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[54] CHAMELAUCIUM (WAXFLOWER) PLANT NAMED MADONNA

[58] Field of Search Plt./54.1

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[57] ABSTRACT

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A new and distinct interspecific *Chamelaucium* hybrid cultivar (known commercially as waxflower) distinguished by its strong and erect flowering stems; upright and semi-open growth habit; dense terminal floral display; dark red flower bud color; red purple flower color; and good postharvest longevity.

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3 Drawing Sheets

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The present invention relates to a new and distinct cultivar of *Chamelaucium* (Waxflower), botanically known as an interspecific *Chamelaucium* hybrid, and hereinafter referred to by the cultivar name Madonna.

The new cultivar is a product of a planned and controlled breeding program conducted by the inventors in Coorow, Western Australia, Australia. The new cultivar originated from a deliberate cross by the inventors between two different species of the genus *Chamelaucium*. An unnamed selection of *Chamelaucium megalopetalum* was used as the female or seed parent and the *Chamelaucium uncinatum* cultivar Purple Pride (not patented) was used as the male of pollen parent. Twenty days after the cross-pollination, the immature seed pod was harvested and the developing embryos were aseptically dissected and transferred onto a nutrient agar-based medium for further development. Mature plants developed from these dissected embryos. The cultivar Madonna was discovered and selected by the inventors as a flowering plant within the progeny of the stated cross in a controlled environment in Coorow, Western Australia, Australia.

Asexual propagation of the new cultivar by cuttings taken at Coorow, Western Australia, Australia, and Escondido, Calif., has shown that the nique features of this new *Chamelaucium* plant are stabilized and reproduced true to type in successive generations of asexual propagation.

The following traits have been repeatedly observed and are determined to be the unique characteristics of the new *Chamelaucium*. These characteristics in combination distinguish Madonna as a new and distinct cultivar:

1. Strong and erect flowering stems.
2. Upright and semi-open growth habit.
3. Dense terminal floral display.
4. Dark red flower bud color.
5. Red purple flower color.
6. Good postharvest longevity.

The new *Chamelaucium* differs from its seed parent, the selection of *Chamelaucium megalopetalum*, in the following characteristics:

1. Plants of the new *Chamelaucium* flower faster than plants of the seed parent.
2. The petal shape of plants of the new *Chamelaucium* is round whereas the petal shape of plants of the seed parent is obovate.
3. The flower bud color is darker red on plants of the new *Chamelaucium* than the flower bud color on plants of the seed parent.
4. At maturity, the petal color of the new *Chamelaucium* is red purple whereas the petal color of the seed parent is white.

5. Plants of the new *Chamelaucium* have more flowers per stem and appear more dense and full than plants of the seed parent.

6. Plants of the new *Chamelaucium* have broader flowering stems compared to plants of the seed parent.

The new *Chamelaucium* differs from its pollen parent, the *Chamelaucium uncinatum* cultivar Purple Pride, in the following characteristics:

1. The petal shape of the new *Chamelaucium* is round whereas the petal shape of Purple Pride is obovate.

2. The petal color of the new *Chamelaucium* when opening is white compared to the purple petal color of Purple Pride. At maturity, the petal color of the new *Chamelaucium* is a lighter red purple than the petal color of Purple Pride. The flower color development rate is slower for plants of the new *Chamelaucium* compared to plants of the pollen parent. The floral tube color is also different, as the floral tube of the new *Chamelaucium* is yellow green and the floral tube of Purple Pride is red brown.

3. Plants of the new *Chamelaucium* have more flowers per stem and appear more dense and full than plants of Purple Pride.

The new *Chamelaucium* can be compared to the *Chamelaucium* cultivar Revelation, disclosed in U.S. Pat. No. P.P. 8,791. Plants of Madonna differ from plants of Revelation in the following characteristics:

1. Plants of the new *Chamelaucium* have shorter internodes, shorter leaves, smaller flower buds and longer peduncles than plants of Revelation.

2. The petal color of the new *Chamelaucium* at maturity is red purple compared to the light violet petal color of Revelation. The flower color development rate is slower for plants of the new *Chamelaucium* compared to plants of Revelation.

3. The floral tube color at the distal end is yellow green on plants of the new *Chamelaucium* and the floral tube color at the distal end is purple brown on plants of Revelation.

4. Plants of the new *Chamelaucium* have smooth floral tubes compared to the prominently fluted floral tubes of plants of Revelation.

A detailed comparison of the new *Chamelaucium*, its parents and Revelation plants appears in Chart A at the end of the specification.

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

The accompanying colored photographs show typical specimens of the vegetative growth and flowers of the new *Chamelaucium* plant, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type.

The first photograph comprises a side perspective view of typical flowering stems of the new *Chamelaucium* plant grown in Escondido, Calif. This photograph shows the upright and semi-open growth habit of flowering stems of the new *Chamelaucium*.

The second and third photographs comprise close-up views of the new *Chamelaucium*'s flowers showing the cultivar's unique petal colors that change with the development of the flower.

In the second photograph, flower buds are dark red; and as the flowers open, the petal color is white with a slight pale pink blush.

In the third photograph, flowers shown are mature and petal color is increasingly becoming red purple in color.

The following observations, measurements, values, and comparisons describe plants grown in Escondido, Calif. Values representing size of plants, flowers and foliage are averages of plants produced under standard commercial cultural practices. Color references are made to The Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used.

Classification:

Botanical.—An interspecific *Chamelaucium* hybrid, *Chamelaucium megalopetalum* × *Chamelaucium uncinatum* cultivar Madonna.

Commercial.—Hybrid waxflower.

Parentage:

Female or seed parent.—Selection of *Chamelaucium megalopetalum* (not patented).

Male or pollen parent.—*Chamelaucium uncinatum* cultivar Purple Pride (not patented).

Plant description:

Form.—Erect, branched woody shrub.

Growth habit.—vigorous, rigid and upright. Semi-open growth habit.

Flowering stem length.—1.5 to 2 m.

Foliage description.—Numerous leaves on one- and two-year-old wood; opposite arrangement; sessile; and aromatic. Internode length: 10 mm. Leaf size: Length: 14 mm. Width: 1.5 mm. Shape: Narrowly lanceolate. Texture: Glabrous. Margin: Entire. Aspect: Flat and thick. Color: Dark green sometimes with red tint.

Flower description:

Flowering season.—Flowers develop and open throughout the spring.

Flower longevity.—Flower are long-lasting on the plant and after cutting, flowers and calyx persistent.

flowering habit.—Flowers develop on thin first-year stems from upper axils. Numerous flowers arranged in terminal clusters, broad and dense floral display.

Flower shape.—Rounded outline, flattened cup-shaped floral tube with rounded, slightly cupped, orbicular petals.

Flower diameter.—1.8 cm.

Flower bud.—Form: Rounded, covered with thin deciduous bracteoles. Diameter: 6 mm prior to petal opening. Color: With operculum: Dark red (46A). Without operculum: White (155D) to pale purple. Bud tube: Green (143C).

Petals.—Quantity: Five. Shape: Rounded, slightly cupped and orbicular. Diameter: 9 mm. Texture: Waxy. Calyx: Five calyx lobes arranged alternately between petals. Color: When opening: White (155D) with pale pink blush at times. Developing flowers: White (155D) background with pink (62A) areas at petal distal ends and venation. Mature flowers: As flowers age, petals become more uniformly red purple (59D). Flower nectary, immature: Yellow green (154A). Flower nectary, mature: Red brown (178A). Calyx lobe, mature: Pale pink/purple. Floral tube: Fluting: Slight to absent. Outfling: Flared. Diameter: 8 mm. Color: Midpoint: Yellow green. Distal end: Yellow green. Peduncles: Length: 13 to 14 mm. Aspect: Upright and erect. Color: Green. Fragrance: Aromatic when crushed.

Reproductive organs.—Stamens: Quantity: Ten fertile stamens with ten infertile stamenoids arranged alternately between stamens. Staminoidal outline: Narrow to medium, triangular. Stamenoidal collar color, mature: Very pale pink to purple. Anthers, mature: Width: 0.7 mm. Color: Brown (200D). Filaments: Length: 2.5 mm. Color: White. Pollen: Color: Green brown. Texture: Waxy and sticky. Pistils: Quantity: One. Style: Length: 7 mm. Color: Immature: White (155D). Mature: Light violet (84B). Stigma: Color, mature: Yellow (17B). Texture: Bearded and pubescent.

Fruit.—Shape: Hemispherical. Form: Three-celled capsule formed by the hardened base of the persistent calyx.

Disease resistance: No resistance or susceptibility to plant pathogens has been observed.

CHART A

CHARACTERISTIC	MA-DONNA	PURPLE PRIDE, pollen parent	<i>Chamelaucium megalopetalum</i> selection, seed parent	REVELATION
FLOWER BUD COLOR, WITH OPERCULUM	Dark red 46A	Dark red 46A	Red 46B	Dark red 46A
BUD COLOR, WITHOUT OPERCULUM	White 155D	Pale purple 80A	White 155B	White 155D
BUD TUBE COLOR	Green 143C	Green 146A	Light green 145A	Green to violet 144A to 77B
PETAL SHAPE, AFTER OPENING	Round	Obovate	Obovate	Round
PETAL COLOR, WHEN OPENING	White 155D	Purple 78A	White 155B	White 155C
PETAL COLOR DEVELOPMENT RATE	Slow	Medium	Slow	Fast
PETAL COLOR, MATURE	Red purple 59D	Red purple 59B/59C	White 155D	Light violet 84B
FLOWER NECTARY COLOR, IMMATURE	Yellow green 154A	Light brown 177D	Green 148A	Green 146D
FLOWER NECTARY COLOR, MATURE	Red 178A	Dark purple 187A	Green 146B/146C	Green 147A
STAMINOIDAL OUTLINE	Narrow/medium,	Broad, triangular	Medium, triangular	Narrow, triangular

CHART A-continued

CHARACTERISTIC	MA-DONNA	PURPLE PRIDE, pollen parent	<i>Chamelaucium megapetalum</i> selection, seed parent	REVELATION
STAMINOIDAL COLLAR COLOR, MATURE	triangular Very pale pink/purple	Pale pink/purple	White	Very pale pink/purple
CALYX LOBE COLOR, MATURE	Pale pink/purple	Pale pink/purple	White	Pale purple
STYLE COLOR, MATURE	Light violet 84B	Purple	White	Light violet 84B
FLORAL TUBE FLUTING, IMMATURE	Slight/absent	Slight	Slight	Prominent
FLORAL TUBE OUTLINE	Flared	Flared	Conical	Flared
FLORAL TUBE	8 mm	7 mm	6.8 mm	6.8 mm

CHART A-continued

CHARACTERISTIC	MA-DONNA	PURPLE PRIDE, pollen parent	<i>Chamelaucium megapetalum</i> selection, seed parent	REVELATION
DIAMETER				
FLORAL TUBE COLOR, MIDPOINT	Yellow green	Red/brown	Green	Green
FLORAL TUBE COLOR, DISTAL END	Yellow green	Red/brown	Green	Purple brown
FLOWERING STEM SHAPE	Broad	Broad	Narrow	Broad

It is claimed:

1. A new and distinct *Chamelaucium* interspecific hybrid plant named Madonna, as illustrated and described.

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