: Lanceolate. Apex: Acute. Base: Rounded. Margin: Serrate, occasionally with few shallow lobes; slightly undulate. Venation pattern: Pinnate, reticulate. Texture and luster, upper surface: Rugose, glabrous; matte. Texture and luster, lower surface: Rough, sparsely pubescent; matte. Color: Developing leaves, upper surface: Close to 137B. Developing leaves, lower surface: Close to 138A. Fully developed leaves, upper surface: Darker than 139A; venation, close to 138B. Fully developed leaves, lower surface: Close to 137B; venation, close to 143A. Petioles: Length: About 1.8 cm. Diameter: About 2.1 mm. Texture, upper and lower surfaces: Sparsely pubescent. Color, upper surface: Close to 138A, variably tinged with close to 59B. Color, lower surface: Close to 138A.

Inflorescence description:

Inflorescence type and habit.—Inflorescences are compound corymbs of cyathia with numerous flower bracts subtending the cyathia; inflorescences positioned above the foliar plane.

Quantity of inflorescences.—One per lateral branch, about four inflorescences develop per plant.

Inflorescence diameter.—About 16.3 cm.

Inflorescence height.—About 3.8 cm.

Fragrance.—None detected.

Natural flowering season.—Plants typically flower during the autumn and winter in Japan; inflorescence initiation and development can also be induced under artificial long nyctoperiod and short photoperiod conditions; early flowering response, plants flower about 50 days under natural season or photoinductive conditions in Japan.

Post-production longevity.—Good post-production longevity; plants of the new *Euphorbia* maintain good substance and bract color for about eight weeks.

Flower bracts.—Quantity per inflorescence: About 15. 5
Length: About 6.1 cm. Width: About 3.6 cm. Shape: Elliptic. Apex: Acute. Base: Obtuse. Margin: Entire with occasional irregular serrations; slightly undulate. Texture, upper and lower surfaces: Smooth, glabrous. Aspect: Mostly horizontal. Venation pattern: Pinnate, reticulate. Color: Transitional bracts, upper surface: Random sectors and areas, close to N57B and 69C; towards the margins, close to 143A. Transitional bracts, lower surface: Random sectors and areas, close to N57D and 69C; towards the apex, close to 143A. Developing bracts, upper surface: Close to N57A and 62B. Developing bracts, lower surface: Close to 63A and 62C. Fully expanded bracts, upper surface: Close to N57B; random spots, flecks and sectors, close to 68D; venation, close to N57B. Fully expanded bracts, lower surface: Close to 58D; random spots, flecks and sectors, close to NN155B; venation, close to 143D. Flower bract petioles: Length: About 1.2 cm. Diameter: About 1.4 mm. Texture, upper and lower surfaces: Sparsely pubescent. Color, upper and lower surfaces: Close to N57B and 144D. 10 15 20 25

Cyathia.—Quantity per corymb: About 19. Diameter of cyathia cluster: About 2.7 cm. Height, individual cyathium: About 4 mm. Diameter, individual cya- 30

thium: About 5.7 mm. Shape, individual cyathium: Globose. Color: Distally, close to 67A and proximally, close to 143A. Nectaries: Quantity per cyathium: One. Size: About 2.2 mm by 3.4 mm. Texture: Smooth, glabrous. Color: Close to 3C.

Peduncles.—Length: About 2.1 mm. Diameter: About 1.8 mm. Texture, upper and lower surfaces: Smooth, glabrous. Aspect: Mostly upright. Color, upper and lower surfaces: Close to 144C.

Reproductive organs.—Stamens: Quantity per cyathia: Two. Filament length: About 1.9 mm. Filament color: Close to 67B. Anther size: About 0.9 mm by 1.1 mm. Anther shape: Oblong. Anther color: Close to 160B and 64A. Pollen amount: Sparse. Pollen color: Close to 3A. Pistils: To date, pistil development has not been observed on plants of the new *Euphorbia*.

Seeds and fruits.—To date, seed and fruit production has not been observed on plants of the new *Euphorbia*.

Pathogen & pest resistance: Plants of the new *Euphorbia* have not been shown to be resistant to pathogens and pests common to *Euphorbia* plants.

Temperature tolerance: Plants of the new *Euphorbia* have been observed to tolerate temperatures ranging from about 8° C. to about 40° C.

It is claimed:

1. A new and distinct *Euphorbia* plant named 'Bonpr 1639' as illustrated and described.

* * * * *

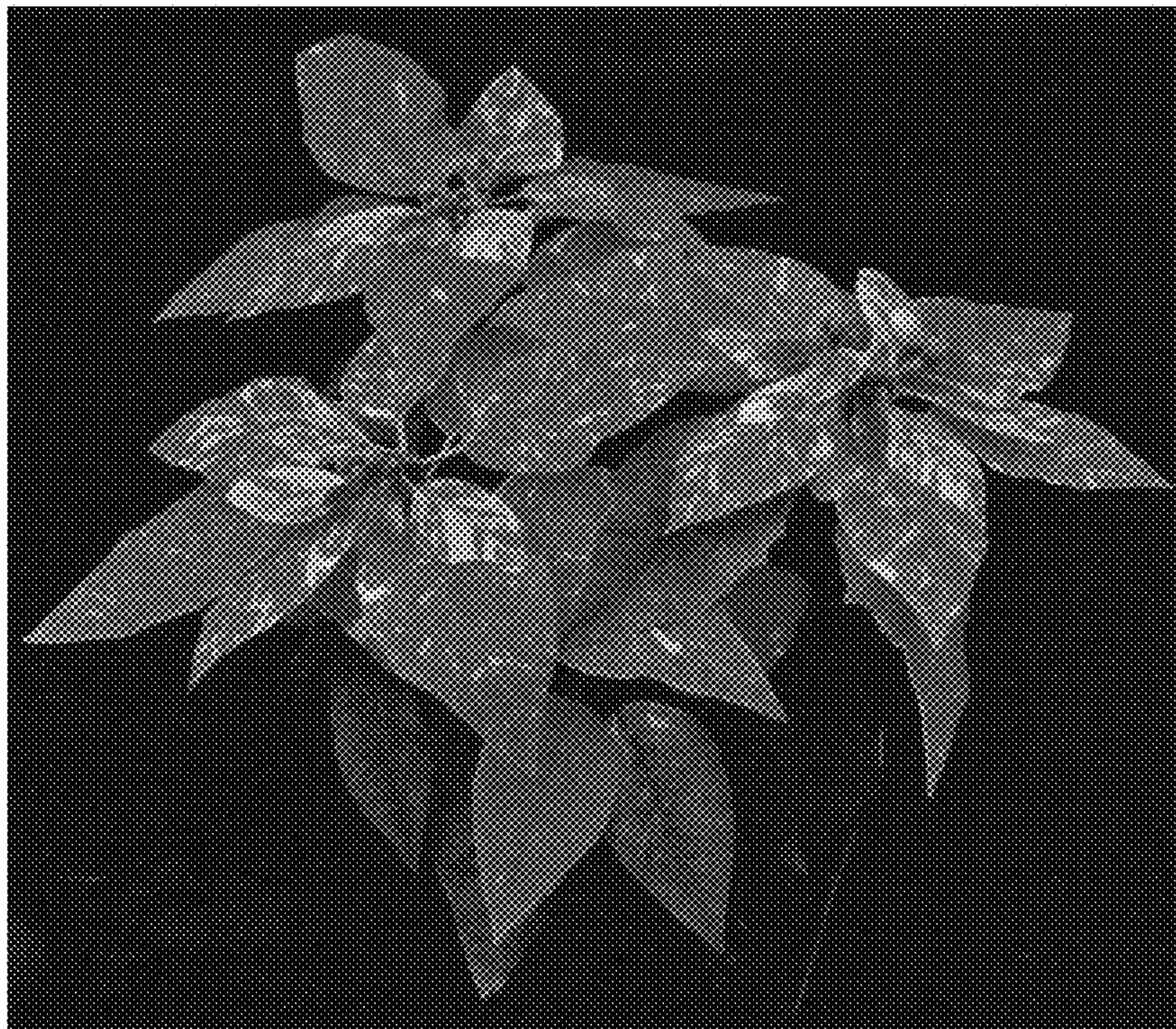


FIG. 1

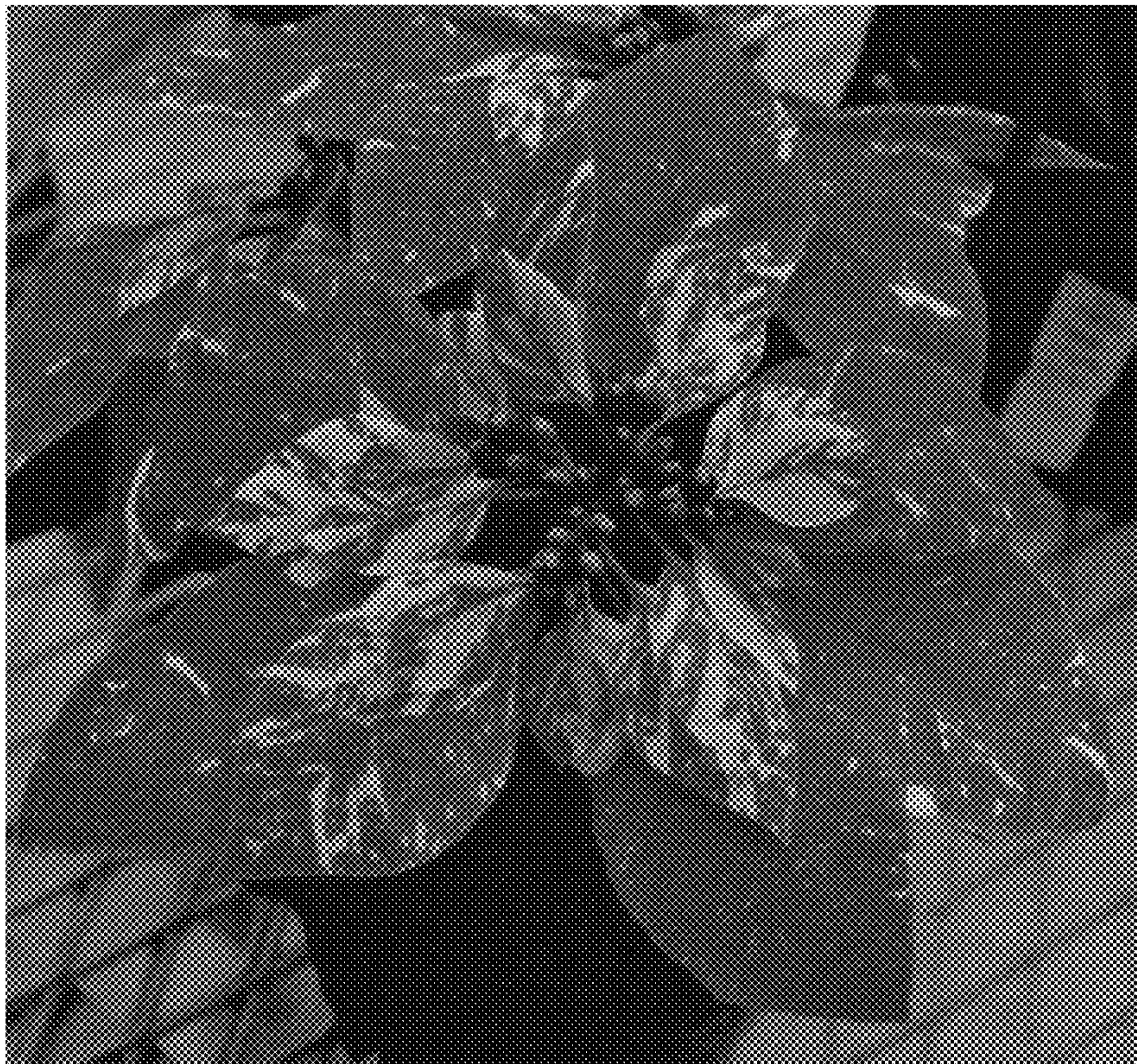


FIG. 2