



(12) **United States Plant Patent**
Endisch

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(54) **GERANIUM PLANT NAMED ‘GENTREO’**

(50) Latin Name: *Pelargonium×hortorum*
Varietal Denomination: **Gentreo**

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(58) **Field of Classification Search** **Plt./327**
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Geranium* plant named ‘Gentreo’ that is characterized by semi-double orange-red flowers, medium green foliage with a strong zonation pattern, an early flower response and a medium growth habit.

1 Drawing Sheet

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Botanical classification: *Pelargonium×hortorum*.
Variety denomination: ‘Gentreo’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Geranium* plant botanically known as *Pelargonium×hortorum* and hereinafter referred to by the cultivar name ‘Gentreo’.

The new cultivar is the product of a breeding program conducted by the inventor in a cultivated area of Hagenbach, Germany. The objective of the breeding program is to develop new *Geranium* cultivars that are early flowering with semi-double flowers and medium green foliage.

‘Gentreo’ is a hybrid that originated from the hybridization of the female or seed parent a proprietary selection of *Pelargonium×hortorum* identified by the name ‘Toro-Type’ (not patented) and the male or pollen parent a proprietary selection of *Pelargonium×hortorum* identified by number 192/92 (not patented). The cultivar ‘Gentreo’ was selected by the inventor in June of 2001 as a single plant within the progeny of the stated cross in a controlled environment of Hagenbach, Germany.

Asexual reproduction by terminal cuttings of the new cultivar ‘Gentreo’ were first done in September of 2002 in Hagenbach, Germany. Since that time, under careful observation, the unique characteristics of the new cultivar have been uniform, stable and reproduced true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

The following represent the distinguishing characteristics of the new *Geranium* cultivar ‘Gentreo’. These traits in combination distinguish ‘Gentreo’ as a new and distinct cultivar apart from other known existing varieties of *Geranium*.

1. *Geranium* ‘Gentreo’ exhibits orange-red flowers.
2. *Geranium* ‘Gentreo’ exhibits semi-double flowers.
3. *Geranium* ‘Gentreo’ exhibits medium green foliage with a strong zonation pattern.
4. *Geranium* ‘Gentreo’ exhibits an early flower response.
5. *Geranium* ‘Gentreo’ exhibits a medium growth habit.

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The closest comparison variety is *Geranium* ‘Rena’ (U.S. Plant Pat. No. 9,571). ‘Gentreo’ is different than ‘Rena’ in having a shorter plant height, shorter internodes, shorter leaves and smaller flowers.

5 The new cultivar ‘Gentreo’ is distinguishable from the female parent *Geranium* proprietary selection ‘Toro-Type’ in having lighter green leaves and orange-red flowers.

10 The new cultivar ‘Gentreo’ is distinguishable from the male parent *Geranium* proprietary selection 192/92 in having orange-red flowers. The flowers of 192/92 are pink.

BRIEF DESCRIPTION OF THE DRAWING

15 The accompanying photograph illustrates the distinguishing traits of *Geranium* ‘Gentreo’. The plant in the photograph shows an overall view of a 12 week old plant. 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.

BOTANICAL DESCRIPTION OF THE PLANT

25 The following is a detailed description of the new *Geranium* cultivar named ‘Gentreo’. Data was collected in Hagenbach, Germany from 12 week old plants grown under glass greenhouse conditions. The plants were grown in 12 cm diameter containers. The time of year was Spring and the daytime temperature ranged from 18 to 26° Centigrade. The temperature at night ranged from 16 to 20° Centigrade. The light level was 20 to 35 klux. No photoperiodic treatments were used. The growth retardant CYCOCEL 720 was applied at a rate of 0.05 percent. Color determinations are in accordance with The Royal Horticultural Society Colour Chart 2001 edition, except where general color terms of ordinary dictionary significance are used. The growing requirements are similar to the species.

40 ‘Gentreo’ has not been tested under all possible conditions and phenotypic differences may be observed with variations in environmental, climatic, and cultural conditions, however, without any variance in genotype.

Botanical classification: *Pelargonium×hortorum* cultivar 'Gentreo'.

Annual or Perennial: Annual.

Parentage: 'Gentreo' is a hybrid plant that resulted from the hybridization of the following parent plants:

Female parent.—A proprietary selection of *Pelargonium×hortorum* identified by the name 'Toro-Type'.

Male parent.—A proprietary selection of *Pelargonium×hortorum* identified by number 192/92.

Vigor: Moderate.

Growth rate: Approximately 6 cm. per month.

Growth habit: Upright, outwardly spreading.

Plant shape: Globose.

Plant height: Average 16 cm. in height.

Plant width: Average 24 cm. in width.

Suitable container size: 11 to 14 cm containers.

Propagation: Terminal cuttings.

Time to initiate roots: Approximately 5–7 days to produce roots on an initial cutting.

Time to produce a rooted cutting or liner: Approximately 20–24 days.

Crop time: From a rooted cutting, approximately 12 weeks are required to produce a finished flowering plant.

High temperature tolerance: 40 degrees Centigrade.

Low temperature tolerance: 0 degrees Centigrade.

Root system: Fine and fibrous.

Stem.—Branching habit: Free branching. Basal branching: Yes. Average number of lateral branches: 4. Pinching: No. Lateral branch dimensions: 9.5 cm. in length and 1.3 cm. in diameter. Lateral branch strength: Moderate. Color: 143B. Pubescence: Present. Internode length: 1.9 cm. between nodes. Shape: Round. Surface: Glabrous, slightly glossy.

Foliage.—Texture: Both sides smooth. Leaf arrangement: Alternate. Compound or single: Single. Quantity of leaves per lateral branch: 14. Leaf shape: Reniform. Leaf apex: Rounded. Leaf base: Cordate. Leaf length: 4 cm. in length. Leaf width: 7 cm. in width. Pubescence: Present both sides. Leaf margin: Bicrenate. Vein pattern: Plamate. Young leaf color (upper surface): 144A. Young leaf color (lower surface): 144B. Mature leaf color (upper surface): 137C. Mature leaf color (lower surface): 137C. Vein color (upper surface): 137C. Vein color (lower surface): 146C. Zonation pattern: Strong. Zonation color: 200A. Leaf attachment: Petiolate. Petiole dimensions: 6 cm. in length and 1.5 mm. in width. Petiole color: 146B.

Stipules.—Stipule dimensions: 1.2 cm in length and 0.8 cm in width. Stipule color: 143C.

Inflorescence.—Inflorescence arrangement: Rounded hemispherical umbels. Inflorescence type: Umbel. Inflorescence dimensions. 4.5 cm in height and 10.0 cm in width. Flowering habit: Continuous. Quantity of flowers per inflorescence: Approximately 6. Quantity of buds per lateral stem: Approximately 32. Quantity of flowers and buds per plant. Approximately 152. Flower season: Spring to Summer. Time

to flower: Approximately 12 weeks. Rate of flower opening: Approximately 12% of the flowers are opened at once. Fragrance: None. Bud dimensions: 6 mm. in length and 3.8 mm in diameter. Bud shape: Ovoid. Bud color: 143B. Rate of bud opening: 3 days. Flower aspect: Upright. Flower shape: Shallow cup shaped, rounded, semi-double. Flower dimensions: 5 cm. in diameter and 1.7 cm. in height. Flower longevity: Lasts approximately 10 days on plant. Petal texture: Glabrous. Petal arrangement: Zygomorph. Number of petals: 9 in number. Petals fused or unfused: Unfused. Petal shape: Ovate. Petal margin: Entire. Petal apex: Rounded. Petal base: Attenuate. Petal dimensions: 2.1 cm. in length and 1.9 cm. in width. Upper petal color when opening (upper side): 33A. Lower petal color when opening (upper side): 33A. Upper petal color when opening (under side): 33B to 33C. Lower petal color when opening (under side): 33B to 33C. Upper petal color fully opened (upper side): 33A. Lower petal color fully opened (upper side): 33A. Upper petal color fully opened (under side): 33B to 33C. Lower petal color fully opened (under side): 33B to 33C. Petaloid shape: Sail-like. Petaloid quantity: Average 3. Petaloid dimensions: 1 cm. in length and 0.2 cm. in width. Petaloid color, young: 33A. Petaloid color, mature: 33A.

Self-cleaning or persistent.—Persistent.

Sepals.—Number of sepals: 5. Sepal surface: Upper side: dull and smooth, Lower side: pubescent. Sepal shape: Lancet. Sepal margin: Entire. Sepal apex: Acute. Sepal base: Cuneate. Sepal dimensions: 1 cm. in length and 2.5 mm. in width. Sepal color immature (upper side): 143B. Sepal color immature (under side): 143B. Sepal color mature (upper side): 143B; with light red base. Sepal color mature (under side): 143B. Calyx shape: Cup-shaped. Calyx dimensions: 9 mm in length, 1.7 cm in diameter, and 6 mm in height.

Peduncle.—Peduncle dimensions: 12 cm. in length and 3 mm. in diameter. Peduncle color: 147B. Peduncle strength: Moderately strong.

Pedicels.—Pedicel dimensions: 2.0 cm. in length and 1.2 mm. in diameter. Pedicel color (young): 178A. Pedicel color (mature): 178A. Pedicel strength: Moderate.

Reproduction organs.—Stamen number: 6. Anther shape: Ovate. Anther dimensions: 2.5 mm. in length. Anther color: 61B. Amount of pollen: Moderate. Pollen color: 31A. Pistil number: 1 in number. Pistil dimensions: 8 mm. in length. Stigma shape: Five parted, star shaped. Stigma color: 46A. Style length: 5 mm. Style color: 46A. Ovary color: 143B.

Seed: Seed production has not been observed.

Disease and pest resistance: Plants of the new *geranium* have not been observed for disease or pest resistance.

It is claimed:

1. A new and distinct variety of *Geranium* plant named 'Gentreo' as described and illustrated.

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