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Smit

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(54) ***PEPEROMIA* PLANT NAMED 'EC-PEPE-2103'**

(50) Latin Name: ***Peperomia obtusifolia***
Varietal Denomination: **'EC-PEPE-2103'**

(71) Applicant: **Eden Collection, BV**, Sappemeer (NL)

(72) Inventor: **Obed Smit**, Sappemeer (NL)

(73) Assignee: **Eden Collection 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.

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A01H 6/00 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./373**

(58) **Field of Classification Search**
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CPC ... A01H 5/12; A01H 5/00; A01H 5/02; A01H 6/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP29,598 P3 * 8/2018 Smit A01H 6/00 Plt./373
PP31,313 P2 * 12/2019 Smit A01H 6/00 Plt./373

OTHER PUBLICATIONS

CPVO Register 4.1.45 for *Peperomia* EC PEPE 2103, retrieved on Mar. 24, 2022 at https://online.plantvarieties.eu/publicConsultationDetails?registerId=20211456&denomination=ec%20pepe%202103, 3 pages. (Year: 2022).*

* cited by examiner

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(57) **ABSTRACT**

A new and distinct cultivar of *Peperomia* plant named 'EC-PEPE-2103' is disclosed, characterized by striking red-brown stems, and shiny dark-green leaves with dark-red margins. Plants have an upright habit, uncharacteristic of most *Peperomia*. The new variety is a *Peperomia*, typically used as an ornamental plant.

3 Drawing Sheets

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Latin name of the genus and species: *Peperomia obtusifolia.*

Variety denomination: 'EC-PEPE-2103'.

BACKGROUND OF THE INVENTION

The new cultivar is a product of a planned breeding program to produce distinct and better performing *Peperomia* varieties. The new variety was selected as a seedling resulting from the crossing of *Peperomia obtusifolia* '#1407', and '#1421', two unpatented varieties from the inventor's breeding line. The crossing was made by the inventor, Obed J. Smit, a citizen of the Netherlands in 2016. 'EC-PEPE-2103' was selected by the inventor in 2017 at a commercial greenhouse in Sappemeer, the Netherlands.

Asexual reproduction of the new cultivar 'EC-PEPE-2103' by terminal cuttings was first performed in Sappemeer, the Netherlands at a commercial greenhouse in September 2017, and has shown that the unique features of this cultivar are stable and reproduced true to type through successive generations.

SUMMARY OF THE INVENTION

The cultivar 'EC-PEPE-2103' 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.

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The following traits have been repeatedly observed and are determined to be the unique characteristics of 'EC-PEPE-2103'. These characteristics in combination distinguish 'EC-PEPE-2103' as a new and distinct *Peperomia* cultivar:

1. Shiny dark-green leaves with a dark-red margin.
2. Striking red-brown stems that slightly "zig-zag" with maturity.
3. Upright-growing plant model (most *Peperomia* grow in a rosette shape).

PARENT COMPARISON

Plants of the new cultivar 'EC-PEPE-2103' are similar to plants of the female parent, *Peperomia obtusifolia* '#1407' in most horticultural characteristics, however, plants of the new cultivar 'EC-PEPE-2103' differ from in the following characteristics:

1. Stems of the new variety are red-brown colored, while stems of the seed parent are brown.
2. Stems of the new variety are thicker than stems of the seed parent.
3. Stems of the new variety tend to "zig-zag," with maturity while stems of the seed parent do not.
4. Leaves of the new variety are very dark-green, while leaves of the seed parent are light-green.
5. Leaves of the new variety have a wide dark-red margin, while leaves of the seed parent have no distinct marginal coloration.

Plants of the new cultivar 'EC-PEPE-2103' are similar to plants of the male parent, *Peperomia obtusifolia* '#1421' in most horticultural characteristics, however, plants of the new cultivar 'EC-PEPE-2103' differ in the following characteristics:

1. Leaves of the new variety have a wide dark-red margin, while leaves of the pollen parent have no distinct marginal coloration.
2. Stems of the new variety tend to "zig-zag," with maturity while stems of the pollen parent do not.
3. Stems of the new variety are thinner than stems of the pollen parent.

COMMERCIAL COMPARISON

Plants of the new cultivar 'EC-PEPE-2103' are similar to plants of the commercial variety *Peperomia obtusifolia* 'EC-PEPE-1806', U.S. Plant Pat. No. 31,313. However, plants of the new cultivar differ in the following characteristics:

1. Stems of the new variety are not as heavily pigmented with Greyed-Purple anthocyanin as stems of 'EC-PEPE-1806'.
2. Leaf veins of the new variety are not clearly visible, while leaf veins of this comparator are clearly visible and deep-lying.
3. Leaves of the new variety are dark-green colored, while leaves of this comparator are light-green.
4. Leaves of the new variety have a dark-red margin, while leaves of this comparator have no distinct marginal coloration.

Plants of the new cultivar 'EC-PEPE-2103' are similar to plants of *Peperomia obtusifolia* 'Obtipan', U.S. Plant Pat. No. 29,598. However, plants of the new cultivar differ in the following characteristics:

1. Stems of the new variety are red-brown colored when mature, while stems of this comparator are brown when immature and green when mature.
2. Leaves of the new variety are a darker green than leaves of this comparator.
3. Leaves of the new variety have a wider dark-red margin, while leaves of this comparator have a tiny brown marginal coloration.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photograph in FIG. **1** illustrates in full color a typical blooming plant of 'EC-PEPE-2103' grown in a greenhouse. The plant is approximately 7 months of age.

FIG. **2** illustrates a close up of the foliage.

FIG. **3** illustrates typical inflorescences.

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 Society Colour Chart 2015 except where general terms of ordinary dictionary significance are used. The following observations and measurements describe 'EC-PEPE-2103' plants at 7 months of age, grown in a greenhouse in Sappemeer, the Netherlands during October. The growing temperature ranged from 18° C. to 20° C. at night to 20° C. to 23° C. during the day. Measurements and numerical values represent averages of typical flowering types.

Botanical classification: *Peperomia obtusifolia* 'EC-PEPE-2103'.

PROPAGATION

Time to initiate roots: About 7 days at approximately 20° C. in summer.

Time to produce rooted cutting: About 10 days at 20° C. in summer.

Description of roots: Fibrous, fine, moderately dense, freely branching. White in color, not accurately measured with R.H.S. chart.

PLANT

Plant type: Perennial potted plant.

Plant shape: Broad ovate.

Growth habit: Basal and lateral branching.

Plant spread: Approximately 13.1 cm.

Height: 19.1 cm to top of foliar plane; 20 cm to top of floral plane.

Growth rate: Moderate.

Plant vigor: Moderate to high.

Age of plant described: Approximately 7 months.

Branching habit: Basal and lateral branching.

Pinching: Pinching not required.

Number of primary (main) branches per plant: Average 2.

Number of secondary (lateral) branches per plant: Average 4.

Main branches:

Length.—Average: 4.5 cm.

Diameter.—Average: 0.5 cm.

Internode length: Average: 2.8 cm.

Appearance and shape: Succulent, thick and rounded.

Luster: Glossy.

Aspect/angle from vertical: Average angle: 45°.

Strength: Moderately strong.

Color:

Developing, newest growth.—RHS Yellow-Green, slightly darker than 152A.

Mature.—Base color near RHS Yellow-Green 152B, heavily flushed with anthocyanin Greyed-Purple 183A and 183B.

At Internodes.—RHS Greyed-Purple 185B.

Older stems.—RHS Yellow-Green N148A and N148B, slightly finely, irregularly striped and flushed Greyed-Red 183C.

Pubescence: None.

FOLIAGE

Leaf:

Arrangement.—Alternate, single.

Quantity.—Average 3 per lateral branch.

Average length.—6.6 cm.

Average width.—5.7 cm.

Shape of blade.—Broad ovate to near orbicular.

Apex.—Obtuse to shallow retuse.

Base.—Short attenuate.

Margin.—Entire.

Texture of top surface.—Glabrous, smooth, leathery.

Texture of bottom surface.—Glabrous, smooth, leathery.

Pubescence.—None.
Luster, upper side.—Glossy.
Luster, under side.—Moderately glossy.
Color.—Young foliage upper side: RHS Green 143A, narrowly margined Greyed-Orange 166A. Young foliage under side: Blend of RHS Yellow-Green 144A and 146B, narrowly margined Greyed-Orange 166A to Greyed-Purple N186C. Mature foliage upper side: Blend of RHS Green NN137A and 139A, but slightly darker; narrowly margined Greyed-Purple N186D. Mature foliage under side: RHS Yellow-Green 146B, narrowly margined Greyed-Purple N186D.
Venation.—Pattern: Pinnate. Venation color upper side: RHS Yellow-Green 144A. Venation color under side: RHS Yellow-Green 144B.
Petiole.—Average Length: 1.5 cm. Diameter: Petiole flattened, average diameter at widest (horizontally) 0.5 cm; at narrowest (vertically) 0.4 cm. Texture: Glabrous, smooth. Luster: Both sides glossy. Strength: Medium. Color, upper side: RHS Greyed-Red 178A. Color, under side: RHS Greyed-Red 178A and 178B.

FLOWER

Inflorescence:
Arrangement.—Axillary spike.
Type and form.—Spike.
Height.—Average 5.7 cm, excluding peduncle.
Diameter.—Average 0.3 cm.
Flowers per inflorescence.—Approximately 1,300 individual flowers per spike.
Flowers and buds per plant.—Approximately 5,700.
Bud:
Length.—Approximately 0.4 mm.
Diameter.—Approximately 0.3 mm.
Shape.—Flattened, elliptic.
Texture.—Glabrous, smooth, moderately velvety.
Luster.—Slightly glossy.
Color.—Near RHS Yellow-Green 146D.
Flower:
Type and form.—Individual flowers are very small and consist of 1 bract, 2 stamens, and a single pistil.
Aspect.—Outward.
Habit.—Very freely flowering.
Fragrance.—None.
Shape.—Rotate, consisting of 1 bract, 2 stamens, and 1 pistil; no petals or sepals present.
Height.—Average 1 mm.
Diameter.—Average 0.5 mm.
Length.—Average 0.2 mm.
Longevity on plant.—Average 1 month.
Persistent or self-cleaning?.—Self-cleaning.
Peduncles:
Terminal length.—Average 1.8 cm to 2.3 cm.
Terminal diameter.—Average 2.5 mm.
Angle.—Average 30° to lateral branch axis.
Strength.—Weak.
Texture.—Glabrous, smooth.
Luster.—Moderately glossy.
Color.—RHS Greyed-Orange 166A to Greyed-Purple 183B.
Bracts:
Length.—Average 0.5 mm.
Width.—Average 0.5 mm.
Shape.—Orbicular.
Color.—Near RHS Green 138B, center near 138A.

REPRODUCTIVE ORGANS

Stamens:
Number per flower.—Average 2.
Filament length.—0.1 mm or shorter.
Filament color.—Near RHS Yellow-Green Group, impossible to measure due to small size.
Anthers:
Shape.—Ovate.
Length.—Average 0.3 mm.
Width.—Average 0.15 mm.
Color.—Near RHS Yellow-White Group, impossible to measure due to small size.
Pollen.—Amount: Low. Color: RHS Greyed-Yellow 160D.
Pistil.—Number: Average 1 per flower. Length: Average 0.2 mm.
Stigma.—Sessile.
Ovary color.—Near RHS Greyed-Green N199A.

OTHER CHARACTERISTICS

Seeds and fruits: None observed to date.
Disease/pest resistance: No increased nor decreased resistance nor susceptibility to normal diseases and pests of *Peperomia* has been observed.
Temperature tolerance: Tolerates temperatures up to 40'C. Hardy to USDA zones 10 to 12.

What is claimed is:

1. A new and distinct cultivar of *Peperomia* plant named 'EC-PEPE-2103' as herein illustrated and described.

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FIG. 1

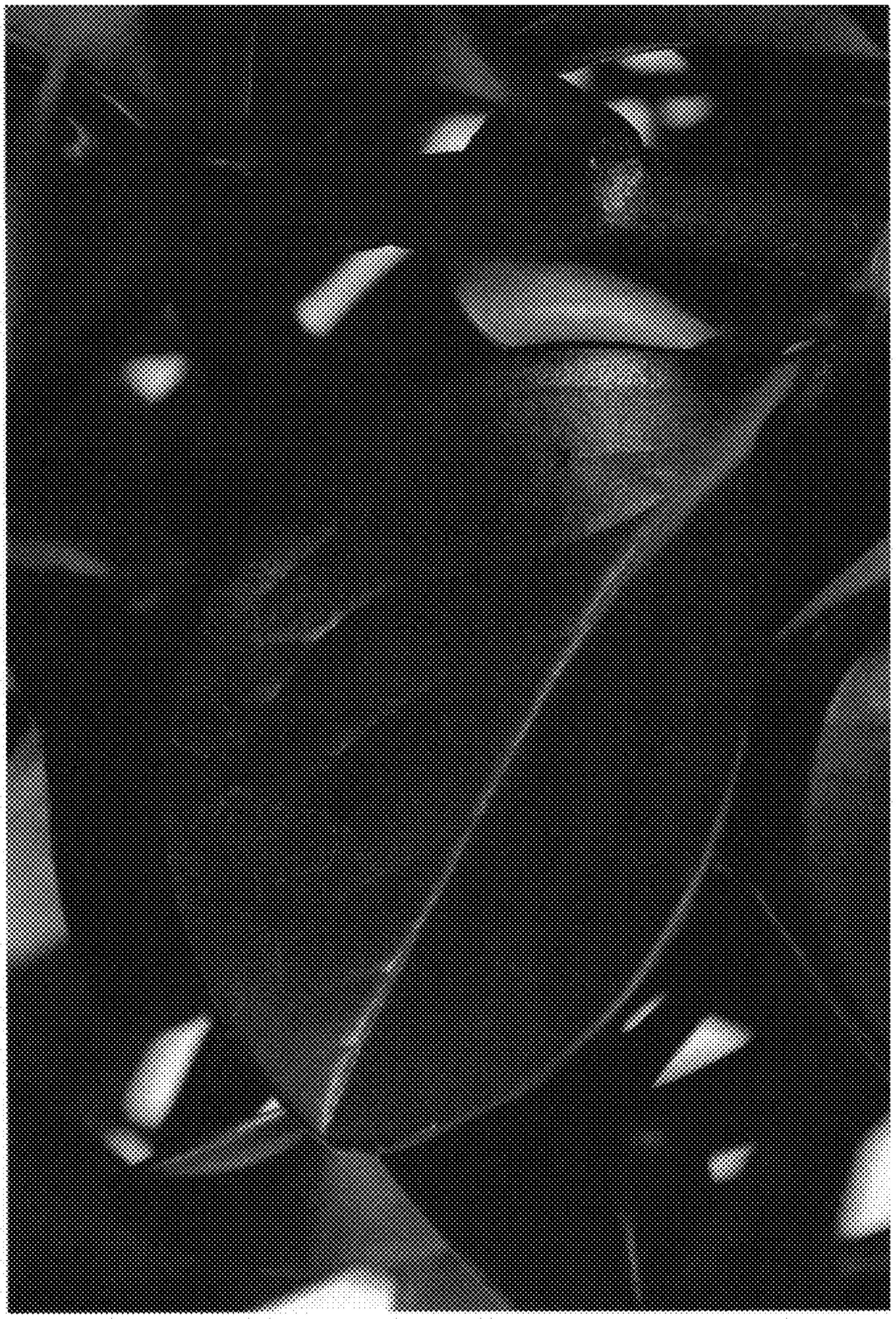

FIG. 2

FIG. 3