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Arts

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(54) **DIANTHUS PLANT NAMED ‘DDTCC20-0’**

(56) **References Cited**

(50) Latin Name: ***Dianthus hybrid***
Varietal Denomination: **DDTCC20-0**

PUBLICATIONS

(71) Applicant: **Agriom Trade BV**, de Kwakel (NL)

Dianthus-Hydrangea-Lavender-8-24-20.PDF (retrieved from the Internet on Mar. 16, 2021)(1 page total).*
www.germaniaseed.com (Gulley Greenhouse, Inc. Poppers & Super Popper Perennials Speciality Herbs and Vegetative Annuals) (3 pages total).*

(72) Inventor: **Niels Arts**, Aalsmeer (NL)

(73) Assignee: **Agriom Trade B.V.**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

* cited by examiner

Primary Examiner — Susan McCormick Ewoldt
(74) *Attorney, Agent, or Firm* — Cassandra Bright

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(57) **ABSTRACT**

(51) **Int. Cl.**
A01H 5/02 (2018.01)
A01H 6/30 (2018.01)

A new and distinct variety of *Dianthus* plant named ‘DDTCC20-0’ is disclosed, characterized by a unique flower color pattern of bright pink with a deep burgundy hallow on the upper petal and distinct light pink margin on the petals. Plants bloom for an extended period into the Summer and are hardy to USDA Zone 5. The new variety is a *Dianthus*, typically produced as a garden or container plant.

(52) **U.S. Cl.**
USPC **Plt./273**

(58) **Field of Classification Search**
USPC **Plt./272, 273**
See application file for complete search history.

2 Drawing Sheets

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2

Latin name of the genus and species: *Dianthus hybrid*.
Variety denomination: ‘DDTCC20-0’.

BACKGROUND OF THE INVENTION

The new cultivar is a product of a planned breeding program. The new variety originated as the result of the crossing of the female parent, an unpatented, proprietary *Dianthus* referred to as ‘13-307-001’ and the pollen parent, a different unpatented proprietary *Dianthus* referred to as ‘13-130-002’. The crossing was made during July 2017 at a commercial greenhouse in Santa Paula, Calif. ‘DDTCC20-0’ was discovered and selected at a commercial greenhouse in Santa Paula, Calif., in December of 2018.

Asexual reproduction of the new cultivar ‘DDTCC20-0’ was first performed in Santa Paula, Calif. at a research greenhouse by vegetative terminal cuttings in January of 2019. ‘DDTCC20-0’ 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 ‘DDTCC20-0’ 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 ‘DDTCC20-0’. These characteristics in combination distinguish ‘DDTCC20-0’ as a new and distinct *Dianthus* cultivar:

1. Unique flower color pattern of bright pink with a deep burgundy halo on the upper petal and distinct light pink margin on the petals.
2. Early flowering.
- 5 3. Suitability for both garden and container uses.
4. Extended bloom time into Summer and Fall months.
5. Hardy to USDA Zone 5.

PARENTAL COMPARISON

10 Plants of the new cultivar ‘DDTCC20-0’ are comparable to the seed parent in most horticultural characteristics; however, the new variety ‘DDTCC20-0’ differs in the following:

- 15 1. Plants of the new variety are more compact than plants of the seed parent.
2. Plants of the new variety have a halo on the petal not found on the parent variety.

20 Plants of the new cultivar ‘DDTCC20-0’ are comparable to the pollen parent in most horticultural characteristics; however, the new variety ‘DDTCC20-0’ differs in the following:

1. The new variety produces multi-whorled flowers, the pollen parent produces single flowers.

COMMERCIAL COMPARISON

30 Plants of the new cultivar ‘DDTCC20-0’ are comparable to the commercial *Dianthus* variety ‘DDTHP02-0’, U.S. Plant Pat. No. 28,102. The two *Dianthus* varieties are similar in most horticultural characteristics; however, the new variety ‘DDTCC20-0’ differs in the following:

1. The new variety produces multi colored flowers while this comparator has solid pink flowers.
2. Foliage of the new variety is longer and narrower than foliage of this comparator.
3. Plants of the new variety are on average 2.5 cm taller than plants of this comparator.

Plants of the new cultivar 'DDTCC20-0' 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 'DDTCC20-0' differs in the following:

1. The new variety produces multi colored flowers while this comparator has solid dark pink flowers.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photograph in FIG. 1 illustrates in full color typical plants of 'DDTCC20-0' in a greenhouse in Santa Paula, Calif. This plant are approximately 12 weeks old, grown in 6-inch pots.

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

The photographs were 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 'DDTCC20-0' 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 conditions were approximately 2500 to 4000 fc of light. Measurements and numerical values represent averages of typical plant types.

Botanical classification: *Dianthus* hybrid 'DDTCC20-0'.

PROPAGATION

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

Time to produce a rooted cutting: About 18 days at 24° C.

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: 6 inches.

Plant type: Compact upright flowering perennial.

Plant habit: Upright growing stems emerge basally.

Plant spread: Approximately 25 cm.

Height: Approximately 23 cm to top of flowering plane.

Approximately 18 cm to top of foliar plane.

Length plant stem: Average range 6 to 9 cm.

Diameter of plant stem: Approximately 3 mm.

Quantity stems: Approximately 25.

Stem:

Color.—Near RHS Green 138B.

Texture.—Smooth.

Internode length: 2.2 to 3.2 cm.

FOLIAGE

Leaf:

Arrangement.—Opposite (in pairs).

Quantity.—Approximately 8 to 12 fully expanded per stem.

Average length.—6.8 cm.

Average width.—4 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 138B. Young foliage under side: Near RHS Green 138B. Mature foliage upper side: Near RHS Green 138A. Mature foliage under side: Near RHS Green 138A.

Venation.—Type: Linear. Venation color upper side: Indistinguishable from foliage. Venation color under side: Indistinguishable from foliage.

FLOWER

Natural flowering season: Continuous flowering from Spring until Fall.

Inflorescence type and habit: Umbel of 2 to 4 flowers.

Flower longevity on plant: 2-3 weeks.

Quantity of flowers: Approximately 25 to 35 flowers and buds on a 12-week old plant.

Flowers persistent or self-cleaning: Persistent.

Fragrance: Very mild sweet, clove-like scent.

Inflorescence (umbel) size:

Diameter.—Approximately 6.0 cm.

Height.—Approximately 5.0 cm.

Individual flower size:

Diameter.—Approximately 3.2 cm.

Length.—Approximately 2.8 cm.

Petals:

Petal arrangement.—Multiple whorl.

Shape.—Spatulate.

Base.—Attenuate.

Margin.—Serrated.

Apex.—Very shallowly crenate.

Length.—1.8 cm.

Width.—1.3 cm.

Petal quantity.—Average range 18 to 22.

Texture.—Smooth all surfaces.

Aspect.—Nearly flat.

Color:

When opening.—Upper surface: Lower section near Red-Purple N74B. Upper section N74C with 2 distinct, ragged-edged halos colored near Red-Purple 59A. Well defined margin Red-Purple 65D. Base Yellow 2D. Lower surface: Near RHS Red-Purple N74C, flushed Red-Purple 59C. Base Yellow 2C.

Fully opened.—Upper surface: Lower section near Red-Purple N74A. Upper section N74C with 2 distinct, ragged-edged halos colored near Red-Purple 59A. Well defined margin Red-Purple 65D. Base

Yellow 2D. Lower surface: Near RHS Red-Purple N74C, flushed Red-Purple 59C. Base Yellow 2C.

Tube:

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

Length.—1.6 cm.

Width.—0.6 cm.

Texture.—Smooth.

Color:

Fully opened.—Inner surface: Near RHS Green N138D. Outer surface: Near RHS Green N138D.

Bud:

Shape.—Elongated cylinder.

Length.—Average 1.7 cm.

Diameter.—Average 0.7 cm.

Color.—Appearing petals colored near Red-Purple 69D.

Sepals:

Quantity.—5.

Arrangement.—Fused tube.

Shape.—Cylindric.

Length.—1.5 cm.

Width.—0.3 cm.

Margin.—Entire.

Apex.—Acute.

Texture.—Smooth upper and lower surfaces.

Color.—Near RHS Green N138D.

Bracteoles:

Shape.—Narrow Deltoid.

Quantity per flower.—5-7.

Length.—Approximately 5 mm.

Width.—Approximately 3 mm.

Margin.—Entire.

Texture.—Smooth.

Color.—Near RHS Green N138D.

Peduncle:

Length.—Average 3.3 cm.

Diameter.—2.0 mm.

Color.—Near RHS Green 138B.

Orientation.—Upright.

Strength.—Moderate.

Texture.—Smooth.

REPRODUCTIVE ORGANS

Stamens:

Number.—6.

Filament.—Length: 0.8 cm. Color: RHS White N155C.

Anthers.—Shape: Oblong. Length: 2 mm. Color: RHS Green-Yellow 1D. Pollen: Not observed.

Pistil:

Number.—1.

Length.—Approximately 2.7 cm.

Style.—Number: 2. Length: Approximately 1.7 cm. Color: Near RHS White N155D.

Stigma.—Length: about 0.5 mm. Shape: Linear, arching. Color: Near RHS White 155A.

Ovary.—Shape: Oblong. Diameter: 0.4 cm. Length: 0.7 cm. Color: Near RHS Yellow-Green N144D.

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 *Thysanoptera*, various *Aphis* species, and various species of *Tetranychus*.

Temperature tolerance: USDA zones 5 through 10 tolerant. What is claimed is:

1. A new and distinct cultivar of *Dianthus* plant named 'DDTCC20-0' as herein illustrated and described.

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FIG. 1



FIG. 2