



US00PP20015P2

(12) **United States Plant Patent**
van Kleinwee et al.

(10) **Patent No.:** **US PP20,015 P2**

(45) **Date of Patent:** **May 26, 2009**

(54) **ARGYRANTHEMUM FRUTESCENS PLANT NAMED 'ARGYROS'**

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(50) Latin Name: *Argyranthemum frutescens*
Varietal Denomination: **Argyros**

(52) **U.S. Cl.** **Plt./406**

(58) **Field of Classification Search** **Plt./406**
See application file for complete search history.

(75) Inventors: **Theodorus Cornelis Maria van Kleinwee**, Hoorn (NL); **Anna M. W. P. Houbraken**, Fijnaart (NL)

Primary Examiner—Annette H Para
(74) *Attorney, Agent, or Firm*—S. Matthew Edwards

(73) Assignee: **Syngenta Seeds B.V.**, Enkhuizen (NL)

(57) **ABSTRACT**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 39 days.

A new and distinct cultivar of *Argyranthemum frutescens* plant named 'Argyros' characterized by its compact plant habit with short internodes and dark green foliage and its early, rich and long flowering with large rose flowers.

(21) Appl. No.: **12/012,037**

1 Drawing Sheet

(22) Filed: **Jan. 31, 2008**

1

2

Latin name of the genus and species of the plant claimed:
Argyranthemum frutescens.
Varietal denomination: 'Argyros'.

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct cultivar of Marguerite Daisy plant, botanically known as *Argyranthemum frutescens* and hereinafter referred to by the cultivar name 'Argyros.'

The new cultivar is a product of a planned breeding program conducted in Enkhuizen, Netherlands. The new cultivar 'Argyros' is characterized by its big bright rose flowers and compact plant habit.

The new *Argyranthemum* originates from an open pollination conducted in Enkhuizen, Netherlands in 2003 of a proprietary selection of *Argyranthemum frutescens* identified as code number 'G0101-4', not patented, as the female, or seed, parent with pollen of unknown *Argyranthemum frutescens* plants as the male, or pollen, parent.

The cultivar 'Argyros' was discovered and selected as a single plant within the progeny of the stated open pollination in a controlled environment in Enkhuizen, Netherlands in August 2004. Asexual reproduction of the new *Argyranthemum* by terminal cuttings in a controlled environment in Enkhuizen, Netherlands since August 2004, has shown that the unique features of this new *Argyranthemum* are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The new *Argyranthemum* has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature and light intensity without, however, any variance in genotype.

The following characteristics have been repeatedly observed and are determined to be basic characteristics of 'Argyros' and distinguishes the new *Argyranthemum* as a new and distinct cultivar:

1. Compact plant habit
 2. Freely branching habit and short internodes; dense and bushy plant habit
 3. Early flowering habit
 4. Freely flowering habit with numerous inflorescences per plant
 5. Dark green foliage
 6. Large flower diameter
- Plants of the new *Argyranthemum* differ from plants of the female parent in the following characteristics:
1. Plants of the new *Argyranthemum* have a more compact plant habit than plants of the female parent.
 2. Plants of the new *Argyranthemum* flower earlier than plants of the female parent.
- The difference of plants of the new *Argyranthemum* from plants of the male parent is unknown, as the male parent is unknown.

TABLE 1

DIFFERENCES BETWEEN THE NEW CULTIVAR 'ARGYROS' AND A SIMILAR CULTIVAR		
	'ARGYROS'	'Daisy Crazy Bright Carmine' (Not patented)
Plant height	24 cm	30 cm
Plant width	38 cm	50 cm
Flower diameter	4 cm	3-3.5 cm
Foliage color	139A	137B
Peduncle length	8-14 cm	6-10 cm

DESCRIPTION OF THE PHOTOGRAPHS

The accompanying color photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photograph may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new *Argyranthemum*.

BOTANICAL DESCRIPTION OF THE PLANT

The aforementioned photographs, following detailed observations and averaged measurements describe plants of this new Marguerite Daisy plant. The data were collected from plants from asexual reproductions carried out in Enkhuizen, Netherlands. The plant history was taken on 20 week old plants, grown in the open field in Enkhuizen, Netherlands with day temperatures ranging from 12 to 25° C., and night temperatures ranging from 10 to 20° C.

Color references are primarily to the R.H.S. Colour Chart of The Royal Horticultural Society, 1995 Edition, except where general terms of ordinary dictionary significance are used.

The plant: Classification — Botanical : *Argyranthemum frutescens*.

Parentage:

Female parent.—Proprietary selection of *Argyranthemum frutescens*, identified as number 'G01014' (not patented).

Male parent.—Unidentified plants of *Argyranthemum frutescens*

Propagation:

Type of cuttings.—Terminal cuttings.

Time to initiate roots.—7–10 days at air temperature of 21° C.

Time to develop roots.—7–14 days at air temperature of 18° C.

Root description.—Fibrous, relatively fine, white in color.

Rooting description.—Freely branching, dense.

Plant description:

Growth habit.—Upright; rounded shape.

Plant height.—About 20 cm.

Vigor.—Vigorous.

Spreading area.—About 38 cm.

Strength.—Strong.

Branching character.—Freely branching, plants do not require pinching.

Crop time.—About 9 weeks are required to produce a finished flowering plant in a 10.5 cm container from a well developed cutting.

Lateral branch description:

Length.—20–25 cm.

Diameter.—4 mm.

Shape.—Round, slightly grooved.

Anthocyanin pigmentation.—Absent.

Texture.—Smooth, glabrous, slightly woody.

Internode length.—2.5–3.5 cm.

Pubescence.—Absent.

Color.—138A.

The foliage:

Arrangement.—Alternate, simple.

Leaf shape.—Bipinnatisect.

Leaf apex.—Broadly acute.

Leaf base.—Attenuate, clasping.

Margin.—Deeply dissected, lacinate.

Texture.—Thick, glabrous, smooth.

Length.—4–5 cm.

Width.—1–2 cm.

Depth of incision.—Lacinate.

Color.—Upper side : 139A; old leaf 137A. Lower side : 137C; old leaf 137A.

Pubescence.—Absent.

Petiole.—Length : About 2–2.5 cm. Diameter : About 3–4 mm. Texture : Smooth, glabrous. Color : 137A.

Venation.—Shape : Pinnate. Color : 137A.

The inflorescence:

Appearance.—Daisy-type inflorescences with ligulate ray florets. Disc and ray florets develop acropetally

on a capitulum. Inflorescences held upright and outwardly on terminal and axillary peduncles. Inflorescences positioned perpendicular to the peduncles. Inflorescences persistent.

Flowering response.—Under natural conditions, plants flower continuously from spring to early fall.

Inflorescence longevity.—10 days.

Quantity of inflorescences.—Freely flowering, about 500 open inflorescences and inflorescence buds per plant.

The flower bud:

Peduncle.—Length : 8–14 cm. Diameter : 2 mm.

Strength : Strong. *Aspect* : Upright to slightly outward. *Texture* Smooth, glabrous. *Color* : 146C.

Inflorescence bud.—Height : 4 mm. Diameter : 6 mm. *Shape* : Ovoid. *Color* : 199A.

The inflorescence:

Size.—Diameter : 4 cm. Depth : About 4–7 mm.

Disc diameter.—About 1.2–1.5 cm.

Form.—Single flowered.

Receptacle.—Height : About 4 mm. Diameter : About 9–10 mm.

Bracts.—Number of bracts : 3 series of 5 bracts, tightly to receptacle. *Shape* : Elliptic. *Apex* : Broad. *Base* : Truncate. *Texture* : Smooth, glabrous. *Margin* : Entire. *Length* : 3 mm. *Width* : 1 mm. *Color upper side* : N144C. *Color lower side* : 139B.

Fragrance.—Absent.

Ray florets:

Quantity per inflorescence.—18–19 arranged in a single whorl.

Shape.—Ligulate.

Apex.—Emarginate.

Base.—Attenuate.

Margin.—Entire.

Color upper surface.—71B.

Color lower surface.—70B.

Length.—1.5 cm.

Width.—0.4 cm.

Texture.—Smooth, glabrous; longitudinally ridged.

Disc florets:

Arrangement.—Massed at the center of the inflorescence.

Shape.—Tubular, elongated, five-pointed; fused at base.

Color.—Immature : 17A. Mature : 20A.

Diameter.—Apex : 1 mm. Base : <1 mm.

Length.—5 mm.

Quantity per inflorescence.—Approximately 100.

Androecium.—Presence : Only on disc florets. Stamen quantity per floret : 5. Anther length : About 1 mm. Anther shape : Oval. Anther color : 21A. Pollen color : 21A. Amount of pollen : Very small.

Gynoecium.—Presence : On ray and disc florets Number of pistils per floret : 1. Pistil length : Approximately 3 mm. Style color : 144D. Style length : Approximately 1 mm. Stigma color : 14A. Stigma shape : Bilobed. Ovary color : 144C.

Seed and fruit development: Seed and fruit development has not been observed to date.

Disease resistance: No disease/pest resistance has been observed to date.

Temperature/weather tolerance: Plants of the new *Argyranthemum* have been observed to be tolerant to rain, wind and to temperatures from 0° C. to 36° C.

What is claimed is:

1. A new and distinct variety of *Argyranthemum frutescens* plant, named 'Argyros,' as substantially illustrated and described herein.

* * * * *

