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(12) **United States Plant Patent**
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- (54) **ARGYRANTHEMUM PLANT NAMED 'BONMADRE'**
- (50) Latin Name: *Argyranthemum×hybrida*
Varietal Denomination: Bonmadre
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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.
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- (52) **U.S. Cl.** **Plt./406**
- (58) **Field of Classification Search** Plt./406
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Argyranthemum* plant named 'Bonmadre', characterized by its single-type deep red-purple colored flowers, medium green-colored foliage, and moderately vigorous, compact and upright-mounded growth habit, is disclosed.

1 Drawing Sheet**1**

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

Variety denomination: 'Bonmadre'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Argyranthemum* plant botanically known as *Argyranthemum×hybrida* and hereinafter referred to by the cultivar name 'Bonmadre'.¹⁰

The new cultivar originated in a controlled breeding program in Yellow Rock, New South Wales, Australia during June 2005. 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-upright growth habit.¹⁵

The new *Argyranthemum* cultivar is the result of cross-pollination. The female (seed) parent of the new cultivar is the proprietary *Argyranthemum×hybrida* breeding selection designated 05-5, not patented, characterized by its single-type dark pink-colored flowers, medium green-colored foliage, and moderately vigorous, upright growth habit. The male (pollen) parent of the new cultivar was a bulk of pollen collected from five proprietary *Argyranthemum×hybrida* breeding selections designated 04-131, 04-133, 05-128, 05-130, and 05-132, not patented, characterized by single and double flower types having colors in dark shades of red and deep pink, medium green-colored foliage, moderately vigorous, and compact, upright growth habits. The new cultivar was discovered and selected as a single flowering plant within the progeny of the above stated cross-pollination during August 2006 in a controlled environment at Yellow Rock, New South Wales, Australia.²⁰

Asexual reproduction of the new cultivar by terminal stem cuttings since August 2006 at 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.²⁵

2**SUMMARY OF THE INVENTION**

The following characteristics of the new cultivar have been repeatedly observed and can be used to distinguish 'Bonmadre' as a new and distinct cultivar of *Argyranthemum* plant:⁵

1. Single-type deep red-purple colored flowers;
2. Medium green-colored foliage; and
3. Moderately vigorous, compact and upright-mounded growth habit.

Plants of the new cultivar differ from plants of the female parent primarily in flower color. Plants of the new cultivar differ from plants of the male parent primarily in flower color, flower size, and floriferousness. Plants of the new cultivar have a deep red flower color that is distinctly different from any male parent. In addition, the new cultivar has larger flowers and more flowers per plant than any male parent.¹⁰

Of the many commercially available *Argyranthemum* cultivars, the most similar in comparison to the new cultivar is Daisy Crazy Meteor Red Star 'Supa742', U.S. Plant Pat. No. 18,435. However, in side by side comparisons, plants of the new cultivar differ from plants of 'Supa742' in at least the following characteristics:¹⁵

1. Plants of the new cultivar are earlier to flower than plants of 'Supa742'. Plants of 'Bonmadre' were at first flower at least one week prior to plants of 'Supa742'.
2. Plants of the new cultivar have smaller leaves, as measured by leaf length and width, than plants of 'Supa742'. In a comparison trial, plants of 'Supa742' had an average leaf length of 8.8 cm and average leaf width of 5.8 cm compared with an average leaf length of 6.4 cm and average leaf width of 4.3 cm for plants of 'Bonmadre'.²⁰

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 'Bonmadre'. The plants were grown in 4.5 inch pots for 7 weeks in a greenhouse at West Chicago, Ill.²⁵

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

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

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 in May 2009 under natural light conditions in West Chicago, Ill.

The following descriptions and measurements describe plants produced from cuttings 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 7 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. Measurements and numerical values represent averages of typical plants.

Botanical classification: *Argyranthemum×hybrida* cultivar Bonmadre.

Parentage:

Female parent.—Proprietary *Argyranthemum×hybrida* breeding selection designated 05-5, not patented.

Male parent.—Bulk of pollen collected from five proprietary *Argyranthemum ×hybrida* breeding selections designated 04-131, 04-133, 05-128, 05-130, and 05-132, 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 45 28 days.

Root description.—Fibrous.

Rooting habit.—Freely branching.

Plant description:

Commercial crop time.—Approximately 6 to 9 weeks 50 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: 55 Approximately 20.5 cm. Width: Approximately 20.8 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 13.7 cm. Diameter at central internode: Approximately 3.0 mm. Length of central internode: Approximately 8.3 mm. Texture: Glabrous. Color of young stem: Glaucous, 144B. Color of mature stem: Glaucous, 144B with woody 65 base of 199B.

Foliage description:

General description.—Quantity of leaves per main stem: Approximately 15. Fragrance: Slight. Form: Simple. Arrangement: Alternate.

Leaves.—Aspect: Acute angle to stem; leaf blade obtuse angle to stem with age. Shape: Obovate. Margin: Parted. Apex: Acute, cuspidate. Base: Attenuate, decurrent. Venation pattern: Pinnate. Length of mature leaf: Approximately 6.4 cm. Width of mature leaf: Approximately 4.3 cm. Texture of upper surface: Glabrous. Texture of lower surface: Glabrous. Color of upper surface of young and mature foliage: Glaucous, 137A with venation of 146D to indistinguishable. Color of lower surface of young and mature foliage: 137C with venation of 146D to indistinguishable.

Flowering description:

Flowering habit.—'Bonmadre' 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 13 to 14 days.

Inflorescence description:

General description.—Type: 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 13. Diameter: Approximately 3.4 cm. Fragrance: Pungent.

Peduncle.—Strength: Strong, pliable. Aspect: Erect. Length: Approximately 5.5 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 3.

Bud just before opening.—Shape: Ovoid. Diameter: Approximately 7.0 mm. Color: 155C with 61C at apex.

Ray florets.—Quantity per inflorescence: Approximately 21. Arrangement: Imbricate in two whorls. Aspect: Slightly convex, tuning downward with age. Shape: Ligulate. Margin: Entire. Apex: Emarginate with 3 tips. Base: Attenuate, fused to form a tube. Length: Approximately 1.4 cm. Width: Approximately 5.0 mm. Texture of upper surface: Glabrous. Texture of lower surface: Glabrous, ribbed. Color of upper surface when first open: More red than 59A. Color of lower surface when first open: Closest to 71B. Color of upper surface when fully open: Slightly darker than 61A, becoming closer to 71A with development. Color of lower surface when fully open: Closest to 71B, becoming closer to 75A with development.

Disc florets.—Quantity per inflorescence: Approximately 114. Arrangement: Massed in center of inflorescence. Shape: Tubular with 5 lobes. Margin: Entire. Apex: Acute. Base: Truncate. Length: Approximately 6.0 mm. Diameter at apex: Approximately 2.0 mm. Diameter at base: Approximately 1.0 mm. Texture: Glabrous with glandular pubescence on lower half. Gland color: Colorless. Color when fully open: 145D with 6B at lobes.

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Disc.—Diameter: Approximately 1.3 cm. Depth: Approximately 8.0 mm.

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

Phyllaries.—Quantity per inflorescence Approximately 22. Arrangement: Imbricate, in several whorls. Shape: Lanceolate. Margin: Entire. Apex: Acute. Base: Truncate. Length: Approximately 3.5 mm. Width: Approximately 2.5 mm. Texture of upper and lower surfaces: Glabrous, papery along edges. Color of upper surface: 143A in center with transparent margins of N199B. Color of lower surface: Closest to 143C in center with transparent margins of 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:

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13B. Pollen amount: Abundant. Pollen color: 13A. Gynoecium: Present on ray and disc florets. Pistil quantity: 1 per floret. Pistil length: Approximately 6.0 mm. Stigma shape: Two-parted. Stigma length: Less than 1 mm. Stigma color: 13B. Style length: Approximately 4.0 mm. Style color: 145D, transparent. Ovary length: Approximately 2.0 mm. Ovary color: 145D.

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

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

What is claimed is:

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

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FIG. 1



FIG. 2