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COLEUS PLANT NAMED 'UF17-52-13'

Latin Name: Coleus scutellarioides Varietal Denomination: UF17-52-13

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USPC

Field of Classification Search (58)See application file for complete search history.

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ABSTRACT (57)

'UF17-52-13' is a new *Coleus* plant, selected because it has a highly desirable combination of novel traits. It has leaves colored dark maroon with chartreuse margins and with superior stability in both sun and shade. The highly lobed shape of the large leaves is extremely uniform across the plant throughout development, and the leaves are larger than most plants of this leaf type. It has excellent lateral branching, thus providing ample vegetative propagules for producers. It has a vigorous spreading form, growing more horizontal than vertical, which allows it to fill space with vibrant color very quickly in summer gardens. This plant has not been observed to produce flowers in any trial to date, thus it is desirable for long-season performance in the landscape. This trait is particularly valuable for large-scale commercial landscape plantings.

3 Drawing Sheets

Genus and species: Coleus scutellarioides.

Cultivar denomination: The present disclosure relates to Coleus cultivar 'UF17-52-13'.

CROSS-REFERENCE TO RELATED APPLICATIONS

N/A.

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N/A.

BACKGROUND OF THE NEW CULTIVAR

Coleus (previously Solenostemon scutellarioides or Plectranthus scutellarioides, now Coleus scutellarioides) plants are used as annual bedding plants for the landscape and mixed containers in summer gardens. Coleus plants are 20 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 25 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 of different visible phenotypes 30 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 10 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 20 '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 25 these desirable traits.

SUMMARY OF THE INVENTION

The invention relates to a new and distinct cultivar of 30 *Coleus* plant named 'UF17-52-13'. The new cultivar 'UF17-52-13' originated from an open pollination conducted in May-November 2016 in Gainesville, Fla., between the female *Coleus* plant 'UF16-39-4' (unpatented) and an unknown male *Coleus* plant. A single seedling was chosen 35 in May 2017 for further asexual propagation in Gainesville, Fla.

The new cultivar 'UF17-52-13' 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. 'UF17-52-13' was first propagated asexually by meristem tip cuttings in May, 2017, in Gainesville, Fla., and has remained true-to-type since that time.

The new *Coleus* cultivar 'UF17-52-13' has not been 45 observed under all possible environmental conditions. The phenotype of the new cultivar may vary with variations in environmental and cultural practices such as temperature, light intensity, fertilization, irrigation, and application of plant growth regulators without any change in genotype. 50

Plant Breeder's Rights for 'UF17-52-13' have not been applied for. The new cultivar 'UF17-52-13' has not been made publicly available prior to the filing date of this application.

The new cultivar 'UF17-52-13' was selected because it has unique, highly lobed-shape leaves that are larger than normal cultivars of this type, and because it has not been observed to produce flowers in any field or greenhouse trials. It performs well in sun and shade and has excellent vigor to withstand the harsh selection conditions our plants are subjected to in full sun trials in Gainesville, Fla. The new cultivar 'UF17-52-13' is exceptional because it maintains both distinct colors in well-defined zones in shade or sun.

The following are the most outstanding and distinguishing characteristics of the new cultivar 'UF17-52-13' when 65 grown under normal horticultural practices in Gainesville,

Fla.: the new cultivar 'UF17-52-13' has the combination of vigorous, well-branched, upright growth habit, excellent heat tolerance, and leaves consistently colored dark maroon with chartreuse margins, and the leaves are significantly different than other *Coleus* plants (large leaves that are highly lobed). It has superior stability in foliage color in both sun and shade conditions, maintaining stable color in all conditions. It grows faster than most *Coleus* plants, thus requiring a week less production time for commercial producers to go to market. The new cultivar 'UF17-52-13' has been observed to have long-season performance in land-scape trials in Gainesville, Fla.

When compared to the female parent 'UF16-39-4', plants of the new *Coleus* cultivar 'UF17-52-13' have large leaves that are highly lobed, and the leaves are dark maroon with chartreuse margins. In contrast, plants of 'UF16-39-4' have smaller leaves, colored dark maroon with green margins, that are only slightly lobed in shape. The new cultivar 'UF17-52-13' has a very vigorous, well-branched, upright growth habit, whereas 'UF16-39-4' is much less vigorous, and more spreading in form with less lateral branching.

DESCRIPTION OF THE FIGURES

The accompanying photographs (as shown in FIGS. 1-3) illustrate the overall appearance of the new *Coleus* cultivar 'UF17-52-13'. These photographs show the colors 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 describe the colors of the new *Coleus* cultivar. FIGS. 2 and 3 were taken from plants grown nine (9) weeks from unrooted cuttings in September-November 2020 in a glass-covered greenhouse in Gainesville, Fla.

FIG. 1 shows the pedigree of the claimed plant;

FIG. 2 shows the growth habit, form, and foliage of the claimed plant; and

FIG. 3 shows a close-up of the foliage of the claimed plant.

DETAILED BOTANICAL DESCRIPTION OF THE CULTIVAR

The following detailed description sets forth the distinctive characteristics of the new *Coleus* cultivar 'UF17-52-13'. Color references are made to The Royal Horticultural Society (R.H.S.) Colour Chart, 2007 (5th Edition).

Description of Growing Conditions

The detailed description was obtained using nine-weekold plants grown from unrooted cuttings in September-November 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.—Coleus scutellarioides.

Common name.—Coleus.

Cultivar.—'UF17-52-13'.

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Parentage:

Female or seed parent.—'UF16-39-4'.

Male or pollen parent.—Unknown.

Propagation:

Type cuttings.—Vegetative meristems having at least 5 one node.

Time to initiate roots.—3-4 days.

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

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

Rooting habit.—Fibrous.

Plant description:

Plant form.—Spreading.

Growth habit.—Upright, well-branched.

Plant height (from top of soil).—28-30 cm.

Plant width (horizontal plant diameter).—58-62 cm.

Branches.—Quantity per plant: 7-8. Branch color: RHS 141C (medium green). Texture: Smooth. Pubes- 20 cence: Not present. Branch diameter: 0.5-0.7 cm at the base of a 28-cm-long branch. Branch length: 24-26 cm. Internode length: 3-4 cm. Anthocyanin: Not present. Stem description: Square-shaped stem, 1.0 cm in diameter at the soil line.

Foliage description:

Quantity of leaves per branch.—20-22. Arrangement: Opposite.

Fragrance.—Not fragrant.

Shape.—Ovate.

Length.—10-12 cm.

Width.—8-10 cm.

Apex.—Broadly acute.

Base.—Attenuate.

Margin.—Deeply lobed.

Leaf texture (both surfaces).—Smooth.

Pubescence (both surfaces).—Not present.

Venation color.—Upper surface: Proximal (base): RHS 141C (medium green). Distal (tip): RHS 187A (dark red). Center: RHS 186D (purplish pink). Lower 40 surface: RHS 141D (light green).

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

Color, immature leaf.—Upper surface: Base and center: RHS 177A (dark greyed orange). Margin: RHS 143B

(light green). Lower surface: Base: RHS 193D (light grey green). Margin: RHS 143A (medium green).

Color, mature leaf.—Upper surface: Base and center: RHS 187A (dark brown). Margin: RHS 143A (medium green). Lower surface: RHS 143C (light green).

Petiole length.—2-3 cm.

Petiole diameter.—0.2-0.3 cm.

Petiole color.—RHS 143C (light green). Petiole texture.—Smooth, no pubescence.

Flowers and seeds: Flowers and seeds have not been observed.

Fruit/seed set: Fruit/seed not observed.

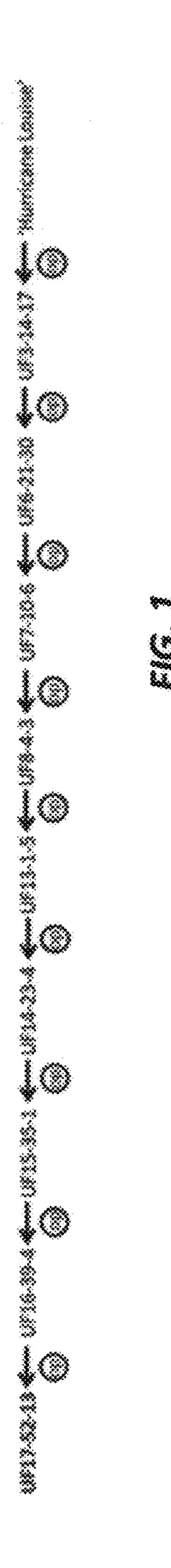
Disease and insect resistance: Disease and insect resistance is typical of the species, thus no claims are made of any superior disease or insect resistance with this cultivar. The most common insect pests observed on this plant in Gainesville, Fla. have been long-tailed or citrus mealybugs (*Pseudococcus* 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 (Perononspora lamii). This pathogen has been observed in stock materials grown closely together in cooler growing seasons.

Comparison with Known Cultivars

Plants of the new *Coleus* cultivar 'UF17-52-13' can be compared to those of 'UF17-73-7' (commercial name Wicked Witch, not patented). The color of the adaxial surface of mature leaves of 'UF17-52-13 is RHS 187A (dark red) in the leaf center, with leaf margins and tip accents colored RHS 143A (medium green). In contrast, the color of the adaxial surface of mature leaves of 'UF17-73-7' is RHS 140A (yellow green) at the base then transitions from RHS 61B (purple red) in the leaf center to RHS 77A (red purple), then to RHS 140A (yellow green) at the leaf margins.

What is claimed is:

1. A new and distinct *Coleus scutellarioides* plant named 'UF17-52-13' as shown and described herein.



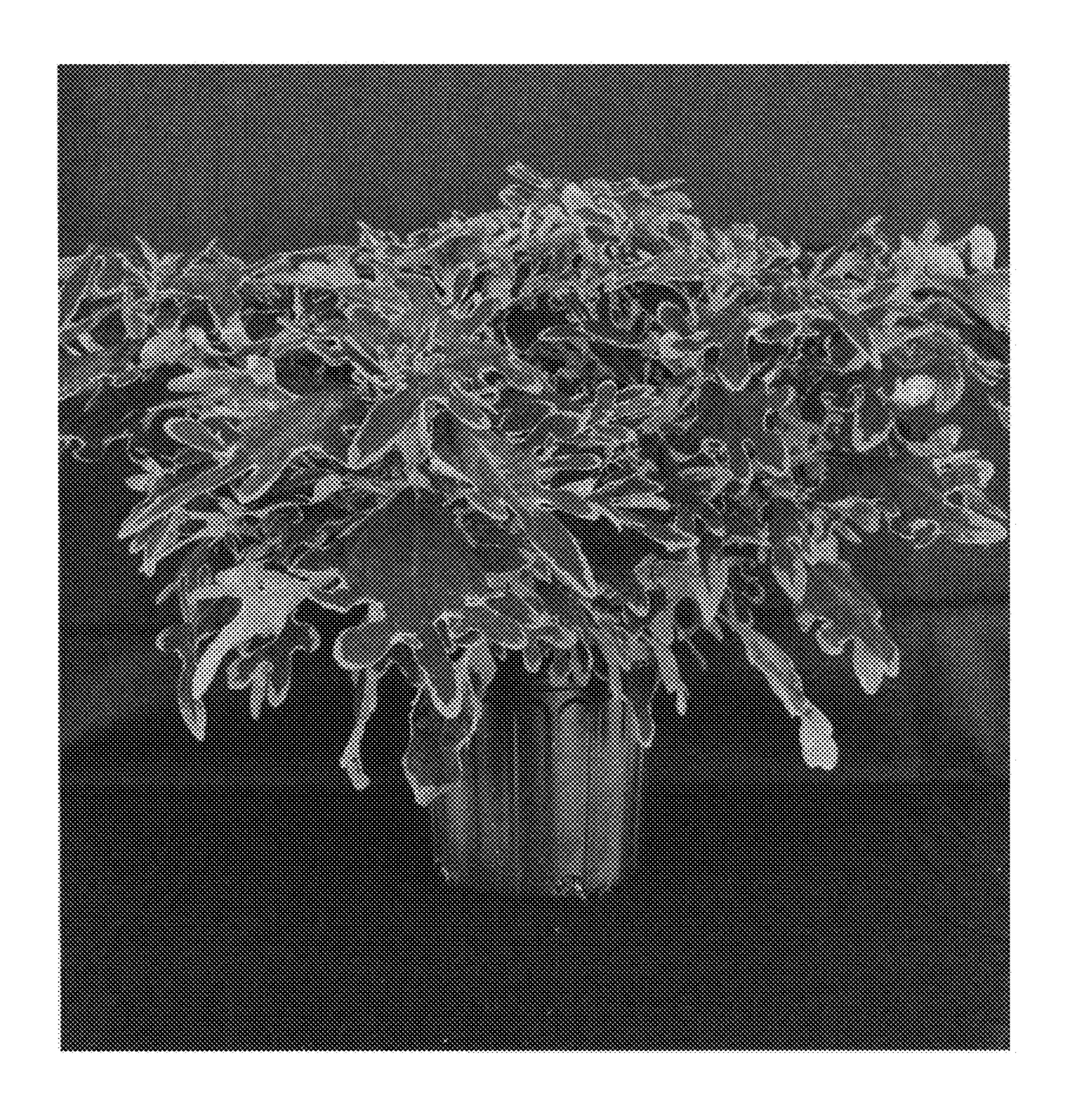


FIG. 2

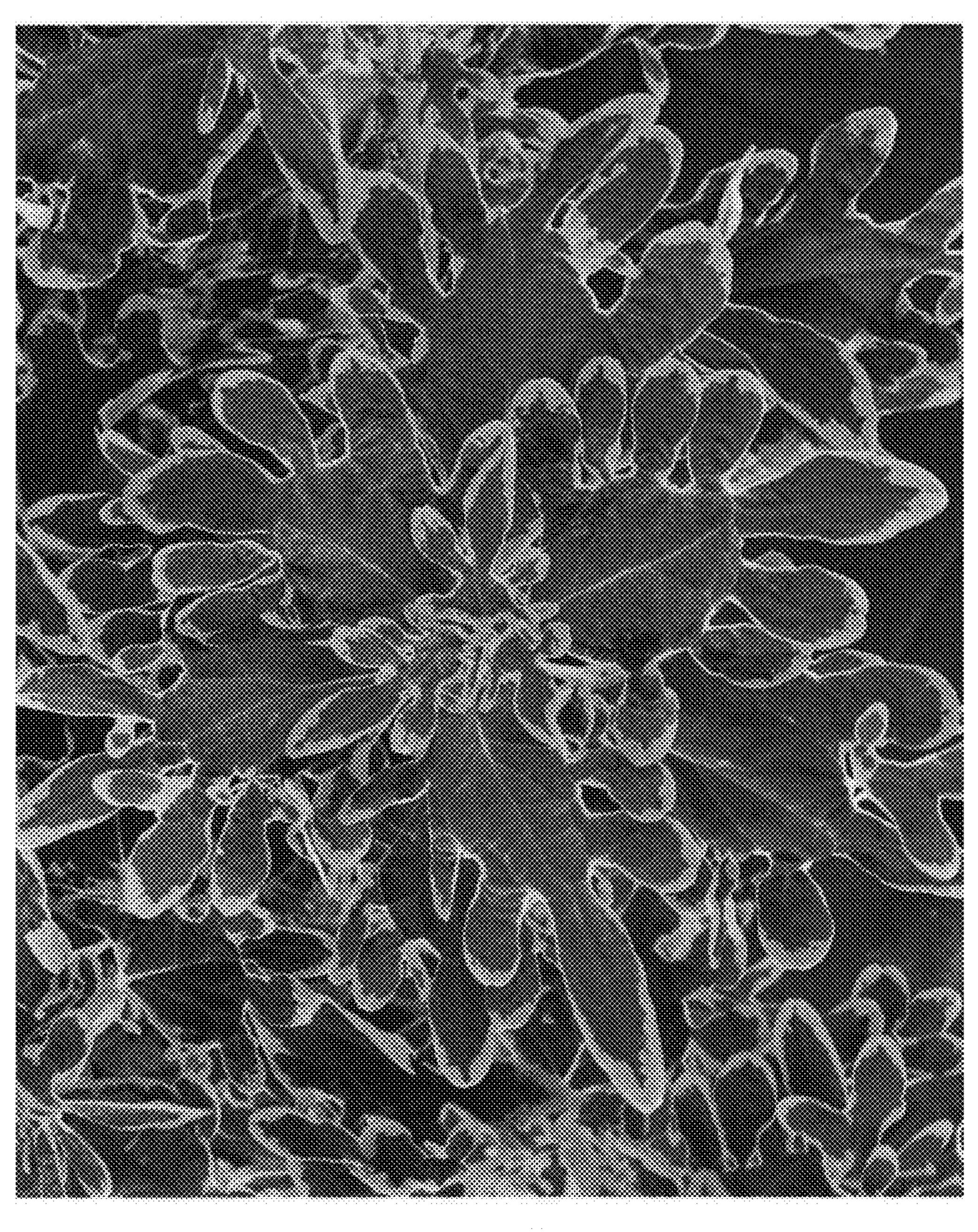


FIG. 3