



US00PP33419P3

(12) **United States Plant Patent**
Klemm et al.

(10) **Patent No.:** **US PP33,419 P3**

(45) **Date of Patent:** **Aug. 31, 2021**

(54) **DIANTHUS PLANT NAMED ‘KLEDG20468’**

Related U.S. Application Data

(50) Latin Name: ***Dianthus L.***
Varietal Denomination: **KLEDG20468**

(60) Provisional application No. 62/973,972, filed on Nov. 4, 2019.

(71) Applicant: **Klemm+Sohn GmbH & Co. KG,**
Stuttgart (DE)

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

(72) Inventors: **Nils Klemm,** Stuttgart (DE); **Lena Thiede,** Bempflingen (DE)

(52) **U.S. Cl.**
USPC **Plt./273**
CPC **A01H 6/305** (2018.05)

(73) Assignee: **Klemm+Sohn GmbH & Co. KG,**
Stuttgart (DE)

(58) **Field of Classification Search**
USPC **Plt./273**
CPC **A01H 6/305**
See application file for complete search history.

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

Primary Examiner — Anne Marie Grunberg
(74) *Attorney, Agent, or Firm* — Weatherly IP Solutions, LLC; Barbara Campbell

(21) Appl. No.: **17/083,958**

(22) Filed: **Oct. 29, 2020**

(57) **ABSTRACT**

A new *Dianthus* plant designated ‘KLEDG20468’ particularly distinguished by double purple-red flowers with pink borders and very early flowering, is disclosed.

(65) **Prior Publication Data**

US 2021/0136977 P1 May 6, 2021

1 Drawing Sheet

1

2

Genus and species: *Dianthus L.*
Variety denomination: ‘KLEDG20468’.

May 2019 and is of a whole plant of ‘KLEDG20468’ showing the foliage, buds, and flowers.

BACKGROUND OF THE NEW PLANT

DESCRIPTION

The present invention comprises a new and distinct variety of *Dianthus*, botanically known as *Dianthus L.*, and hereinafter referred to by the variety name ‘KLEDG20468’. ‘KLEDG20468’ originated from a naturally-occurring, whole plant mutation from the *Dianthus* parent ‘KLEDG12163’ (U.S. Plant Pat. No. 24,707) in May 2018 in The Netherlands.

The following detailed descriptions set forth the distinctive characteristics of ‘KLEDG20468’. The data which define these characteristics were collected from asexual reproductions carried out in Stuttgart, Germany. Data was collected in May 2019 on 7-month old plants grown in a plastic greenhouse. Color references are to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.), 5th edition (2007).

In September 2018, ‘KLEDG20468’ was first vegetatively propagated by vegetative stem cuttings in Stuttgart, Germany, and subsequently in Latina, Italy. ‘KLEDG20468’ was found to reproduce true to type in successive generations of asexual propagation in Stuttgart, Germany and Latina, Italy via vegetative stem cuttings.

Classification:
Family.—Caryophyllaceae.
Botanical.—*Dianthus L.*
Common.—Pot carnation.
Designation.—‘KLEDG20468’.
Parentage: Mutation parent is ‘KLEDG12163’ (U.S. Plant Pat. No. 24,707).
Plant:

SUMMARY

The following are the most outstanding and distinguishing characteristics of ‘KLEDG20468’ when grown under normal horticultural practices in Stuttgart, Germany.

- 1. Double, purple-red flowers having a pink border; and
- 2. Very early flowering.

Propagation type.—Vegetative cuttings via stem, terminal cuttings.
Time to produce a rooted young plant.—10 to 14 days.
Root description.—Fine roots, young roots are RHS 161D, mature roots are RHS 199C.
Rooting habit shape.—Lanceolate.
Plant form.—Upright.
Plant height.—15 cm to 17 cm.
Plant diameter or spread.—22 cm to 25 cm.

DESCRIPTION OF THE PHOTOGRAPH

This new *Dianthus* plant is illustrated by the accompanying photograph of plants grown in a greenhouse in Stuttgart, Germany. The colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photograph is of a 30-week-old plant taken in

Lateral branches/stems:
Shape of the branch in cross-section.—Moderately angular.
Hollowness of the stem.—Absent, solid.

Length.—7 cm to 10 cm.
Diameter.—4 cm to 7 cm.
Internode length.—2 cm to 3 cm.
Internode quantity per branch.—3 to 5.
Number of internodes per branch/stem.—3 to 5. 5
Node length.—0.2 cm to 0.4 cm.
Node diameter.—0.2 cm to 0.4 cm.
Texture.—Smooth.
Color.—RHS 146B.
Flower clustering on the lateral branch.—In some 10
lateral branches.
Foliage:
Arrangement.—Opposite.
Length.—4 cm to 5 cm.
Width.—0.3 cm to 0.5 cm. 15
Shape.—Lanceolate.
Apex.—Acute.
Base.—Obtuse.
Margin.—Entire. 20
Texture (both upper and lower surfaces).—Smooth.
Cross-section of the leaf.—Moderately concave.
Curvature of the leaf.—Absent.
Glaucosity of the leaf.—Weak.
Leaf color.—Upper surface: Immature leaves are RHS 25
138A and mature leaves are RHS 137A. Lower
surface: Immature leaves are RHS 138A and mature
leaves are RHS 137A.
Venation pattern.—Absent.
Flowers:
Flower type and habit.—Semi-double, small sprays,
round.
Fragrance.—Present.
Position of the flowers compared to the foliage of the 35
plant.—Moderately above.
Profile of both the upper and lower part in the lateral
view.—Convex.
Diameter of the flower.—1.8 cm to 2.2 cm.
Natural flowering season.—Spring to autumn. 40
Position of flowers relative to the foliage.—Moderately
above.
Number of flowers per spray.—3 to 5.
Flower longevity on the plant.—14 to 18 days.
Buds:
Length.—0.5 cm to 1.5 cm.
Diameter.—0.3 cm to 0.4 cm.
Shape.—Elliptic.
Color.—RHS 138A.
Extrusion of the styles at the bud stage.—Absent. 50
Corolla:
Quantity of petals and arrangement.—7 to 13 and
arranged in several whorls.
Corolla height.—0.8 cm to 1.5 cm.
Petal length.—1.8 cm to 2.5 cm. 55
Petal width.—1.0 cm to 1.5 cm.
Petal shape.—Spoon-shaped.
Petal apex.—Obtuse.
Petal base.—Acute.
Petal margin.—Serrated.
Depth of petal margin.—Shallow.
Petal texture (both upper and lower surfaces).—
Smooth.
Petal color (both immature and mature).—Upper sur-
face: RHS 58A with an RHS 68B border. Lower
surface: RHS 69A. 65

Macule.—Present; around 0.7 cm in size and RHS
58A.
Calyx.—Quantity of sepals and arrangement: Com-
posed of 5 sepals. Longitudinal axis of the lobes of
the calyx: Straight. Shape: Campanulate. Calyx
height: 0.8 cm to 1.5 cm. Calyx diameter (at the
apex): 0.4 cm to 0.6 cm. Sepal texture (both upper
and lower surfaces): Smooth. Sepal color: Upper
surface: RHS 137A. Lower surface: RHS 137D.
Position of the outer lobes of the epicalyx in relation to
the calyx.—Adpressed and free.
Apex shape of the outer lobes of the epicalyx.—Acute.
Tip length of the outer lobes of the epicalyx.—Short.
Apex shape of the inner lobes of the epicalyx.—Me-
dium acuminate.
Tip length of the inner lobes of the epicalyx.—Short.
Peduncles:
Length.—5 cm to 8 cm.
Diameter.—0.2 cm. 20
Strength.—Moderate.
Texture.—Smooth.
Color.—RHS 146B.
Reproductive organs:
Stamens.—Quantity per flower: Moderate. Filament
length: 0.5 cm to 0.8 cm. Filament color: RHS 157B.
Anther length: 0.1 cm. Anther diameter: 0.05 cm.
Anther color: RHS 155B. Pollen amount: Absent.
Pistils.—Not observed. 30
Fruit and seed set: Not observed.
Disease and pest/insect resistance: No disease and pest/
insect resistance observed.

COMPARISON OF 'KLEDG20468' WITH
PARENTAL LINE AND KNOWN VARIETY

'KLEDG20468' is distinguished from the mutation parent
as described in Table 1.

TABLE 1

Comparison with Parental Line		
Characteristic	'KLEDG20468'	Mutation Parent 'KLEDG12163'
Main flower color	RHS 58A	RHS 75B
Secondary flower color	RHS 68B	RHS 71A
Flower color pattern	Border	Bi-color

'KLEDG20468' can be compared to the commercial
Dianthus variety 'KLEDG18305' (U.S. Plant Pat. No.
31,019). Differences between the varieties are described in
Table 2.

TABLE 2

Comparison with Similar Variety		
Characteristic	'KLEDG20468'	'KLEDG18305'
Flower type	Double	Single
Flower color	Purple-red with pink border	Pink with purple ring
Flowering time	Very early; around 195 days after potting (cold cultivation)	Early-medium; around 205 days after potting (cold cultivation)

We claim:

1. A new and distinct variety of *Dianthus* plant designated 'KLEDG20468' as illustrated and described herein.

* * * * *

