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

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(54) **CHRYSANTHEMUM PLANT NAMED**
‘CIFZ0049’

(50) Latin Name: *Chrysanthemum x morifolium*
Varietal Denomination: **CIFZ0049**

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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 19 days.

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

(52) **U.S. Cl.**
USPC **Plt./290**

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

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(57) **ABSTRACT**

A new garden type *Chrysanthemum* plant named
‘CIFZ0049’ particularly distinguished by the medium size
orange decorative flower with darker orange center, a
medium-large size plant with very round plant habit and a
natural season response in mid to late September.

1 Drawing Sheet

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

Varietal denomination: ‘CIFZ0049’.

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 ‘CIFZ0049’.

‘CIFZ0049’ is a product of a planned breeding program.
The new cultivar has medium size orange decorative flower
with darker orange center, a medium-large size plant with
very round plant habit and a natural season response in mid
to late September.

‘CIFZ0049’ originated from a mutation: Stock x-rayed at
1750 RAD in October of 2013. Single cutting sport from the
stock.

The female parent was ‘Beverly Bronze’ (‘CIFZ0032’).

When compared to the female parent, ‘CIFZ0049’ has:

- | | |
|----|---|
| 1) | Similar flower type and size but lighter overall color that is more orange/less redbronze than ‘Beverly Bronze’ |
| 2) | Blackcloth and natural season response is one or two days faster than ‘Beverly Bronze’ |
| 3) | Similar plant habit and similar plant size as ‘Beverly Bronze’ |

No male parent.

The first act of asexual reproduction of ‘CIFZ0049’ was
accomplished when vegetative cuttings were propagated
from the initial selection, this initial selection took place on
Apr. 16, 2014 in Gilroy, Calif.

BRIEF SUMMARY OF INVENTION

Horticultural examination of plants grown from cuttings
of the plant initiated in May 2014 in Gilroy, Calif., and
continuing thereafter, has demonstrated that the combination

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of characteristics as herein disclosed for ‘CIFZ0049’ are
firmly fixed and are retained through successive generations
of asexual reproduction.

‘CIFZ0049’ 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.

‘CIFZ0049’ has not been made publicly available 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 ‘CIFZ0049’ 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 drawings show typical
flower and foliage characteristics of ‘CIFZ0049’ with colors
being as true as possible with an illustration of this type. The
photographic drawings show in FIG. 1 a close view of
flower of the new variety and in FIG. 2 a flowering plant
from an indoor trial.

The aforementioned photographs: FIG. 1, as well as FIG.
2, were taken in August 2016 both showing a plant from the
same blackcloth indoor trial in Gilroy, Calif.

These plants were about 9 weeks of age. One rooted
cutting per pot had been planted in a 6 inch pot in week 24,
not pinched. Shortday blackcloth treatment was applied
from week 25 on. Plants started flowering in August.

DETAILED BOTANICAL DESCRIPTION

The measurements were taken in Gilroy, Calif. in August
2016 on the plants from the aforementioned trial.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.) 2001.

TABLE 1

DIFFERENCES BETWEEN THE NEW VARIETY 'CIFZ0049' AND TWO MOST SIMILAR VARIETIES:		
	'CIFZ0049'	'Syaub Oran', U.S. Plant Pat. No. 22,785
Flowering response (blackcloth):	Half a week faster	Half a week slower
Flowering response (natural):	Half a week faster	Half a week slower
Flower color:	Lighter and darker orange in one flower (two tone)	No two tone flower color
Flower size:	Similar	Similar
Plant habit or size:	Shorter with rounder plant habit	Higher, more upright plant type
	'CIFZ0049'	'Zanmubedaz', U.S. Plant Pat. No. 23,014
Flowering response (blackcloth):	Half a week slower	Half a week faster
Flowering response (natural):	2 days slower	2 days faster
Flower color longevity:	Holds color better	More color fading
Flower color:	Similar	Similar
Flower shape:	Similar	Similar
Flower size:	Larger	Smaller
Plant habit or size:	Bit larger plant size	Bit smaller plant size

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).—10-11.5 cm.
Plant height (inflorescence included).—15-17 cm.
Plant width.—30-32 cm.

Roots:

Number of days to initiate roots.—About 4 days at about 22 degrees C.
Number of days to produce a rooted cutting.—14-16 days at 22 degrees C.
Type.—Fine, fibrous, free branching.
Color.—RHS N155B but whiter.

Foliage:

Arrangement.—Alternate.
Immature leaf, color upper surface.—RHS 141A.
Immature leaf, color lower surface.—RHS 138B.
Mature leaf, color, upper surface.—RHS 139A.
Mature leaf, color lower surface.—RHS 137C.
Length.—3.0-3.7 cm.
Width.—2.5-3.0 cm.
Shape.—Ovate.
Base shape.—Attenuate.
Apex shape.—Acute.
Margin.—3 main lobes, irregularly serrulated.
Texture, upper surface.—Bifid hairs.
Texture, lower surface.—Bifid hairs.
Color of veins, upper surface.—RHS 141C.
Color of veins, lower surface.—RHS 137C.
Pattern of veining.—Palmate.
Petiole color.—RHS 137C.
Petiole length.—1.6-1.9 cm.

Diameter.—0.1-0.15 cm.
Texture.—Covered with bifid hairs.

Stem:

Quantity of main branches per plant.—8-10.
Color of stem.—RHS 137D.
Length of stem.—6-8 cm.
Diameter.—0.3-0.5 cm.
Length of internodes.—0.8-1.0 cm.
Texture.—Bifid hairs.
Color of peduncle.—RHS 137C.
Length of peduncle.—6.5-7 cm.
Peduncle diameter.—0.1 cm.
Texture.—Bifid hairs.

Inflorescence:

Type.—Compositae, solitary, decorative-type inflorescences borne terminally above foliage, ray florets arranges on a capitulum.
Quantity of short days to flowering (response time).—5.5 weeks.
Natural season flowering.—Mid to late September.
Quantity of inflorescences per plant.—80-105 (and a large number of buds in various stages).
Lastingness of individual blooms on the plant.—About six weeks from first color.
Fragrance.—Slightly spicy.

Bud (when showing color):

Color.—RHS 172B.
Length.—01.5-1.8 cm.
Width.—1.0-1.2 cm.
Shape.—Oblate.

Immature inflorescence:

Diameter.—2.5-2.8 cm.
Color of ray florets, upper surface.—RHS 13C overlain with RHS 171C.
Color of ray florets, lower surface.—RHS 13C overlain with RHS 171C.

Mature inflorescence:

Diameter.—4.0-4.7 cm.
Depth.—1.5-2.0 cm.
Total diameter of disc.—Very small, not visible as covered by the many rays.
Receptacle color.—RHS 145B.
Receptacle height.—0.2 cm.
Receptacle diameter.—0.3 cm.

Ray florets:

Average quantity of florets.—Between 160 and 185 in several whorls.
Color of florets, upper surface (abaxial).—RHS 13C overlain with RHS 171D.
Color inner surface (adaxial).—RHS 12C overlain with RHS 171D.
Length.—1.6-1.9 cm.
Width/diameter.—0.4-0.6 cm.
Shape.—Oblong to elliptical.
Apex shape.—Most often emarginated or praemorse.
Base shape.—Attenuate.
Margin.—Entire.
Texture, upper surface.—Smooth.
Lower surface.—Smooth.

Disc florets: None present.

Phyllaries:

Quantity.—20.
Color, upper surface.—RHS 143A.
Color, lower surface.—RHS 143B.
Length.—0.6-0.8 cm.

Width.—0.25-0.3 cm.
Shape.—Lanceolate.
Apex shape.—Acute.
Base.—Fused.
Margins.—Entire, some with papery edges.
Texture, upper surface.—Glabrous.
Texture, lower surface.—Bifid hairs.
Reproductive organs:
Pistil.—One.
Length.—0.5-0.6 cm.
Style color.—RHS 1C.
Style length.—0.35-0.4 cm.
Stigma color.—RHS 7D.
Stigma shape.—Bi-parted.

Ovary color.—RHS 145C.
Ovary length.—0.15 cm.
Ovary width.—0.1 cm.
Androecium:
5 *Stamens.*—None, as they are usually present in disc
florets only, which are not developed.
Fertility/seed set.—Has not been determined to date.
Disease/pest resistance.—Has not been determined to
date.
10 What is claimed is:
1. A new and distinct variety of *Chrysanthemum* plant
named ‘CIFZ0049’ substantially as illustrated and described
herein.

* * * * *



FIGURE 1



FIGURE 2