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

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(54) **COLEUS PLANT NAMED ‘UF17-50-5’**

(50) Latin Name: *Plectranthus scutellarioides*
Varietal Denomination: **UF17-50-5**

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(*) 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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Related U.S. Application Data

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A01H 5/12 (2018.01)
A01H 6/00 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./469**
CPC *A01H 6/00* (2018.05); *A01H 5/12* (2013.01)

(58) **Field of Classification Search**
USPC Plt./469
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See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

UF/IFAS, University of Florida, Ornamentals, Apr. 17, 2019.*

* cited by examiner

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(57) **ABSTRACT**

‘UF17-50-5’ is a new *Coleus* plant with a combination of novel characteristics which include vigorous compact mounded growth habit, excellent heat tolerance, and consistent crimson and chartreuse foliage with very distinct margination. It has superior stability in foliage color in both sun and shade conditions, maintaining stable color in all conditions. ‘UF17-50-5’ has not been observed to produce flowers in any trial conducted to date, so it has long season performance as an annual plant in the landscape until late Fall.

3 Drawing Sheets

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Genus and species: *Plectranthus scutellarioides*.
Cultivar denomination: The present disclosure relates to *Coleus* cultivar ‘UF17-50-5’.

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 to commercial growers and landscapers because they are easy to propagate and provide fast and reliable attractive foliage color that makes their businesses profitable. *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 of different visible phenotypes including foliage color, leaf shape and size, plant height, time to flowering and growth habit.

The *Coleus* breeding program at the University of Florida 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

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released a number of cultivars into the industry over the past decade. 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. Field trials at Citra, Fla. are planted in full sun in sand beds with plastic mulch in May each year with drip irrigation and a minimal amount of slow-release fertilizer added at planting. Field trials at Gainesville, Fla. are planted in 30% shade in sand beds in May 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 at UF have performed well in commercial markets, and continue to attract interest from US, European and Asian gardeners. The UF genotypes disclosed herein were selected because they have many of these desirable traits.

SUMMARY OF THE INVENTION

The invention relates to a new and distinct cultivar of *Coleus* plant named 'UF17-50-5'. 'UF17-50-5' originated from an open pollination conducted in May-November 2016 in Gainesville, Fla. between the female *Coleus* plant 'UF16-33-50' (unpatented) and an unknown male *Coleus* plant. A single seedling was chosen in May 2017 for further asexual propagation in Gainesville, Fla. FIG. 1 shows the pedigree of 'UF17-50-5'.

'UF17-50-5' has been reproduced asexually for over 18 months through vegetative cuttings and has been found to retain its distinctive characteristics through successive asexual propagations. 'UF17-50-5' 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 'UF17-50-5' 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.

'UF17-50-5' was selected based on several visual characteristics. The following traits have been repeatedly observed and are determined to be the unique characteristics of the new *Coleus* cultivar. These characteristics in combination distinguish 'UF17-50-5' as a new and distinct cultivar of *Coleus*:

1. vigorous growth with large leaves and a very consistent and well-branched plant habit when grown from vegetative propagules as a stock plant, thus providing ample vegetative propagules for producers;
2. excellent heat tolerance;
3. distinct crimson and chartreuse foliage color with well-defined margins between the two colors that is

very consistent in both sun and shade conditions in Gainesville, Fla. and Citra, Fla.; and

4. 'UF17-50-5' has not been observed to set flowers or seeds under trailing protocols, and has been observed to have long-season performance in landscape trials in Gainesville, Fla.

Plant of the new *Coleus* cultivar 'UF17-50-5' differ from plants of the female parent, 'UF16-33-50', in the following characteristics:

1. 'UF17-50-5' has large rounded leaves that are crimson with distinct chartreuse margins and a thin pink mid-vein, whereas the female parent 'UF16-33-50' has smaller leaves that are colored maroon and lime green that are pointed at the apex; and
2. 'UF16-33-50' is much less vigorous and much more upright in habit with less lateral branching.

Plants of the new *Coleus* cultivar 'UF17-50-5' are similar to those of the commercial *Coleus* cultivar 'UF11-74-5' (U.S. Plant Pat. No. 25,653); however, 'UF17-50-5' has a broad, upper-surface leaf margin coloration of RHS 143C (Strong Yellow Green), whereas 'UF11-74-5' has a narrow, upper-surface leaf margin coloration of RHS 139D (Yellow Green). Additionally, 'UF17-50-5' has rounded leaf bases, whereas 'UF11-74-5' has truncate leaf bases.

DESCRIPTION OF THE FIGURES

The accompanying photographs (as shown in FIGS. 2 and 3) illustrate the overall appearance of the new *Coleus* cultivar 'UF17-50-5'. These photographs show the colors as true as can be reasonably obtained 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 *Coleus* cultivar.

FIG. 1 shows the pedigree of 'UF17-50-5';

FIG. 2 shows the growth habit, form, and foliage of a nine-week-old plant of the new *Coleus* cultivar 'UF17-50-5'; and

FIG. 3 shows a close-up view of the foliage of a nine-week-old plant of the new *Coleus* cultivar 'UF17-50-5'.

DETAILED BOTANICAL DESCRIPTION OF THE CULTIVAR

The following detailed description sets forth the distinctive characteristics of the new *Coleus* cultivar 'UF17-50-5'. The detailed description was obtained using nine-week-old plants grown from unrooted cuttings in September through November 2018 in a poly-covered plastic greenhouse in Gainesville, Fla. The plants were propagated in mist for ten days after cuttings were stuck, then grown in one-gallon pots for approximately seven and a half additional weeks. Color references are made to The Royal Horticultural Society (R.H.S.) Colour Chart, 2007 5th Edition, except where general terms of ordinary dictionary significance are used, if any.

BOTANICAL DESCRIPTION

Botanical classification:

Family.—Lamiaceae.

Botanical name.—*Plectranthus scutellarioides*.

Common name.—*Coleus*.

Cultivar.—'UF17-50-5'.

Parentage:
Female or seed parent.—*Coleus* cultivar ‘UF16-33-50’.
Male or pollen parent.—Unknown (open pollination was used).
 Propagation:
Type.—Cuttings; vegetative meristems having at least 1 node.
Time to initiate roots.—Approximately 3-4 days.
Time to develop roots.—Approximately 7-10 days.
 Root description:
Root habit.—Fibrous.
Root description.—Callus forms in approximately 2-3 days, roots initiate in approximately 3-4 days and become a highly branched cutting in approximately 7-10 days.
 Plant description:
Plant form.—Spreading.
Growth habit.—Upright.
Plant height (from top of soil).—Approximately 25-27 cm.
Plant diameter (horizontal plant diameter).—Approximately 50-55 cm.
Branches.—Quantity per plant: Approximately 6-7. Color: RHS 141C. Texture: Smooth. Pubescence: Not present. Stem description: Square-shaped stem, approximately 0.8 cm in diameter at the soil line. Branch diameter: Approximately 0.6-0.7 cm at the base of a 24-cm-long branch. Branch length: Approximately 23-25 cm. Internode length: Approximately 3-4 cm. Anthocyanin: Not present.
 Foliage description:
Quantity of leaves per branch.—Approximately 13-15.
Arrangement.—Opposite.
Fragrance.—Not fragrant.
Shape.—Ovate.
Length.—Approximately 14-15 cm.
Width.—Approximately 11-12 cm.
Apex.—Broadly acute.
Base.—Rounded.
Margin.—Lobed.

Texture, upper and lower surfaces.—Smooth.
Pubescence color (both surfaces).—Not present.
Venation pattern.—Upper surface: Arcuate. Lower surface: Arcuate.
Color of veins.—Upper surface: RHS 59C. Lower surface: RHS 150D.
Color.—Immature leaf: Upper surface: Center: RHS 59C. Mid-center: RHS N77A. Margin: RHS 143C. Lower surface: Center: RHS 150D. Mid-center: RHS 143A. Margin: RHS 143C. Mature leaf: Upper surface: Center: RHS 59C. Mid-center: RHS N77A. Margin: RHS 143C. Lower surface: Center: RHS 150D. Mid-center: RHS 143A; Margin: RHS 143C.
Petiole.—Length: Approximately 2-3 cm. Diameter: Approximately 0.3-0.4 cm. Color: RHS 150D. Texture: Smooth, no pubescence.
 Flowers and seeds: Flowers and seeds have not been observed to date during formal trials in Gainesville, Fla.
 Fruit: Fruit has not been observed to date during formal trials in Gainesville, Fla.
 Disease and insect resistance: Disease and insect resistance of the *Coleus* cultivar ‘UF17-50-5’ is typical of the species, and therefore no claims are made herein of any superior disease or insect resistance. The most commonly observed insect pests on this species 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 three to four 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 United States is downy mildew (*Peronospora lamii*), which has been observed in stock materials grown closely together in cooler growing seasons.
 I claim:
 1. A new and distinct *Plectranthus scutellarioides* (*Coleus*) plant named ‘UF17-50-5’ as shown and described herein.

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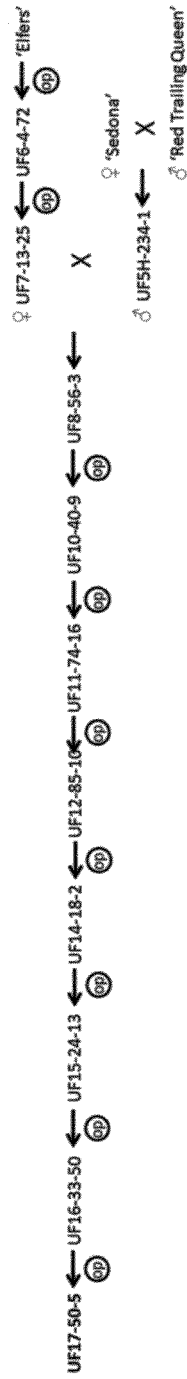


FIG. 1

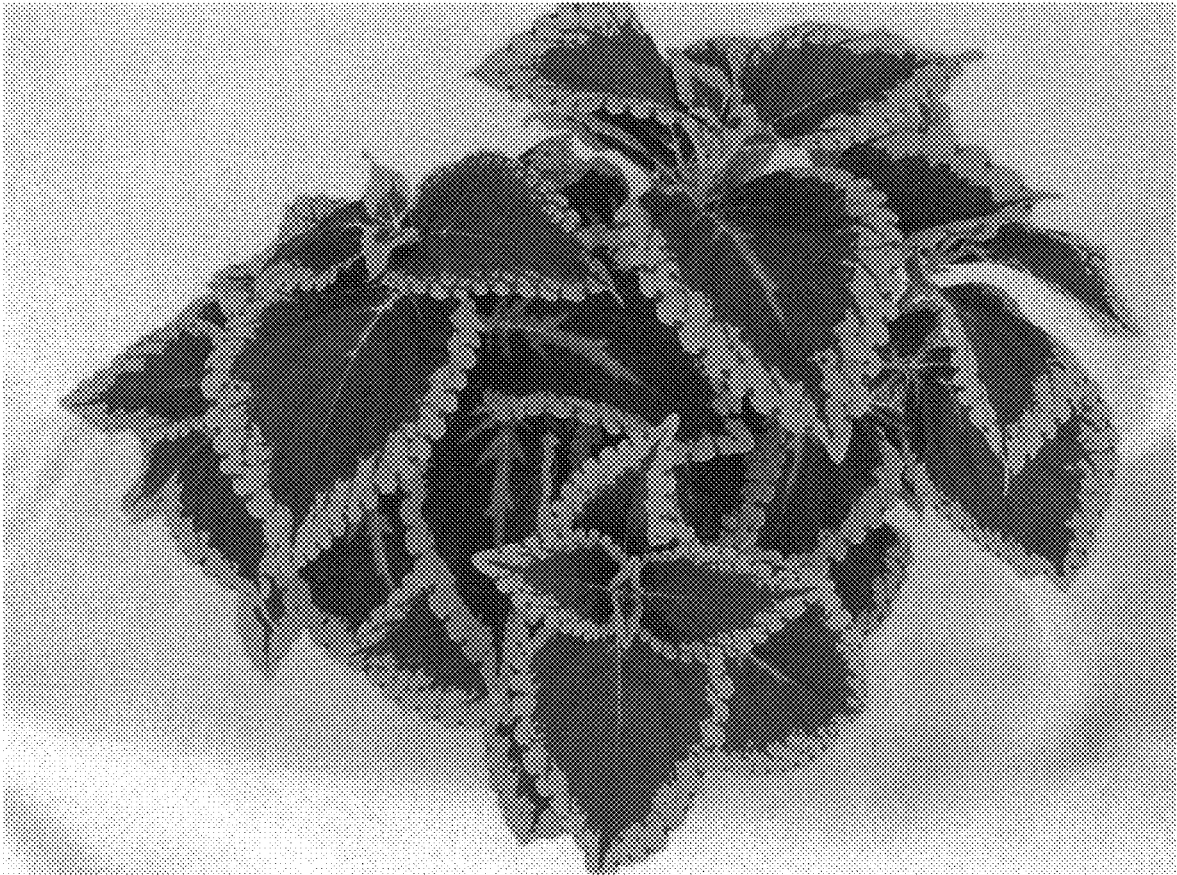


FIG. 2

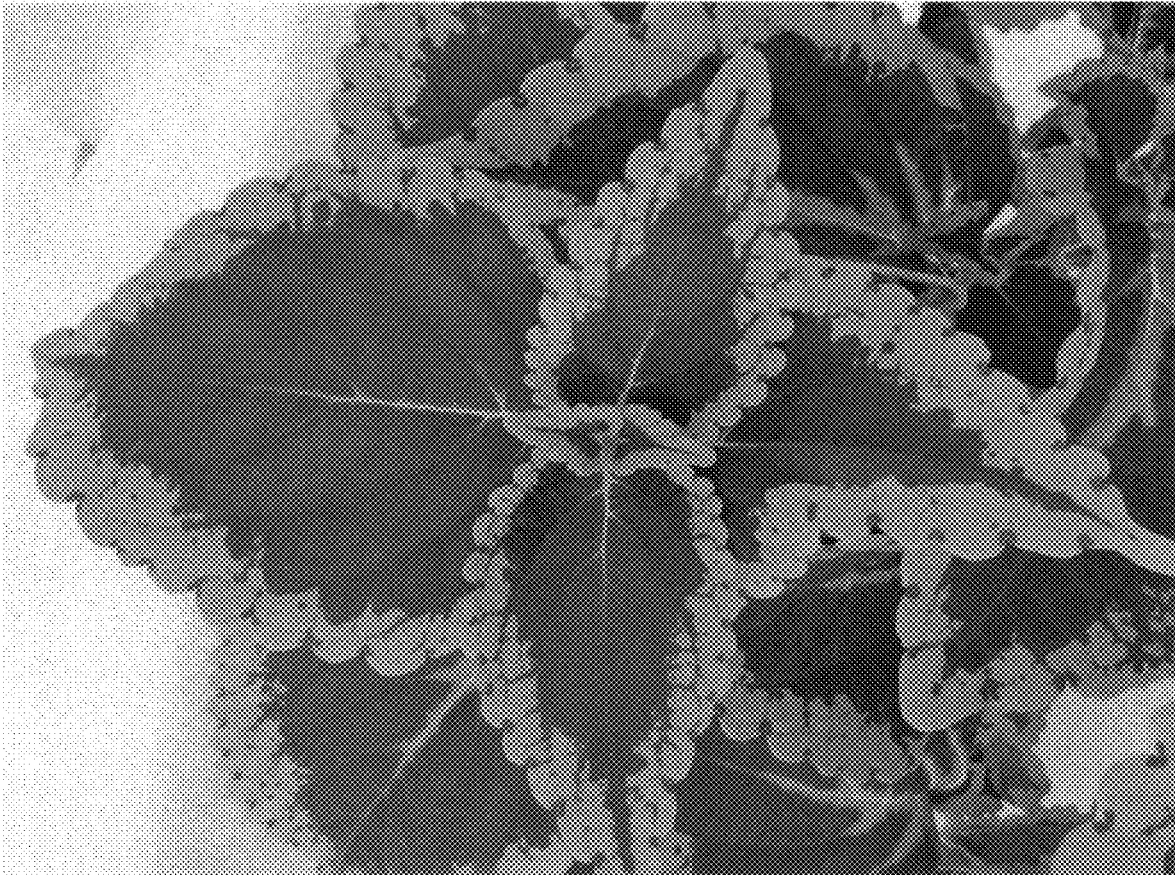


FIG. 3