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(54) DIANTHUS PLANT NAMED 'DCAMC10-0'

(50) Latin Name: *Dianthus hybrida*Varietal Denomination: **DCAMC10-0**

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A01H 5/02 (2018.01) A01H 6/30 (2018.01) (52) U.S. Cl. USPC: Plt./2.77

(58) Field of Classification Search

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(57) ABSTRACT

A new and distinct *Dianthus* cultivar named 'DCAMC10-0' is disclosed, characterized by flowers that are white at first opening, turning pink within 24 hours then to a strong purplish red. Plants are floriferous, flower continuously and hardy to USDA Zone 3. The new variety is a *Dianthus*, typically produced as a garden or container plant.

2 Drawing Sheets

1

Latin name of the genus and species: *Dianthus hybrida*. Variety denomination: 'DCAMC10-0'.

BACKGROUND OF THE INVENTION

The new cultivar is a product of chance discovery. The new variety originated as a spontaneous whole plant mutation discovered among a commercial planting of the unpatented parent *Dianthus* 'Magical Cherry'. 'DCAMC10-0' was discovered and selected by the inventor, Steve Jones, 10 at a commercial greenhouse in Santa Paula, Calif. in April 2016.

Asexual reproduction of the new cultivar 'DCAMC10-0' was first performed in Santa Paula, Calif. at a research greenhouse by vegetative terminal cuttings in May 2016. 15 'DCAMC10-0' has since produced several generations and has shown that the unique features of this cultivar are stable and reproduced true to type.

SUMMARY OF THE INVENTION

The cultivar 'DCAMC10-0' has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, day length, and light intensity, without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'DCAMC10-0'. These characteristics in combination distinguish 'DCAMC10-0' as a new and distinct *Dianthus* cultivar:

- 1. Flowers are white at first opening, within 24 hours turn to pink, then to a deep purplish red.
- 2. Floriferous plants.
- 3. Suitability for both garden and container uses.
- 4. Continuous flowering from Spring through Fall.
- 5. Hardy to USDA Zone 3.

Plants of the new cultivar 'DCAMC10-0' are comparable to parent 'Magical Cherry' in most horticultural characteristics. However, the new variety 'DCAMC10-0' differs in 40 the following:

2

- 1. The new variety produces flowers that emerge white, turn pink then deep red. The seed parent produces flowers which are Red-Purple with a white base that do not exhibit this kind of color change.
- 2. Plants of the new variety are more floriferous than plants of the seed parent.

COMMERCIAL COMPARISON

Plants of the new cultivar 'DCAMC10-0' are comparable to the commercial *Dianthus* variety 'DCACR08-0', U.S. Plant Pat. No. 30,026. The two *Dianthus* varieties are similar in most horticultural characteristics; however, the new variety 'DCAMC10-0' differs in the following:

1. The new variety produces flowers that emerge white, turn pink then deep red. This comparator produces flowers which are Red-Purple with a white base that do not exhibit this kind of color change.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photograph in FIG. 1 illustrates in full color a typical plant of 'DCAMC10-0' grown outdoors in Santa Paula, Calif. This plant is approximately 20 weeks old, shown in a 1 gallon pot.

FIG. 2 illustrates a close up view of the flowers.

The photograph was taken using conventional techniques and although colors may appear different from actual colors due to light reflectance it is as accurate as possible by conventional photographic techniques.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Colour Chart, 2007, except where general terms of ordinary dictionary significance are used. The following observations and measurements describe 'DCAMC10-0' plants in a commercial greenhouse in Santa Paula, Calif. Temperatures ranged from 10° C. to 29° C. night and day. No artificial light, photoperiodic treatments or chemical treatments were given to the plants. Natural light

3

conditions were approximately 2500 to 4000 fc of light. Measurements and numerical values represent averages of typical plant types.

Botanical classification: *Dianthus hybrida* 'DCAMC10-0'.

PROPAGATION

Time to initiate roots: About 10 days at approximately 24° C.

Time to produce a rooted cutting: About 18 days at 24° C. 10 Root description: Fibrous roots, approximately 1 to 3 mm in diameter, colored near Orange-White 159C.

PLANT

Age of plant described: Approximately 20 weeks from rooted cutting.

Pot size: 1 gallon.

Plant type: Compact upright perennial.

Plant habit: Upright growing stems emerge basally.

Plant spread: Approximately 25 cm.

Height: Approximately 25 cm to top of flowering plane. Approximately 19 cm to top of foliar plane.

Length plant stem: Average 11 cm.

Diameter of plant stem: Approximately 3.0 mm.

Quantity stems: Approximately 30.

Stem:

Color.—Near RHS Yellow-Green 138A.

Texture.—Smooth.

Internode length: Average 3.0 cm.

FOLIAGE

Leaf:

Arrangement.—Opposite (in pairs).

Quantity.—Approximately 10-12 fully expanded per stem. Average range of 10-12 immature leaves per stem.

Average length.—4.0-6.5 cm.

Average width.—5-7 mm.

Shape of blade.—Linear.

Apex.—Acute.

Base.—Clasping.

Attachment.—Sessile.

Margin.—Entire.

Texture of top surface.—Smooth.

Texture of bottom surface.—Smooth.

Pubescence.—None.

Color.—Young foliage upper side: Near RHS Green 138A. Young foliage under side: Near RHS Green 50 138A. Mature foliage upper side: Near RHS Green 139A. Mature foliage under side: Near RHS Green 137A.

Venation.—Type: Linear with a prominent mid vein.

Venation color upper side: Indistinguishable from 55 foliage. Venation color under side: Indistinguishable from foliage.

FLOWER

Natural flowering season: Perpetual flowering.

Inflorescence type and habit: Umbel of 1 to 3 flowers.

Flower longevity on plant: 2-3 weeks.

Quantity of flowers: Approximately 40 flowers on a 20 week old plant.

Flowers persistent or self-cleaning: Persistent.

Fragrance: Strong sweet scent.

Inflorescence size:

Diameter.—Approximately 6.0 cm.

Height.—Approximately 3.5 cm.

5 Individual flower size:

Diameter.—Approximately 3.5-4.0 cm.

Length.—Approximately 3.0 cm.

Petals:

Petal arrangement.—Whorled, multiple whorl.

Shape.—Spatulate, with an elongated narrow base and orbicular distal section.

Base.—Attenuate.

Margin.—Serrated.

Apex.—Sharply serrated or notched.

Length.—2.0-2.5 cm.

Width.—Approximately 1.5 cm.

Petal quantity.—Average range 20 to 25.

Texture.—Smooth all surfaces.

Aspect.—Flat to slightly undulating.

Color:

20

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When opening.—Upper surface: Near RHS White 155D. With some maturity, marginal Red-Purple 71D flush. Base near White N155A. Lower surface: Near RHS White 155D. With some maturity, marginal Red-Purple 71D flush. Base near White N155A.

Fully opened.—Upper surface: Near RHS Red-Purple 71C. Base near White N155A. Lower surface: Near RHS Red-Purple 71C. Base near White N155A.

Fading.—Upper surface: Near Red-Purple 71D. Base near White N155A. Lower surface: Near Red-Purple N74D. Base near White N155A.

5 Tube:

General description: Tube consists of the elongated, unfused base of the petals. Tube shape caused by a fused calyx.

Length.—1.5 cm.

Width.—0.7 cm.

Texture.—Smooth.

Color:

Fully opened.—Inner surface: Near RHS Green 138C. Outer surface: Near RHS Green 138A.

Bud:

Shape.—Elongated cylinder.

Length.—Average 1.0 cm.

Diameter.—Average 0.5 cm.

Color.—Near RHS Green 138B.

Sepals:

Quantity.—5.

Arrangement.—Fused tube.

Shape.—Cylindric.

Length.—1.5 cm.

 \widetilde{Width} .—0.4 cm.

Margin.—Entire.

Apex.—Acute.

Texture.—Smooth upper and lower surfaces.

Color.—Near RHS Green 138A.

Bracteoles:

Shape.—Strap shaped.

Quantity per flower.—2.

Length.—Approximately 0.5 cm.

Width.—Approximately 1.0 mm.

Margin.—Entire.

Texture.—Smooth.

Color.—Near RHS Green 139A.

6

10

Peduncle:

Length.—2.5 cm.
Diameter.—2.0 mm.

Color.—Near RHS Green 139A.

Orientation.—Upright.
Strength.—Flexible.
Texture.—Smooth.

Pedicel:

Length.—Average 0.5-1.0 cm.

Diameter.—1 mm.

Color.—Near RHS Greyed-Green 139B.

Orientation.—Upright. Strength.—Flexible, elastic.

REPRODUCTIVE ORGANS

Stamens:

Number.—Most commonly 6.

Filament length.—Approximately 1 cm.

Anthers:

Shape.—Oblong.

Length.—Approximately 0.2 cm.

Color.—Near RHS Greyed-Yellowed 160C.

Pollen.—Not observed.

Pistil:

Number.—3-4.

Length.—Approximately 1.8 cm.

Style.—Length: Approximately 1.5 cm. Color: Near RHS White N155B.

Stigma:

Shape.—Linear, arching.

Color.—Near RHS White N155B.

Ovary shape.—Oblong.

Ovary diameter.—0.5 cm.

Ovary length.—0.8 cm.

Ovary color.—Near RHS Green 139D.

OTHER CHARACTERISTICS

Seeds and fruits: Not observed to date.

Disease/pest resistance: Neither resistance nor susceptibility to the normal diseases and pests of *Dianthus* has been observed. Typical diseases of *Dianthus* include: *Alternaria dianthicola*, *Botrytis cinerea*, *Erwinia chrysanthemi*, *Pseudomonas caryophylli*, *Fusarium graminearum*, *Fusarium avenaceum*, *Fusarium culmorum* and *Rhizoctonia solani*, Typical pests include; various species of *Thysanopthera*, various *Aphis* species, and various species of *Tetranychus*.

Temperature tolerance: USDA zones 3 through 10 tolerant. What is claimed is:

1. A new and distinct cultivar of *Dianthus* plant named 'DCAMC10-0' as herein illustrated and described.

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FIG. 1



FIG. 2