

US00PP34332P2

# (12) United States Plant Patent Thiede

(10) Patent No.: US PP34,332 P2

(45) Date of Patent:

Jun. 14, 2022

#### (54) DIANTHUS PLANT NAMED 'KLEDG22997'

(50) Latin Name: *Dianthus allwoodii*Varietal Denomination: KLEDG22997

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

Stuttgart (DE)

(72) Inventor: Lena Thiede, Riederich (DE)

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

Stuttgart (DE)

(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 17/537,834

(22) Filed: Nov. 30, 2021

(51) Int. Cl.

A01H 5/02 (2018.01)

A01H 6/30 (2018.01)

(52) **U.S. Cl.** 

(58) Field of Classification Search

See application file for complete search history.

Primary Examiner — Anne Marie Grunberg

(74) Attorney, Agent, or Firm — Weatherly IP Solutions, LLC; Barbara Campbell

(57) ABSTRACT

A new *Dianthus* plant designated 'KLEDG22997' particularly distinguished by double purple flowers with purple centers, very early flowering, and an upright plant habit is disclosed.

1 Drawing Sheet

1

Genus and species: *Dianthus allwoodii*. Variety denominations: 'KLEDG22997'.

#### BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct variety of *Dianthus*, botanically known as *Dianthus* cultivars, and hereinafter referred to by the variety name 'KLEDG22997'. 'KLEDG22997' originated from a naturally-occurring, whole plant mutation from the *Dianthus* parent 'KLEDG12163' (U.S. Plant Pat. No. 24,707) in June 10 2018 in The Netherlands.

In September 2018, 'KLEDG22997' was first vegetatively propagated by vegetative stem cuttings in Stuttgart Germany, and subsequently in Latina, Italy. 'KLEDG22997' was found to reproduce true to type in successive generations of asexual propagation in Stuttgart, Germany and Latina, Italy via vegetative stem cuttings.

#### **SUMMARY**

The following are the most outstanding and distinguish- 20 ing characteristics of 'KLEDG22997' when grown under normal horticultural practices in Stuttgart, Germany.

- 1. Pink flowers with purple centers;
- 2. Very early flowering; and
- 3. An upright plant habit.

#### DESCRIPTION OF THE PHOTOGRAPH

This new *Dianthus* plant is illustrated by the accompanying photograph of a 30-week-old plant taken in May 2019 and 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 a whole plant photo of 'KLEDG22997' and shows the foliage, buds, and flowers.

#### DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'KLEDG22997'. The data which

2

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.), 5<sup>th</sup> edition (2007).

Classification:

Family.—Caryophyllaceae.

Botanical.—Dianthus cultivars.

Common.—Pot carnation.

Designation.—'KLEDG22997'.

Parentage: Mutation parent 'KLEDG12163' (U.S. Plant Pat. No. 24,707).

Plant:

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 (Greyed-Yellow), mature roots are RHS 199C (Greyed-Brown).

Rooting habit shape.—Lanceolate.

Plant form.—Upright.

Plant height.—15 cm to 17 cm.

Plant diameter or spread.—22 cm to 25 cm.

<sup>25</sup> Lateral branches/stems:

Shape of the branch in cross-section.—Circular.

Hollowness of the branch.—Absent.

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.

Node length.—0.2 cm to 0.4 cm.

Node diameter.—0.2 cm to 0.4 cm.

*Texture*.—Smooth.

Color.—RHS 146B (Yellow-Green).

Flower clustering on the lateral branch.—In some lateral branches.

3

4

#### Foliage:

Arrangement.—Opposite.

Length.—4 cm to 5 cm.

Width.—0.3 cm to 0.5 cm.

Shape.—Lanceolate.

Apex.—Acute.

Base.—Obtuse.

Margin.—Entire.

Texture (both upper and lower surfaces).—Smooth.

Cross-section of the leaf.—Moderately concave.

Curvature of the leaf.—Absent.

Glaucosity of the leaf.—Medium.

Leaf color (both immature and mature).—Upper surface: RHS 138A (Green) for immature and RHS 137A (Green) for mature. Lower surface: RHS 138A (Green) for immature and RHS 137A (Green) for mature.

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 plant.—Moderately above.

Profile of both the upper and lower part in the lateral view.—Convex.

Diameter of the flower.—2.0 cm to 2.5 cm.

Natural flowering season.—Spring to autumn.

*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 (Green).

Extrusion of the styles at the bud stage.—Absent. 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.

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 surface: RHS 68A (Red-Purple) with RHS 72A (Red-Purple) center. Lower surface: RHS 75C (Purple).

Macule.—Present; 1.5 cm to 1.8 cm wide and RHS 72A (Red-Purple).

Calyx.—Quantity of sepals and arrangement: Composed of 5 sepals. Longitudinal axis of the lobes of the calyx: Concave. 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 (Green). Lower surface: RHS 137D (Green).

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.—Short acuminate.

Tip length of the outer lobes of the epicalyx.—0.2 cm. Apex shape of the inner lobes of the epicalyx.—Short acuminate.

Tip length of the inner lobes of the epicalyx.—0.1 cm. Peduncles:

Length.—5 cm to 8 cm.

Diameter.—0.2 cm.

Strength.—Moderate.

Texture.—Smooth.

Color.—RHS 146B (Yellow-Green).

#### Reproductive organs:

Stamens.—Quantity per flower: Moderate. Filament length: 0.5 cm to 0.8 cm. Filament color: RHS 157B (Green-White). Anther length: 0.1 cm. Anther diameter: 0.05 cm. Anther color: RHS 155B (White). Pollen amount: None observed.

Pistils.—Not observed.

Fruit and seed set: Sometimes observed but no information is available.

Disease and pest/insect resistance: No disease and pest/insect resistance observed.

# COMPARISON OF 'KLEDG22997' WITH PARENTAL LINE AND KNOWN VARIETY

'KLEDG22997' is distinguished from the mutation parent as described in Table 1.

#### TABLE 1

35	Comparison with Parental Line		
	Characteristic	'KLEDG22997'	Mutation Parent 'KLEDG12163'
	Main flower color	RHS 68A (Red-Purple)	RHS 75B (Purple)
<b>4</b> 0	Secondary flower color	RHS 72A (Red-Purple)	RHS 71A (Red-Purple)
	Flower color pattern	Bi-color	Bi-color

'KLEDG22997' 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

50	Comparison with Similar Variety			
	Characteristic	'KLEDG22997'	'KLEDG18305'	
55	Flower type Flower color Flowering time	Double Pink with purple centers Very early; around 195 days after potting (cold cultivation)	Single Pink with purple ring Early-medium; around 205 days after potting (cold cultivation)	

I claim:

1. A new and distinct variety of *Dianthus* plant designated 'KLEDG22997' as illustrated and described herein.

\* \* \* \* \*



## UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO. : PP34,332 P2

APPLICATION NO. : 17/537834

DATED : June 14, 2022

INVENTOR(S) : Lena Thiede

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

In item (50), Line 1, instead of "allwoodi"; should be - sp. -.

In Column 1, Line 1, instead of "allwoodi"; should be - sp. -.

In Column 1, Line 7, instead of "cultivars"; should be - sp. -.

In Column 2, Line 9, instead of "cultivars"; should be - sp. -.

Signed and Sealed this
Sixth Day of December, 2022

Annuive Kully-Vidal

Katherine Kelly Vidal

Director of the United States Patent and Trademark Office