



US00PP32976P2

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

(10) **Patent No.:** **US PP32,976 P2**
(45) **Date of Patent:** **Apr. 13, 2021**

(54) **CHRYSANTHEMUM PLANT NAMED**
'CIFZ0074'

(50) Latin Name: *Chrysanthemum x morifolium*
Varietal Denomination: **CIFZ0074**

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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.

(21) Appl. No.: **16/873,306**

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

(51) **Int. Cl.**
A01H 5/02 (2018.01)
A01H 6/14 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./293**

(58) **Field of Classification Search**

USPC Plt./293
CPC ... A01H 5/00; A01H 5/02; A01H 6/14; A01H
6/1424; A01H 5/0255
See application file for complete search history.

(56) **References Cited**

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Plt./293

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(57) **ABSTRACT**

A new garden type *Chrysanthemum* plant named
'CIFZ0074' particularly distinguished by its medium plant
size with oval mound plant habit, a medium to small sized
decorative flower (1.5 to 1.75 inches), red flower color and
a natural season response early September.

1 Drawing Sheet

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Latin name of the genus and species of the plant claimed:
Chrysanthemum x morifolium.

Varietal denomination: 'CIFZ0074'.

BACKGROUND OF THE NEW PLANT

The present invention comprises a new *Chrysanthemum*,
botanically known as *Chrysanthemum x morifolium*, and
hereinafter referred to by the variety name 'CIFZ0074'.

'CIFZ0074' is a product of a planned breeding program.
The new cultivar has a medium sized plant with oval mound
plant habit, a medium to small sized decorative flower (1.5
to 1.75 inch), red flower color and a natural season response
of early September.

'CIFZ0074' originated from a cross made in October
2014 in Enkhuizen, The Netherlands. Seeds were sown in
June 2015 in Gilroy, Calif. and 'CIFZ0074' was selected
from the resulting population on September 28 in Monro-
eville, N.J.

The female parent was the selection from own breeding
'AH3397', not patented.

TABLE 1

Characteristics of the female parent compared to 'CIFZ0074':		
Trait	'CIFZ0074'	'AH3397'
Flower color:	Red	Orange-bronze
Flower type:	Similar	Similar

The male parent was 'Syaid Redfia', U.S. Plant Pat. No.
23,011.

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TABLE 2

Characteristics of the male parent compared to 'CIFZ0074':

Trait	'CIFZ0074'	'Syaid Redfi'
Natural response:	1 week faster	1 week slower
Blackcloth response:	½ week faster	½ week slower
Flower size:	Similar/bit larger	Similar/bit smaller
Flower color:	Similar	Similar
Mature inflorescence diameter:	3.5 cm	4.2-4.5 cm
Plant height:	16-18 cm	11-13 cm
Plant habit:	More oval	More mound
Flower longevity:	½ week less	½ week more
Foliage disease:	Less susceptible	More susceptible

The first act of asexual reproduction of 'CIFZ0074' was
accomplished when vegetative stem cuttings were propa-
gated from the initial selection in January 2016 in Mebane,
N.C.

BRIEF SUMMARY OF INVENTION

Horticultural examination of plants grown from cuttings
of the plant initiated in January 2016 and continuing there-
after, has demonstrated that the combination of characteris-
tics as herein disclosed for 'CIFZ0074' are firmly fixed and
are retained through successive generations of asexual
reproduction.

'CIFZ0074' has not been observed under all possible
environmental conditions. The phenotype may vary signifi-
cantly with variations in environment such as temperature,
light intensity and day length.

A Plant Breeder's Right for this cultivar has not yet been
applied for. 'CIFZ0074' has not been made publicly avail-

able prior to the effective filing date of this application, notwithstanding any disclosure that may have been made less than one year prior to the effective filing date of this application by the inventor or another who obtained 'CIFZ0074' directly from the inventor.

The following traits have been repeatedly observed and are determined to be basic characteristics of the new variety. The combination of these characteristics distinguishes this *Chrysanthemum* as a new and distinct variety.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographic drawing shows typical flower and foliage characteristics of 'CIFZ0074' with colors being as true as possible with an illustration of this type.

The photographic drawing shows in FIG. 1 a close view of flower of the new variety and in FIG. 2 a flowering plant from an outdoor trial.

The aforementioned photographs, FIG. 1, as well as FIG. 2, were taken in September 2019 both showing a plant from the same black cloth indoor trial in Gilroy, Calif. These plants were about 10 weeks of age. One rooted cutting per pot had been planted in a one gallon pot, not pinched in week 24, and black clothed from week 25. Plants started flowering the end of August.

DETAILED BOTANICAL DESCRIPTION

The measurements were taken in Gilroy, Calif. in September 2019 on the plants from the aforementioned trial.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.) 2015.

DIFFERENCES BETWEEN THE NEW VARIETY 'CIFZ0074' AND TWO MOST SIMILAR VARIETIES

TABLE 3

Trait	'CIFZ0074'	'Red Bronze Urano', Not patented
Natural response:	1.5 week faster	1.5 week slower
Blackcloth response:	Similar	Similar
Flower size:	Similar/bit larger	Similar/bit smaller
Flower color:	More red	More bronze
Flower type:	Similar	Similar
Plant size:	Taller/less wide	Shorter/wider
Plant habit:	More oval	More mound
Flower color longevity:	Lasts longer	Short lived

TABLE 4

Trait	'CIFZ0074'	'Daybreak Red 18', Not patented
Natural response - North:	½ week slower	½ week faster
Natural response - South:	1 week faster	1 week slower
Black cloth response:	Similar	Similar
Flower size:	Smaller	Larger
Flower color:	Similar	Similar
Flower type:	Similar	Similar
Plant size:	Larger	Smaller
Plant habit:	More oval	More mound
Flower longevity:	Last longer	Short lived

Plant:

Form, growth and habit.—Herbaceous garden-type, stems Upright and outwardly spreading, freely branching, strong and moderately vigorous growth habit.

Plant height (above soil).—16-18 cm.

Plant height (inflorescence included).—19-24 cm.

Plant width.—37-38 cm.

Roots:

Number of days to initiate roots.—About 4 days at about 22° C.

Number of days to produce a rooted cutting.—14-16 days at 22° C.

Type.—Fine, fibrous, free branching.

Color.—RHS N155B but whiter.

Foliage:

Arrangement.—Alternate.

Immature leaf, color upper surface.—RHS 137A.

Immature leaf, color lower surface.—RHS 137B.

Mature leaf, color, upper surface.—RHS NN137A.

Mature leaf, color lower surface.—RHS NN137B.

Length.—6.0-6.5 cm.

Width.—6 cm.

Shape.—Ovate, with distinct lobes.

Base shape.—Attenuate.

Apex shape.—Mucronate.

Margin.—5-lobed (palmate), edge dentate.

Number of margin indentations.—Many.

Depth of margin indentations.—Shallow.

Leaf length terminal lobe relative to total leaf length.—Terminal lobe is ⅓ the length of the total leaf=Medium.

Leaf depth lower lateral sinus.—Shallow.

Texture, upper surface.—Bifid hairs.

Texture, lower surface.—Bifid hairs.

Color of veins, upper surface.—RHS 138B.

Color of veins, lower surface.—RHS 138A.

Pattern of veining.—Palmate.

Petiole color.—RHS 137A.

Petiole Length.—3.0 cm.

Diameter.—0.3 cm.

Texture.—Bifid hairs.

Presence of stipules.—No.

Stem:

Quantity of main branches per plant.—5-6.

Color of stem.—RHS 138A.

Length of stem.—10.0-11.0 cm.

Diameter.—0.5 cm.

Length of internodes.—0.5-2.0 cm.

Texture.—Bifid hairs.

Color of peduncle.—RHS 138A.

Length of peduncle.—5.0 cm.

Peduncle diameter.—0.2 cm.

Texture.—Bifid hairs.

Inflorescence:

Type.—Compositae, solitary, decorative type inflorescences borne terminally above foliage, ligulate ray florets arranged acropetally on a capitulum giving a double flower.

Quantity of short days to flowering (response time).—Approximately 5 weeks.

Natural season flowering.—Early September.

Quantity of inflorescences per plant.—150-160 with many small buds developing.

- Lastingness of individual blooms on the plant.*—About five weeks from first color.
- Fragrance.*—Slightly spicy.
- Bud (when showing color):
- Color.*—RHS 53A.
- Length.*—1.0 cm.
- Width.*—1.1 cm.
- Shape.*—Oblate.
- Immature inflorescence (at moment of opening):
- Diameter.*—1.8 cm.
- Color of ray florets, upper surface.*—RHS 53A, with minimal stripes of RHS 50C.
- Color of ray florets, lower surface.*—RHS 50C with RHS 1B with a white overtone.
- Mature inflorescence:
- Diameter.*—3.5 cm.
- Depth.*—1.0 cm.
- Total diameter of disc.*—0.3 cm to no disc present.
- Receptacle color.*—RHS 46A.
- Receptacle height.*—0.5 cm.
- Receptacle diameter.*—1.0 cm.
- Length of corolla tube.*—Medium.
- Ray florets:
- Average quantity of florets.*—140-150 in several whorls.
- Color of florets, upper surface.*—RHS 46A with tips aging to RHS 13A.
- Color lower surface.*—RHS 50C with spots of RHS 1B.
- Length.*—1.8 cm.
- Width/diameter.*—0.5-0.6 cm.
- Shape.*—Elliptical.
- Ray floret profile in cross section at widest point.*—Young petals are strongly concave, Mature petals are flat to weakly convex.
- Ray floret longitudinal axis shape.*—Petals are straight to slightly reflexing with age.
- Apex shape.*—Mostly obtuse and dentate.
- Base shape.*—Tube.
- Margin.*—Entire. Small incisions may be present at tip.
- Margin: type of rolling.*—Weakly involute.
- Texture, upper surface.*—Papillate.
- Lower surface.*—Papillate.
- Ribs present.*—No.
- Number of keels.*—0.
- Disc florets:
- Number of disc florets.*—Up to 200, may not be present in all flowers.
- Width.*—Up to 0.5 cm.

- Length.*—3.0 cm.
- Color.*—RHS 1B; 144B at base.
- Inflorescence (at moment of senescence):
- Color of ray florets, upper surface.*—RHS 60C.
- Color of ray florets, lower surface.*—RHS 60D.
- Inflorescence disc diameter size.*—Small to none.
- Phyllaries:
- Quantity.*—30-40.
- Color, upper surface.*—RHS 143C.
- Color, lower surface.*—RHS 143A.
- Length.*—0.6 cm.
- Width.*—0.1-0.2 cm.
- Shape.*—Lanceolate.
- Apex shape.*—Acute.
- Base.*—Fused.
- Margins.*—Entire.
- Texture, upper surface.*—Glabrous.
- Texture, lower surface.*—Canescent.
- Reproductive organs:
- Pistil.*—One.
- Length.*—0.4 cm.
- Style color.*—RHS 150B.
- Style length.*—0.4 cm.
- Stigma color.*—RHS 7D.
- Stigma shape.*—Bi-parted.
- Ovary color.*—RHS 145C.
- Ovary length.*—0.2 cm.
- Ovary width.*—0.1 cm.
- Androecium:
- Stamens.*—1, found on only disc florets.
- Color of filaments.*—RHS 2B.
- Length filaments.*—0.2 cm.
- Anther color.*—RHS 13A.
- Anther length.*—0.2 cm.
- Anther shape.*—Oval to club shaped.
- Color of pollen.*—RHS 13A.
- Pollen amount.*—Moderate.
- Fertility/seed set.*—Has not been determined to date.
- Disease/pest resistance.*—Has not been fully determined to date, but it was observed several times that fungal diseases do affect foliage less severely and less frequent compared to regular commercial varieties.
- Hardiness.*—Has not been determined to date.
- What is claimed is:
1. A new and distinct variety of *Chrysanthemum* plant named 'CIFZ0074' substantially as illustrated and described herein.

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FIG. 1



FIG. 2