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Bernuetz

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(54) ***ARGYRANTHEMUM* PLANT NAMED 'BONMADMERLO'**

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

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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 384 days.

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A01H 5/00 (2006.01)

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

(56) **References Cited**

OTHER PUBLICATIONS

Canada Plant Breeders' Rights application No. 07-5856 filed Apr. 12, 2007—not published when this IDS was prepared.

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(57) **ABSTRACT**

A new and distinct cultivar of *Argyranthemum* plant named 'Bonmadmerlo', characterized by its double type dark red-colored flowers, medium green-colored foliage, and moderately vigorous, upright-mounded growth habit.

1 Drawing Sheet

Latin name of genus and species of plant claimed: *Argyranthemum frutescens.*

Variety denomination: 'Bonmadmerlo'.

BACKGROUND OF THE INVENTION

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

The new cultivar originated in a controlled breeding program in Yellow Rock, New South Wales, Australia during August 2004. The objective of the breeding program was the development of *Argyranthemum* cultivars that are freely flowering with unique flower coloration and a freely branching, compact, and upright growth habit.

The new *Argyranthemum* cultivar is the result of cross-pollination. The female (seed) parent of the new cultivar is the proprietary *Argyranthemum frutescens* breeding selection designated 04-133, not patented, characterized by its anemone type dark maroon red-colored flowers, medium green-colored foliage, and upright mounded and opened in center growth habit. The male (pollen) parent of the new cultivar is the proprietary *Argyranthemum frutescens* breeding selection designated 04-121, not patented, characterized by its anemone type medium pink-colored flowers, medium green-colored foliage, and upright growth habit. The new cultivar was discovered and selected as a single flowering plant within the progeny of the above stated cross-pollination during April 2005 in a controlled environment at Yellow Rock, New South Wales, Australia.

Asexual reproduction of the new cultivar by terminal stem cuttings since April 2005 Yellow Rock, New South Wales, Australia and West Chicago, Ill. has demonstrated that the new cultivar reproduces true to type with all of the characteristics, as herein described, firmly fixed and retained through successive generations of such asexual propagation.

SUMMARY OF THE INVENTION

The following characteristics of the new cultivar have been repeatedly observed and can be used to distinguish 'Bonmadmerlo' as a new and distinct cultivar of *Argyranthemum* plant:

1. Double type, dark red-colored flowers;
2. Medium green-colored foliage; and
3. Moderately vigorous, upright-mounded growth habit.

Plants of the new cultivar differ from plants of the female parent primarily in flower form and growth habit and from plants of the male parent primarily in flower form, flower color, and growth habit.

Of the many commercially available *Argyranthemum* cultivars, the most similar in comparison to the new cultivar is Madeira™ Crested Violet 'Bonmadcrio', U.S. Plant Patent Application Ser. No. 11/601,309(Abandoned). However, in side by side comparisons, plants of the new cultivar differ from plants of 'Bonmadcrio' in the following characteristics:

1. Plants of the new cultivar are taller than plants of 'Bonmadcrio';
2. Plants of the new cultivar have more ray florets than plants of 'Bonmadcrio';
3. Plants of the new cultivar have a smaller disc diameter plants of 'Bonmadcrio'; and
4. Plants of the new cultivar have a ray floret color different from plants of 'Bonmadcrio'.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs show, as nearly true as it is reasonably possible to make the same in color illustrations of this type, typical flower and foliage characteristics of the new cultivar. Colors in the photographs differ slightly from the color values cited in the detailed description, which accurately describes the colors of 'Bonmadmerlo'. The plants were grown in 4.5 inch pots for 9 weeks in a greenhouse at West Chicago, Ill.

FIG. **1** illustrates a side view of the overall growth and flowering habit of 'Bonmadmerlo'.

FIG. **2** illustrates a close-up view of an individual inflorescence of 'Bonmadmerlo'.

DETAILED BOTANICAL DESCRIPTION

The new cultivar has not been observed under all possible environmental conditions to date. Accordingly, it is possible that the phenotype may vary somewhat with variations in the environment, such as temperature, light intensity, and day length, without, however, any variance in genotype.

The chart used in the identification of colors described herein is The R.H.S. Colour Chart of The Royal Horticultural Society, London, England, 2001 edition, except where general color terms of ordinary significance are used. The color values were determined on Apr. 5, 2007 between 9:00 a.m. and 11:00 a.m. under natural light conditions in West Chicago, Ill.

The following descriptions and measurements describe plants produced from cuttings taken from stock plants and grown in a glass-covered greenhouse under conditions comparable to those used in commercial practice. The plants were grown at West Chicago, Ill. in 4.5 inch pots for 9 weeks utilizing a soilless growth medium. Greenhouse temperatures were maintained at approximately 70° F. to 77° F. (21° C. to 25° C.) during the day and approximately 65° F. to 68° F. (18° C. to 20° C.) during the night. Greenhouse light levels of 2,500 footcandles to 6,000 footcandles were maintained during the day.

Botanical classification: *Argyranthemum frutescens* cultivar Bonmadmerlo.

Parentage:

Female parent.—Proprietary *Argyranthemum frutescens* breeding selection designated 04-133, not patented.

Male parent.—Proprietary *Argyranthemum frutescens* breeding selection designated 04-121, not patented.

Propagation:

Type cutting.—Terminal stem.

Time to initiate roots.—Approximately 6 to 8 days.

Time to produce a rooted cutting.—Approximately 21 to 28 days.

Root description.—Fibrous.

Rooting habit.—Freely branching.

Plant description:

Crop time.—Approximately 6 to 9 weeks from a rooted cutting to finish in a 10 cm pot.

Growth habit and general appearance.—Moderately vigorous, compact, and upright-mounded.

Size.—Height from soil level to top of plant plane: Approximately 22.8 cm. Width: Approximately 18.0 cm.

Branching habit.—Freely branching. Quantity of lateral branches per plant: Approximately 6.

Branch.—Strength: Strong. Length of main stem to base of peduncle: Approximately 15.9 cm. Diameter at central internode: Approximately 4.1 mm. Length of central internode: Approximately 6.3 mm. Texture: Glabrous. Color of young stem: Glaucous, 144B with spots of 187A. Color of mature stem: Glaucous, 144B with spots of 187A and a woody base of N199B.

Foliage description:

General description.—Quantity of leaves per main stem: Approximately 22. Fragrance: Pungent. Form: Simple. Arrangement: Alternate.

Leaves.—Aspect: Acute angle to stem; leaf blade transitions to an obtuse angle to stem with age. Shape: Obovate. Margin: Parted. Apex: Acute, cuspidate. Base: Attenuate, decurrent. Venation pattern: Pinnate. Length of mature leaf: Approximately 6.7 cm. Width of mature leaf: Approximately 3.2 cm. Texture of upper surface: Glabrous. Texture of lower surface: Glabrous. Color of upper surface of young foliage: Glaucous, 137A with venation of 137C. Color of lower surface of young foliage: 137C with venation of 137D. Color of upper surface of mature foliage: Glaucous, 137A with venation of 137C. Color of lower surface of mature foliage: 137C with venation of 137D.

Flowering description:

Flowering habit.—'Bonmadmerlo' is freely flowering under outdoor growing conditions with substantially continuous blooming from spring through autumn and year-round in greenhouse environment.

Lastingness of individual inflorescence on the plant.—Approximately 7 to 8 days.

Inflorescence description:

General description.—Type: Double, solitary, composite. Persistent. Shape: Round. Aspect: Facing upward and outward. Arrangement: Terminal, positioned above the foliage. Disc and ray florets develop acropetally on a capitulum. Quantity per plant: Approximately 10. Diameter: Approximately 3.3 cm. Fragrance: Pungent.

Peduncle.—Strength: Strong, pliable. Aspect: Erect. Length: Approximately 7.7 cm. Diameter: Approximately 2.0 mm. Texture: Glabrous. Color: Glaucous, 144A.

Bud.—Rate of opening: Generally takes 6 to 7 days for bud to progress from first color to fully open flower. Quantity per plant: Approximately 6.

Bud just before opening.—Shape: Ovoid. Diameter: Approximately 7.0 mm. Color: 155C with an overlay of 61C.

Ray florets.—Quantity per inflorescence: Approximately Greater than 100. Arrangement: Imbricate in multiple whorls. Aspect: Slightly convex, turning downward with age. Shape: Ligulate. Margin: Entire. Apex: Emarginate with 3 to 5 tips. Base: Attenuate, fused to form a tube. Length of outermost: Approximately 1.4 cm. Width of outermost: Approximately 3.7 mm. Length of innermost: Approximately 7.0 mm. Width of innermost: Approximately 2.0 mm. Texture of upper surface: Glabrous. Texture of lower surface: Glabrous, ribbed. Color of upper surface when first open: Darker than 61A. Color of lower surface when first and fully open: 155D with an overlay of 61B. Color of upper surface when fully open: Closest to 61A.

Disc florets.—Quantity per inflorescence: Approximately 43. Arrangement: Massed in center of inflorescence. Shape: Tubular with 5 lobes. Margin: Entire. Apex: Acute. Base: Truncate. Length: Approximately 7.0 mm. Diameter at apex: Approximately 2.0 mm. Diameter at base: Approximately 1.0 mm. Texture: Sparsely glandular pubescent. Gland

color: Colorless, transparent. Color when fully open: Inner surface closest to 61A, outer surface 155D with an overlay of 61B; both transition to a base of 144D.

Disc.—Diameter: Not clearly defined.

Receptacle.—Shape: Cone. Height: Approximately 3.0 mm. Diameter at base: Approximately 4.0 mm. Color: 145B.

Phyllaries.—Quantity per inflorescence Approximately 18. Arrangement: Imbricate, in several whorls. Shape: Lanceolate. Margin: Entire. Apex: Acute. Base: Truncate. Length: Approximately 4.8 mm. Width: Approximately 3.0 mm. Texture of upper and lower surfaces: Glabrous, papery along edges. Color of upper surface: 143A in center with margins of transparent N199B. Color of lower surface: Closest to 143B in center with margins of transparent N199B.

Reproductive organs.—Androecium: Present on disc florets only. Stamen quantity: 5 per floret. Stamen length: Approximately 3.0 mm. Anther shape: Linear. Anther length: Approximately 1.0 mm. Anther color: 21C. Pollen amount: None observed. Gynoecium: Present on ray and disc florets. Pistil quantity: 1 per floret. Pistil length: Approximately 5.0 mm. Stigma shape: Two-parted. Stigma length: Less than 1 mm. Stigma color: 4A. Style length: Approximately 3.0 mm. Style color: 4D, transparent. Ovary length: Approximately 2.0 mm. Ovary color: Colorless, transparent.

Seed and fruit production: Neither seed nor fruit production has been observed.

Disease and pest resistance: Resistance to pathogens and pests common to *Argyranthemum* has not been observed.

What is claimed is:

1. A new and distinct cultivar of *Argyranthemum* plant named 'Bonmadmerlo', substantially as herein shown and described.

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FIG. 1

FIG. 2