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Clark

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(54) **COLEUS PLANT NAMED ‘UF16-91-25’**

CPC *A01H 6/00* (2018.05); *A01H 5/12*
(2013.01)

(50) Latin Name: *Plectranthus scutellarioides*
Varietal Denomination: **UF16-91-25**

(58) **Field of Classification Search**

USPC Plt./469

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

CPC *A01H 6/00*; *A01H 5/12*
See application file for complete search history.

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

(56) **References Cited**

(73) Assignee: **Florida Foundation Seed Producers, Inc., Marianna, FL (US)**

PUBLICATIONS

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

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

* cited by examiner

(21) Appl. No.: **16/873,457**

Primary Examiner — Keith O. Robinson

(22) Filed: **Apr. 16, 2020**

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(65) **Prior Publication Data**

US 2020/0367412 P1 Nov. 19, 2020

(57) **ABSTRACT**

Related U.S. Application Data

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‘UF16-91-25’ is a new *Coleus* plant with a combination of novel characteristics that include vigorous compact mounded growth habit, excellent heat tolerance, and consistent tri-colored pink, maroon, and lime green foliage. ‘UF16-91-25’ has superior stability in foliage color in both sun and shade conditions, maintaining stable color in all conditions. ‘UF16-91-25’ 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.

(51) **Int. Cl.**

A01H 5/02 (2018.01)

A01H 6/00 (2018.01)

A01H 5/12 (2018.01)

(52) **U.S. Cl.**

USPC **Plt./469**

3 Drawing Sheets

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Genus and species: *Plectranthus scutellarioides*.

Cultivar denomination: The present disclosure relates to *Coleus* cultivar ‘UF16-91-25’.

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

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gardens with little or no care. Using recurrent mass selection and maintaining a large pool of germplasm our program has 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 'UF16-91-25'. 'UF16-91-25' originated from an open pollination conducted in May-November 2015 in Gainesville, Fla. between the female *Coleus* plant 'UF15-96-16' (unpatented) and an unknown male *Coleus* plant. A single seedling was chosen in May 2016 for further asexual propagation in Gainesville, Fla. FIG. 1 shows the pedigree of 'UF16-91-25'.

'UF16-91-25' has been reproduced asexually for over 18 months through vegetative cuttings and has been found to retain its distinctive characteristics through successive asexual propagations. 'UF16-91-25' was first propagated asexually by meristem tip cuttings in May 2016 in Gainesville, Fla., and has remained true-to-type since that time.

The new *Coleus* cultivar 'UF16-91-25' 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.

'UF16-91-25' was selected along with its sibling 'UF17-128-17' because they were the first plants from the breeding program with pink, maroon, and chartreuse leaves with enough vigor to withstand the harsh selection conditions the plants were subjected to in full-sun trials in Gainesville, Fla. This color combination typically fades in full sun with the consistent loss of pink color and browning of the maroon sections of the foliage. 'UF16-91-25' is exceptional because it maintains all three distinct colors in well-defined zones in shade or sun. That is, 'UF16-91-25' demonstrates superior

stability in foliage color in all conditions. Additional characteristics of 'UF16-91-25' include:

1. vigorous but compact upright growth habit with excellent lateral branching when grown as a stock plant, thus providing ample vegetative propagules for producers;
2. excellent heat tolerance; and
3. 'UF16-91-25' has been observed to have long-season performance in landscape trials in Gainesville, Fla.

Plant of the new *Coleus* cultivar 'UF16-91-25' differ from plants of the female parent, 'UF15-96-16', in the following characteristics:

1. 'UF16-91-25' has large leaves that are contrasting pink, maroon, and lime green and pointed at the apex, whereas the female parent 'UF15-96-16' has smaller leaves that are colored pink, maroon, and lime green that are rounded at the apex; and
2. 'UF16-91-25' has a robust, well-branched mounded habit, whereas the female parent 'UF15-96-16' is slightly less vigorous, and much more upright in habit with less lateral branching.

Plants of the new *Coleus* cultivar 'UF16-91-25' are similar to those of the commercial *Coleus* cultivar 'UF15-20-6' (U.S. Plant Pat. No. 30,969); however, 'UF16-91-25' has crenate-shaped leaf margins, whereas 'UF15-20-6' has lobed-shaped leaf margins. Additionally, 'UF16-91-25' has leaf margins colored RHS 143A (Strong Yellow Green), whereas 'UF15-20-6' has leaf margins colored RHS 137B (Moderate Olive Green).

DESCRIPTION OF THE FIGURES

The accompanying photographs (as shown in FIGS. 2 and 3) illustrate the overall appearance of the new *Coleus* cultivar 'UF16-91-25'. 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 'UF16-91-25';

FIG. 2 shows the growth habit, form, and foliage of a nine-week-old plant of the new *Coleus* cultivar 'UF16-91-25'; and

FIG. 3 shows a close-up view of the foliage of a nine-week-old plant of the new *Coleus* cultivar 'UF16-91-25'.

DETAILED BOTANICAL DESCRIPTION OF THE CULTIVAR

The following detailed description sets forth the distinctive characteristics of the new *Coleus* cultivar 'UF16-91-25'. 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.—‘UF16-91-25’.

Parentage:

Female or seed parent.—*Coleus* cultivar ‘UF15-96-16’.

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 30-35 cm.

Plant diameter (horizontal plant diameter).—Approximately 60-65 cm.

Branches.—Quantity per plant: Approximately 10.

Color: RHS 143B. Texture: Smooth. Pubescence:

Not present. Stem description: Square-shaped stem, approximately 0.6 cm in diameter at the soil line.

Branch diameter: Approximately 0.5-0.6 cm at the

base of a 25-cm-long branch. Branch length:

Approximately 23-27 cm. Internode length:

Approximately 3-4 cm. Anthocyanin: Not present.

Foliage description:

Quantity of leaves per branch.—Approximately 16-17.

Arrangement.—Opposite.

Fragrance.—Not fragrant.

Shape.—Ovate.

Length.—Approximately 10-12 cm.

Width.—Approximately 9-10 cm.

Apex.—Broadly acute.

Base.—Attenuate.

Margin.—Crenate.

Texture, upper and lower surfaces.—Smooth.

Pubescence color (both surfaces).—Not present.

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

Color of veins.—Upper surface: Center: RHS 4C.

Edge: RHS 58A. Lower surface: Center: RHS 4C.

Edge: RHS 143B.

Color.—Immature leaf: Upper surface: Base: RHS

150D. Center: RHS 61A. Mid-center: RHS 202A.

Margin: RHS 140A. Lower surface: Base: RHS

150C. Center: RHS 39B. Mid-center: RHS 137B.

Margin: RHS 140A. Mature leaf: Upper surface:

Base: RHS 3D. Center: RHS 58A. Mid-center: RHS

N77A. Margin: RHS 143A. Lower surface: Base:

RHS 3D. Center: RHS 39B. Mid-center: RHS

N137D. Margin: RHS 143A.

Petiole.—Length: Approximately 3-3.5 cm. Diameter:

Approximately 0.2-0.3 cm. Color: RHS 4D. 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 ‘UF16-91-25’ 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 ‘UF16-91-25’ as shown and described herein.

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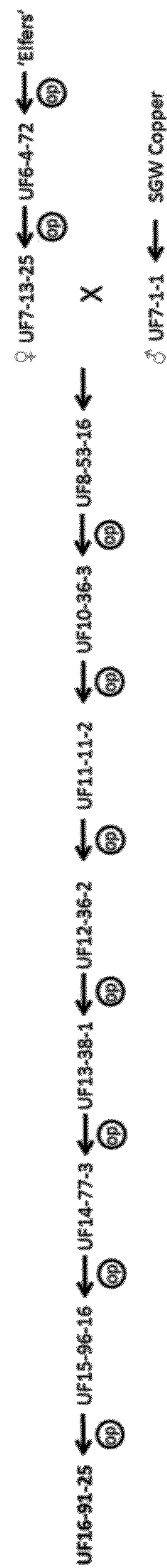


FIG. 1



FIG. 2



FIG. 3