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(54) ECHINACEA PLANT NAMED 'BALSOMOTAN'

- (50) Latin Name: *Echinacea* x *hybrida*Varietal Denomination: **Balsomotan**
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(57) ABSTRACT

A new and distinct cultivar of *Echinacea* plant named 'Balsomotan', characterized by its single-type, medium red-colored inflorescences that first open dark reddish-orange and with senescence fade to yellowish pink, medium green-colored foliage, and moderately vigorous, compact-upright growth habit, is disclosed.

1 Drawing Sheet

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Latin name of genus and species of plant claimed: *Echinacea* x *hybrida*.

Variety denomination: 'Balsomotan'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Echinacea* plant botanically known as *Echinacea* x *hybrida* and hereinafter referred to by the cultivar name 'Balsomotan'.

The new cultivar originated in a controlled breeding program in Elburn, Ill. during October 2010. The objective of the breeding program was the development of *Echinacea* cultivars with a single inflorescence form having imbricate ray florets and a well-branched, compact-upright growth habit.

The new *Echinacea* cultivar is the result of cross-pollination. The female (seed) parent of the new cultivar is the proprietary *Echinacea* x *hybrida* breeding selection coded E83-2, not patented, characterized by its single-type, medium orange-colored inflorescences, medium green-colored foliage, and vigorous, upright growth habit. The male (pollen) parent of the new cultivar is from a bulk pollen mix of eight proprietary *Echinacea* x *hybrida* breeding selections coded E83-1 through E83-8, not patented, characterized by their single-type, medium orange-colored inflorescences, medium green-colored foliage, and vigorous, upright growth habit. The new cultivar was discovered and selected as a single flowering plant within the progeny of the above stated cross-pollination during July 2011 in a controlled environment in Elburn, Ill.

Asexual reproduction of the new cultivar by in vitro shoot propagation since July 2011 in West Chicago, Ill. has demonstrated that the new cultivar reproduces true to type 35 with all of the characteristics, as herein described, firmly fixed and retained through successive generations of such asexual propagation.

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SUMMARY OF THE INVENTION

The following characteristics of the new cultivar have been repeatedly observed and can be used to distinguish 'Balsomotan' as a new and distinct cultivar of *Echinacea* plant:

- 1. Single-type, medium red-colored inflorescences that first open dark reddish-orange and with senescence fade to yellowish pink;
- 2. Medium green-colored foliage; and
- 3. Moderately vigorous, compact-upright growth habit.

Plants of the new cultivar differ from plants of the female and male parents primarily in having a more reddish-orange inflorescence color and a more compact growth habit.

Of the many commercially available *Echinacea* cultivars, the most similar in comparison to the new cultivar is SOMBRERO Flamenco Orange 'Balsomenco', U.S. Plant Pat. No. 25,523. However, in side-by-side comparisons, plants of the new cultivar differ from plants of 'Balsomenco' in at least the following characteristics:

- 1. Plants of the new cultivar have larger diameter inflorescences than plants of 'Balsomenco';
- 2. Plants of the new cultivar have a ray floret color that is a deeper greyed red when fully open than plants of 'Balsomenco'; and
- 3. Plants of the new cultivar have more ray florets per inflorescence than plants of 'Balsomenco'.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs show, as nearly true as it is reasonably possible to make the same in color illustrations of this type, typical inflorescence and foliage characteristics of the new cultivar. Colors in the photographs may differ slightly from the color values cited in the detailed description, which accurately describes the colors of 'Balsomotan'. The plants were approximately six months old and grown

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for 4 months in an outdoor nursery bed in West Chicago, Ill. Plants were placed in a one-gallon container for photography purposes.

FIG. 1 illustrates a side view of the overall growth and flowering habit of 'Balsomotan'.

FIG. 2 illustrates a close-up view of an individual inflorescence of 'Balsomotan'.

DETAILED BOTANICAL DESCRIPTION

The new cultivar has not been observed under all possible environmental conditions to date. Accordingly, it is possible that the phenotype may vary somewhat with variations in the environment, such as temperature, light intensity, and day length, without, however, any variance in genotype.

The chart used in the identification of colors described herein is The R.H.S. Colour Chart of The Royal Horticultural Society, London, England, 2015 edition, except where general color terms of ordinary significance are used. The color values were determined in August 2019 under natural light conditions in West Chicago, Ill.

The following descriptions and measurements describe approximately six-month old plants produced from in vitro plantlets and grown utilizing a soilless growth medium 25 under conditions comparable to those used in commercial practice. The plants were grown in an outdoor nursery bed in West Chicago, Ill. for four months. Measurements and numerical values represent averages of typical plants. Botanical classification: *Echinacea* x *hybrida* 'Balsomotan'. ³⁰ Parentage:

Female parent.—Proprietary Echinacea x hybrida breeding selection coded E83-2, not patented.

Male parent.—A bulk pollen mix of eight proprietary

Echinacea x hybrida breeding selections coded

E83-1 through E83-8, not patented.

Propagation:

Type.—In vitro propagation is preferred, divisions are possible.

Time to initiate roots in vitro.—Approximately 30 days at 18° C.

Time to produce a rooted plantlet in summer.—Approximately 30 days at 18° C.

Root description.—Fine, fibrous; grey to light brown in 45 color.

Rooting habit.—Moderate density, moderate branching.

Plant description:

Commercial crop time.—Approximately 10 to 12 50 weeks from a rooted tissue culture plantlet to finish in a 15 cm container.

Growth habit and general appearance.—Herbaceous perennial, moderately vigorous, compact-upright.

Hardiness.—USDA Zone 5a (-20° F. to -15° F./ -28.9° 55 C. to -26° C.).

Size.—Height from soil level to top of plant plane: Approximately 54.0 cm. Width: Approximately 56.0 cm.

Branching habit.—No lateral branching, flowering 60 stems grow from base. Quantity of main stems per plant: Approximately 2.

Stems.—Strength: Very strong. Aspect: Nearly erect. Shape: Rounded. Length to base of inflorescence: Approximately 25.0 cm. Diameter: Approximately 65 8.0 mm to 1.1 cm. Length of central internode:

Approximately 6.0 cm. Texture: Densely pubescent with short strigose hairs. Color of young and mature stems: 144A to 144B.

Foliage description:

General description.—Form: Simple. Arrangement: Alternate.

Leaves.—Aspect: Perpendicular to stem, subtending with age. Shape: Narrowly ovate to lanceolate. Margin: Entire to shallowly serrate, slightly undulate. Apex: Acute. Base: Attenuate. Venation pattern: Pinnate. Length of mature leaf: Approximately 25.0 cm. Width of mature leaf: Approximately 7.5 cm. Texture of upper surface: Dull, moderately pubescent with short strigose hairs. Texture of lower surface: Moderately pubescent with short strigose hairs. Color of upper surface of young and mature foliage: Closest to NN137A with venation of 145C. Color of lower surface of young and mature foliage: Closest to 147B with venation of 145C.

Petiole.—Shape: V-shaped. Length: Approximately 5.0 cm to 13.0 cm. Diameter: Approximately 3.0 mm to 4.0 mm. Texture of upper surface: Glabrous. Texture of lower surface: Sparsely covered with very short strigose hairs. Color of upper and lower surfaces: 145B to 145C.

Flowering description:

Flowering habit.—'Balsomotan' is a long-day obligate, freely flowering blooming from late spring through late summer under outdoor growing conditions.

Lastingness of individual inflorescence on the plant.— Approximately 3 weeks.

Inflorescence description:

General description.—Type: Solitary, composite. Persistent. Shape: Conical. Aspect: Facing upward. Arrangement: Terminal, held upright on strong peduncles. Fragrance: Faintly sweet. Quantity per plant: Approximately 10. Height: Approximately 4.5 cm. Diameter: Approximately 8.0 cm.

Peduncle.—Strength: Strong. Aspect: Erect to approximately 45° from vertical. Length: Approximately 22.0 cm. Diameter: Approximately 4.0 mm to 5.0 mm. Texture: Densely pubescent with short strigose hairs. Color: 144A to 144B.

Bud.—Quantity per plant: Approximately 5. Shape: Flattened globular with immature ray florets nearly erect. Length: Approximately 1.8 cm. Diameter: Approximately 2.0 cm. Color: Outer ray florets of 154D tinted with 185D with bud center of 143A.

Ray florets.—Quantity per inflorescence: Approximately 19. Arrangement: In a single whorl, slightly imbricate. Aspect: Perpendicular to disc, subtending with age. Shape: Elliptic. Appearance: Dull. Margin: Entire. Apex: Emarginate to notched. Base: Attenuate. Length: Approximately 4.0 cm. Width: Approximately 1.2 cm. Texture of upper surface: Glabrous, ribbed longitudinally. Texture of lower surface: Sparsely pubescent, ribbed longitudinally. Color of upper surface when first open: N30A to N30B with an overlay of N34A. Color of lower surface when first open: NN155A with an overlay of 70A to 70B. Color of upper surface when fully open: N34D with an overlay of 185B to 185C, with senescence fade to 37A. Color of lower surface when fully open: Closest to 186C with 146D at base and tips.

Disc florets.—Disc diameter: Approximately 3.5 cm. Quantity per inflorescence: Approximately 250. Arrangement: Spirally arranged in center of inflorescence. Shape: Tubular. Margin of free portion: Entire. Apex: Five acute tips. Base: Fused into a 5 tube. Length: Approximately 9.0 mm. Diameter: Approximately 2.0 mm. Texture: Glabrous. Color of upper or inner surface when first and fully open: 145C with 187A at tips. Color of lower or outer surface when first and fully open: 155D with an 10 overlay of 146D primarily at both ends of tube portion and 187A at tips, base of NN155B.

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Receptacle.—Shape: Conical. Height: Approximately 1.0 cm. Diameter: Approximately 1.2 cm. Color: 155D.

Phyllaries.—Quantity per inflorescence Approximately 46. Arrangement: In multiple whorls. Appearance: Dull, stiff. Shape: Narrowly ovate to lanceolate, strongly curved towards the peduncle. Margin: Entire, ciliate. Apex: Acute. Base: Truncate. 20 Length: Approximately 0.9 mm to 1.1 cm. Width: Approximately 3.0 mm to 4.0 mm. Texture of upper or inner surface: Glabrous. Texture of lower or outer surface: Sparsely pubescent with short strigose hairs, densely pubescent margins. Color of upper surface: 25 137A. Color of lower surface: 137B.

Receptacle spines.—Number of spines per disc: Approximately 250. Shape: Acicular. Length: Approximately 1.3 cm. Width at widest point:

Approximately 2.0 mm. Apex: Acute. Base: Truncate. Texture: Glabrous. Color: Apex of 167B with tip of 187A, mid-section of 146D, and base of NN155B.

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Reproductive organs.—Androecium: Present on disc florets only. Stamen quantity: 5 per floret. Anther shape: Oblong, basifixed. Anther length: Approximately 3.0 mm. Anther color: Closest to 203B. Filament length: Approximately 3.0 mm. Filament color: 155D. Pollen amount: Abundant. Pollen color: 17A. Gynoecium: Present on disc florets only. Pistil quantity: 1 per floret. Pistil length: Approximately 9.0 mm. Stigma shape: Bifid. Stigma length: Approximately 2.0 mm. Stigma color: 187A. Style length: Approximately 7.0 mm. Style color: 145D. Ovary length: Approximately 2.0 mm. Ovary color: NN155B.

Seed and fruit production: Neither seed nor fruit production has been observed.

Disease and pest resistance: Resistance to pathogens and pests common to *Echinacea* has not been observed.

What is claimed is:

1. A new and distinct cultivar of *Echinacea* plant named 'Balsomotan', substantially as herein illustrated and described.

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FIG. 1



FIG. 2