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

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(54) **COLEUS PLANT NAMED ‘UF18-97-2’**

CPC A01H 5/00; A01H 5/12
See application file for complete search history.

(50) Latin Name: *Plectranthus scutellarioides*
Varietal Denomination: **UF18-97-2**

(56) **References Cited**

(71) Applicant: **Florida Foundation Seed Producers, Inc.**, Marianna, FL (US)

PUBLICATIONS

(72) Inventor: **David G. Clark**, Gainesville, FL (US)

<http://www.ffsp.net/wp-content/uploads/2020/12/ITN20-07-11.pdf>; Dec. 22, 2020; 8 pages.*

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* cited by examiner

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**

(22) Filed: **Jan. 30, 2021**

A new and distinct cultivar of *Plectranthus scutellarioides* (coleus) named ‘UF18-97-2’, selected for its excellent vigor, lateral branching, uniform overall habit, and intense crimson color in sun and shade. The new coleus cultivar ‘UF18-97-2’ was selected because it has superb vigor with brilliant crimson colored leaves with well-defined chartreuse margins. It does not produce flowers, so leaf abscission is minimized late in the landscape season. What makes it a rare red foliage genotype is that it is extremely vigorous and can easily grow three feet tall and five feet wide in the landscape while maintaining intense deep red color in both sun and shade.

(51) **Int. Cl.**
A01H 5/12 (2018.01)
A01H 6/50 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./469**
CPC *A01H 6/50* (2018.05)

(58) **Field of Classification Search**
USPC Plt./469, 373

3 Drawing Sheets

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Genus and species: *Plectranthus scutellarioides*.
Cultivar denomination: The present disclosure relates to coleus cultivar ‘UF18-97-2’.

CROSS-REFERENCE TO RELATED
APPLICATIONS

N/A.

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BACKGROUND OF THE NEW CULTIVAR

Coleus (previously *Solenostemon scutellarioides*, now *Plectranthus scutellarioides*) plants are used as annual bedding plants for the landscape and mixed containers in summer gardens. Coleus plants are popular for commercial growers and landscapers because they are easy to propagate and provide fast and reliable attractive foliage color that performs well at all points in the perishable garden plant supply chain. Coleus plants are also popular with home gardeners because they are easy to grow in both full sun and partial shade conditions, and require less maintenance than many other annual garden plants. From the breeder perspective, there is much genotypic variability in coleus because it is a tetraploid with active transposons and there are a number

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of different visible phenotypes including foliage color, leaf shape and size, plant height, time to flowering, and growth habit.

The coleus breeding program in Gainesville, Fla., was initiated in 2003 with an emphasis on developing new clonally propagated cultivars that are profitable for producers and perform well in consumer gardens with little or no care. Using recurrent mass selection and maintaining a large pool of germplasm our program has released over 85 new cultivars into the industry since 2007. The coleus breeding program has focused on screening for new cultivars with novel leaf colors and shapes, increased vigor and branching, and late flowering, by conducting greenhouse and field trials under demanding environmental conditions. Greenhouse trials under “lush” conditions that push the plants to grow as fast as possible with high amounts of light, high fertility and high temperatures are used because these conditions allow for rapid discernment of growth habits and vigor characteristics, and also facilitate observation of plant phenotypes under conditions where greenhouse pathogen and insect pressure is highest. A first group of field trials in Citra, Fla., are planted in full sun in sand beds with plastic mulch in May-June each year with drip irrigation, minimal added fertilizer, and no chemical control for insects or pathogens. A second group of field trials in Citra, Fla., are planted in 30% shade in sand beds in May-June each year with drip irrigation and a minimal amount of slow-release fertilizer added at planting. These “lean” growing conditions are used in the field trials to screen for plants that grow vigorously

and consistently for minimalist gardeners. Coleus produces a better seed crop under “lean” conditions than “lush” conditions, which is useful for making open-pollinated seeds. Since data is collected on a large number of genotypes (~600-800 per year), each trial only contains 1-3 plants per genotype. If a genotype performs poorly in any trial it is automatically discarded from the program, leaving ~200-250 genotypes in the program as elite stock at the end of each year.

Desirable characteristics that continue to be in demand a decade after first commercial introductions are: (1) foliage color stability in sun and shade; (2) consistent well-branched plant habit; and (3) late flowering. Improved plants with interesting foliage colors in both full sun and shade conditions allow for more versatile garden use and more color choices for gardeners. Superior well-branched plant habit is important throughout the production chain from the propagator/grower to the consumer, which allows for production of a large number of vegetative propagules and translates into more manageable plants for producers during culture and shipping to retail outlets. Once planted in the garden, these well-branched plants require less management over a long season of growth. Late flowering is a desirable characteristic because early flowering triggers senescence of the lower leaves and decreases foliage quality of coleus. Floral induction often slows vegetative growth, and increases landscape maintenance with manual dead-heading and plant replacement, which is vital to landscape contractors. Late or ‘no flowering’ genotypes with good branching and stable foliage color that have been developed in Gainesville, Fla., have performed well in commercial markets, and continue to attract interest from US, European, and Asian gardeners. The plant disclosed herein was selected because it has many of these desirable traits.

SUMMARY OF THE INVENTION

The present invention relates to a new and distinct cultivar of coleus plant named ‘UF18-97-2’. The new cultivar ‘UF18-97-2’ originated from an open pollination conducted in May-November 2017 in Gainesville, Fla. between the female coleus plant ‘UF15-23-40’ (not patented) and an unknown male coleus plant. A single seedling was chosen in May 2018 for further asexual propagation in Gainesville, Fla. FIG. 1 shows the pedigree of ‘UF18-97-2’.

The new cultivar ‘UF18-97-2’ has been reproduced asexually for over eighteen (18) months through vegetative cuttings and has been found to retain its distinctive characteristics through successive asexual propagations. ‘UF18-97-2’ was first propagated asexually by meristem tip cuttings in May 2018 in Gainesville, Fla., and has remained true-to-type since that time.

The new coleus cultivar ‘UF18-97-2’ has not been observed under all possible environmental conditions. The phenotype of the new cultivar may vary with variations in environment and cultural practices such as temperature, light intensity, fertilization, irrigation, and application of plant growth regulators without any change in genotype.

Plant Breeder’s Rights ‘UF18-97-2’ have not been applied for. The new coleus cultivar ‘UF18-97-2’ has not been made publicly available more than one year prior to the filing of this application.

‘UF18-97-2’ was selected because of its novel combination of leaf size and color and plant habit. The following traits have been repeatedly observed and are determined to

be the unique characteristics of the new coleus cultivar ‘UF18-97-2’ when grown under normal horticultural practices in Gainesville, Fla. These characteristics in combination distinguish ‘UF18-97-2’ as a new and distinct cultivar of coleus:

1. consistent, brilliant-crimson-colored leaves with well-defined chartreuse margins;
2. vigorous, spreading growth habit resulting in a plant that is roughly 50% wider than it is tall in the landscape;
3. enough vigor to withstand the harsh conditions to which the plants are subjected in full-sun trials in Gainesville, Fla. (excellent heat tolerance);
4. superior stability in foliage color in both sun and shade conditions (maintains stable color in all conditions);
5. excellent lateral branching when grown as a stock plant, thus providing ample vegetative propagules for producers; and
6. has been observed to have long-season performance in landscape trials in Gainesville, Fla.

Plants of the new coleus cultivar ‘UF18-97-2’ differ from plants of the female parent, ‘UF15-23-40’ in the following characteristics:

1. ‘UF18-97-2’ has large, broad leaves that are uniformly colored crimson and chartreuse with crenate margins, whereas ‘UF15-23-40’ has much smaller leaves colored deep burgundy with occasional lime green accents with lobed margins;
2. ‘UF18-97-2’ occasionally has three leaves present at the meristem tip instead of the normal two leaves arranged oppositely; and
3. ‘UF18-97-2’ has a robust, well-branched, spreading habit, whereas ‘UF15-23-40’ is much less vigorous and much more upright in habit with less lateral branching.

Plants of the new coleus cultivar ‘UF18-97-2’ can be compared to those of ‘UF17-50-5’ (U.S. Plant Pat. No. 32,980). On the adaxial surface of mature leaves of ‘UF18-97-2’, the foliage color is a dark solid red (RHS 175B), with no transitioning to a lighter color in the center, and the leaf margin coloration zone is narrower than in ‘UF17-50-5’. On the adaxial surface of mature leaves of ‘UF17-50-5’, the foliage color is deep maroon (RHS N77A) that transitions to a lighter pinkish color (RHS 59C) in the center, and the leaf coloration zone is wider than in ‘UF18-97-2’.

DESCRIPTION OF THE FIGURES

The accompanying photographs (as shown in FIGS. 1-3) illustrate the overall appearance of the new coleus cultivar ‘UF18-97-2’. The colors shown in these photographs are as true as can be reasonably obtained by conventional photographic procedures. Colors shown in the photographs may differ slightly from the color values cited in the detailed botanical description, which accurately describes the colors of the new coleus cultivar. FIGS. 2 and 3 were taken from plants grown nine (9) weeks from unrooted cuttings in June-August 2020 in a glass-covered greenhouse in Gainesville, Fla.

FIG. 1 shows the pedigree of ‘UF18-97-2’;

FIG. 2 shows the growth habit, form, and foliage of ‘UF18-97-2’; and

FIG. 3 shows a close-up of the foliage of ‘UF18-97-2’.

DETAILED BOTANICAL DESCRIPTION OF
THE CULTIVAR

The following detailed description sets forth the distinctive characteristics of the new coleus cultivar 'UF18-97-2'.
Color references are to The Royal Horticultural Society of London (R.H.S.) Colour Chart, 2007 (5th Edition).

Description of Growing Conditions

The detailed botanical description was obtained using nine-week-old plants grown from unrooted cuttings in June-August, 2020, in a glass-covered greenhouse in Gainesville, Fla. The plants were propagated in mist for ten (10) days after cuttings were stuck, then grown in one-gallon pots for approximately seven and a half additional weeks.

Botanical Description

Botanical classification:

Family.—Lamiaceae.

Botanical name.—*Plectranthus scutellarioides*.

Common name.—Coleus.

Cultivar.—'UF18-97-2'.

Parentage:

Female or seed parent.—'UF15-23-40'.

Male or pollen parent.—Unknown.

Propagation:

Type.—Cuttings; vegetative meristems having at least one node.

Time to initiate roots.—3-4 days.

Time to produce a rooted cutting.—7-10 days.

Root description:

Root description.—Callus forms in 2-3 days, roots initiate in 3-4 days and become a highly branched cutting in 7-10 days.

Rooting habit.—Fibrous.

Plant description:

Plant form.—Upright.

Growth habit.—Spreading.

Plant height (from top of soil).—30-32 cm.

Plant width (horizontal plant diameter).—50-55 cm.

Branches.—Quantity per plant: 7-8. Color: RHS 143D (light green). Texture: Smooth. Pubescence: Not present. Stem description: Square-shaped stem, 0.9 cm in diameter at the soil line. Branch diameter: 0.6-0.7 cm at the base of a 27-cm-long branch. Branch length: 25-28 cm. Internode length: 3-4 cm. Anthocyanin: Not present.

Foliage description:

Quantity of leaves per branch.—19-20.

Arrangement.—Predominantly opposite, with an occasional meristem tip with three leaves arranged in a whorl.

Fragrance.—Not fragrant.

Length.—10-12 cm.

Width.—7-8 cm.

Shape.—Ovate. Apex: Broadly acute. Base: Attenuate.

Margin.—Crenate.

Leaf texture (both surfaces).—Smooth.

Pubescence floor (both surfaces).—Not present.

Venation color.—Upper surface: RHS 59B (dark purple red). Lower surface: RHS 143C (medium green).

Venation pattern.—Upper surface: Reticulate. Lower surface: Reticulate.

Color, immature leaf.—Upper surface: Center: RHS 172A (medium brown). Margin: RHS N144C (light green). Lower surface: RHS N143C (medium green).

Color, mature leaf.—Upper surface: Center: RHS 175B (medium brown). Margin: RHS N144A (light green). Lower surface: RHS 145A (light green).

Petiole length.—3-3.5 cm.

Petiole diameter.—0.2-0.3 cm.

Petiole color.—RHS 145A (light green).

Petiole texture.—Smooth, no pubescence.

Flowers and seeds: Flowers and seeds have not been observed to date during formal trials in Gainesville, Fla.

Fruit/seed set: Fruit and seeds have not been observed to date during formal trials in Gainesville, Fla.

Disease and insect resistance: Disease and insect resistance is typical of the species, thus no claims are made of any superior disease or insect resistance with this cultivar. The most common insect pests observed on this plant in Gainesville, Fla., have been long-tailed or citrus mealybugs (*Pseudococcus* sp.), which occur on older stock plant material held in the greenhouse for over 3-4 months. Impatiens Necrotic Spot Virus (*Bunyaviridae*) has also been observed in plants confined in greenhouses with mixed crops (peppers) infected with Western flower thrips (*Frankliniella occidentalis*). The most common pathogen of this species in the U.S. is downy mildew (*Pernonspora lamii*). This pathogen has been observed in stock materials grown closely together in cooler growing seasons.

What is claimed is:

1. A new and distinct *Plectranthus scutellarioides* plant named 'UF18-97-2' as shown and described herein.

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FIG. 1

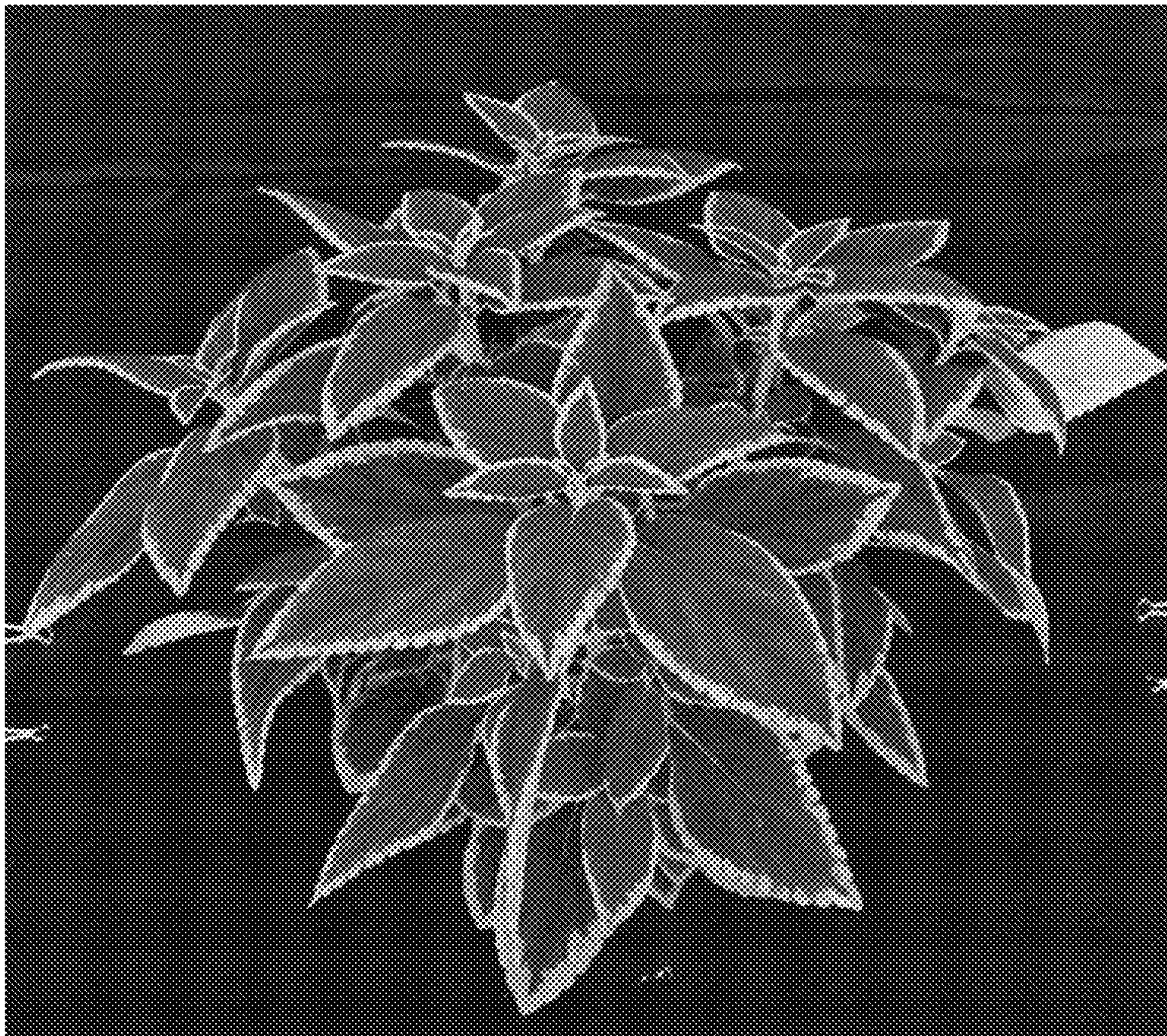


FIG. 2

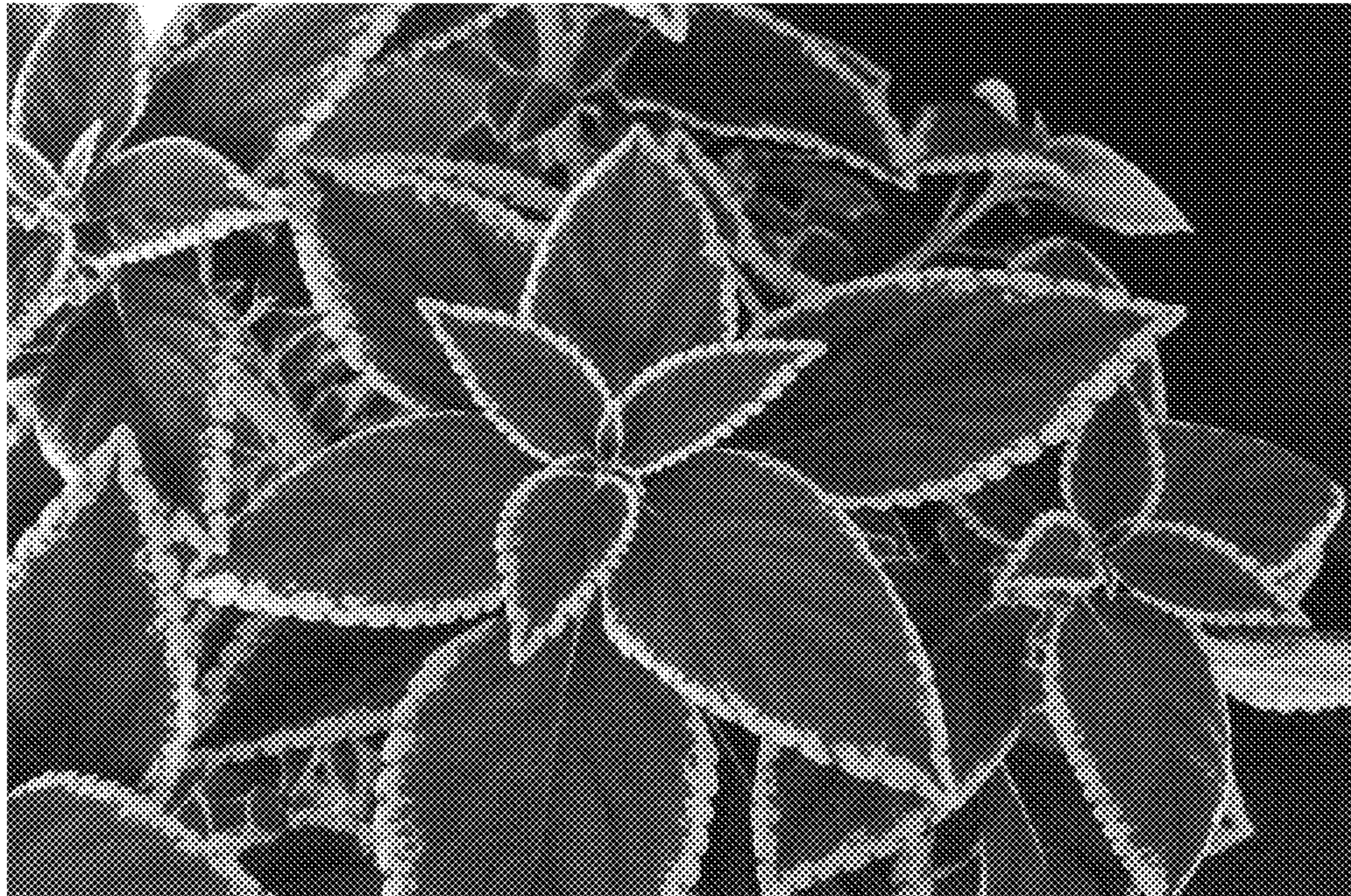


FIG. 3