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(54) ASTILBE PLANT NAMED 'LUCKY DAY'

(50) Latin Name: *Astilbe arendsii*Varietal Denomination: Lucky Day

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

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

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(51) **Int. Cl.**

A01H 6/80 (2018.01) *A01H 5/02* (2018.01)

(52) U.S. Cl.

(58) Field of Classification Search

(56) References Cited

PUBLICATIONS

PLUTO Plant Variety Database Sep. 19, 2020. p. 1.*

* cited by examiner

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(57) ABSTRACT

A new and distinct cultivar of *Astilbe* plant named 'Lucky Day', characterized by its compact, broadly upright and mounding plant habit; vigorous growth habit; dense and bushy appearance; dark green-colored leaves; freely and uniformly flowering habit; red purple-colored flowers on strong, tall and upright peduncles; and good container and garden performance.

2 Drawing Sheets

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Botanical designation: *Astilbe arendsii*. Cultivar denomination: 'LUCKY DAY'.

CROSS-REFERENCE TO A RELATED APPLICATION AND STATEMENT REGARDING PRIOR DISCLOSURES BY INVENTOR/APPLICANT

This application claims priority to a European Community Plant Breeders' Rights application filed on Feb. 7, 2020, application number 20200398. There have been no offers for sale anywhere in the world prior to the effective filing date of this Application and no accessibility to one of ordinary skill in the art could have been derived from the printed Plant Breeder's Rights documents.

The Inventor/Applicant asserts that no publications nor advertisements relating to sales, offers for sale or public distribution occurred more than one year prior to the effective filing date of this application. Any information about the claimed plant would have been obtained from a direct or indirect disclosure from the Inventor. Applicant claims a prior art exemption under 35 U.S.C. 102(b)(1) for disclosure and/or sales prior to the filing date but less than one year prior to the effective filing date.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Astilbe*, botanically known as *Astilbe arendsii* and hereinafter referred to by the name 'Lucky Day'.

The new *Astilbe* plant is a product of a planned breeding program conducted by the Inventor in Heemskerk, The Netherlands. The objective of the breeding program was to create new uniform and freely flowering *Astilbe* plants with attractive leaf and flower coloration.

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The new *Astilbe* plant originated from a cross-pollination in 2013 in Heemskerk, The Netherlands, of two unidentified *Astilbe arendsii* seedling selections. The new *Astilbe* plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Heemskerk, The Netherlands during the summer of 2015.

Asexual reproduction of the new *Astilbe* plant by vegetative divisions in a controlled nursery environment in Heemskerk, The Netherlands since December, 2015, has shown that the unique features of this new *Astilbe* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Astilbe* have not been observed under all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with variations in environmental conditions such as temperature and light intensity without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Lucky Day'. These characteristics in combination distinguish 'Lucky Day' as a new and distinct *Astilbe* plant:

- 1. Compact, broadly upright and mounding plant habit.
- 2. Vigorous growth habit.
- 3. Dense and bushy appearance.
- 4. Dark green-colored leaves.
- 5. Freely and uniformly flowering habit.
 - 6. Red purple-colored flowers on strong, tall and upright peduncles.
 - 7. Good container and garden performance.

Plants of the new *Astilbe* differ primarily from plants of the parent selections in plant habit as plants of the new

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Astilbe are more compact and denser than plants of the parent selections. In addition, inflorescences of plants of the new Astilbe are longer than inflorescences of plants of the parent selections.

Plants of the new *Astilbe* can be compared to plants of *5 Astilbe arendsii* 'Verslilac', disclosed in U.S. Plant Pat. No. 19,847. In side-by-side comparisons, plants of the new *Astilbe* and 'Verslilac' differ primarily in the following characteristics:

- 1. Plants of the new Astilbe are taller than plants of 10 'Verslilac'.
- 2. Inflorescences of plants of the new *Astilbe* are taller and narrower than inflorescences of plants of 'Verslilac'.
- 3. Flowers of plants of the new *Astilbe* are red purple in color whereas flowers of plants of 'Verslilac' are pink 15 in color.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the 20 overall appearance of the new *Astilbe* plant showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of 25 the new *Astilbe* plant.

The photograph on the first sheet (FIG. 1 of 2) is a side perspective view of a typical flowering plant of 'Lucky Day' grown in a container.

The photograph on the second sheet (FIG. 2 of 2) is a 30 close-up view of typical inflorescences of 'Lucky Day'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown during the spring in 13-cm containers in a coldframe in Ter Aar, The Netherlands and under cultural practices typical of commercial *Astilbe* production. During the production of the plants, day temperatures ranged from 15° C. to 30° C. and night temperatures ranged from 5° C. to 20° C. Plants were one year old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2015 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Astilbe arendsii* 'Lucky Day'. Parentage:

Female, or seed, parent.—Unidentified Astilbe arendsii seedling selection, not patented.

Male, or pollen, parent.—Unidentified Astilbe arendsii seedling selection, not patented.

Propagation:

Type.—By vegetative divisions.

Time to initiate roots.—About three weeks at tempera- 55 tures about 20° C.

Root description.—Thick, fleshy; typically brown in color, actual color of the roots is dependent on substrate composition, water quality, fertilizer type and formulation.

Rooting habit.—Freely branching; dense.

Plant description:

Plant form and growth habit.—Herbaceous perennial; compact, broadly upright and mounding plant form with inflorescences held above the foliar plane; flowering stems and leaves basal; freely flowering with

numerous basal branches developing per plant, dense and bushy; vigorous growth habit; and freely and uniformly flowering habit.

Growth rate.—Moderately rapid; from divisions, about three months are required to produce fully-grown flowering plants in containers.

Plant height (soil level to top of foliar plane).—About 33.7 cm.

Plant height (soil level to top of inflorescences).— About 54.5 cm.

Plant width (spread).—About 48.4 cm.

About 3.5 mm. Internode length: About 5.6 cm. Strength: Strong. Aspect: Erect to about 5° from vertical. Texture and luster: Sparsely pubescent; slightly glossy. Color, developing: Close to 146C; surfaces exposed to the sun are slightly tinged with close to 178B to 178C. Color, developed: Close to 146C; surfaces exposed to the sun are moderately to strongly tinged with close to 178B.

Leaf description:

Arrangement.—Alternate; biternately compound; on average, about 19 leaflets per leaf.

Leaf length (excluding petiole).—About 20 cm.

Leaf width.—About 18.3 cm.

Terminal leaflet length.—About 8.8 cm.

Terminal leaflet width.—About 4.1 cm.

Lateral leaflet length.—About 5.6 cm.

Lateral leaflet width.—About 2.5 cm.

Leaf shape, in outline.—Broadly ovate to broadly rhomboidal.

Leaflet shape.—Elliptic to narrowly ovate.

Leaflet apex.—Acuminate.

Leaflet base.—Truncate to short attenuate.

Leaflet margin.—Biserrate.

Leaflet texture and luster, upper and lower surfaces.—
Sparsely pubescent; moderately glossy.

Leaflet venation pattern.—Pinnate.

Leaflet color.—Developing leaflets, upper surface: Close to 144A. Developing leaflets, lower surface: Close to 144B. Fully expanded leaflets, upper surface: Close to between NN137A and 147A; venation, close to 144B. Fully expanded leaflets, lower surface: Close to 146A; venation, close to 151D.

Leaf petiole length.—About 9.5 cm.

Leaf petiole diameter.—About 2 mm.

Leaf and leaflet petiole strength.—Strong.

Leaf and leaflet petiole texture and luster, upper and lower surfaces.—Sparsely pubescent; moderately glossy.

Leaf and leaflet petiole color, upper surface.—Close to 145A strongly tinged with close to 178B.

Leaf and leaflet petiole color, lower surface.—Close to 145A.

Flower description:

Flower type and flowering habit.—Single rotate flowers arranged on terminal compound panicles; flowers face upright, outward or downward depending on position on the inflorescence; panicles conical in shape; freely and uniformly flowering habit with about 5,000 flowers developing per inflorescence and about 25,000 flowers developing per plant during the flowering season.

Fragrance.—Strong; moldy-sweet and pleasant.

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Natural flowering season.—Plants begin flowering about 13 weeks after planting; continuously flowering from late spring until late summer in The Netherlands.

Postproduction longevity.—Flowers last about ten days on the plant; flowers not persistent.

Flower buds.—Height: About 2 mm. Diameter: About 1.25 mm. Shape: Broadly elliptic. Texture and luster: Smooth, glabrous; matte. Color: Sepals, close to 148A to 148B and petals, close to 61A.

Inflorescence height.—About 24.8 cm.

Inflorescence diameter.—About 13.4 cm.

Flower diameter.—About 7 mm.

Flower depth.—About 2.5 mm.

Petals.—Quantity per flower: Typically five in a single whorl. Length: About 3.5 mm. Width: About 0.75 mm. Shape: Oblanceolate. Apex: Obtuse. Base: Narrowly cuneate. Margin: Entire; not undulate. Texture and luster, upper and lower surfaces: Smooth, glabrous; matte. Color: Developing petals, upper and lower surfaces: Close to 70B. Fully expanded petals, upper and lower surfaces: Close to 67B; venation, close to 67B; with development, color becoming closer to 64C.

Sepals.—Quantity per flower: Typically five in a single whorl, lower 30% fused towards the base forming a campanulate- shaped calyx. Length: About 1.5 mm. Width: About 0.8 mm. Shape: Ovate. Apex: Bluntly acute. Base: Cuneate, fused. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; matte. Color: Developing sepals, upper surface: Close to 148A to 148B; at the margins, close to 61A. Developing sepals, lower surface: Close to 148B; at the margins, close to 61B. Fully expanded 35

sepals, upper and lower surfaces: Close to 150D; at the margins, close to 61B; colors do not change with development.

Peduncles.—Length: About 24.5 cm. Diameter: About 2.5 mm. Angle: Mostly erect. Strength: Strong. Texture and luster: Moderately pubescent; slightly glossy. Color: Close to 183A to 183B and 53C.

Pedicels.—Length: About 1.5 mm. Diameter: About 0.5 mm. Angle: About 40° from peduncle axis. Strength: Moderately strong. Texture and luster: Sparsely pubescent; matte. Color: Close to 63C.

Reproductive organs.—Stamens: Quantity per flower: Typically ten; anthers basifixed. Filament length: About 1 mm. Filament color: Close to 63B. Anther shape: Broadly ovate. Anther length: About 0.5 mm. Anther diameter: About 0.25 mm. Anther color: Close to 186D. Pollen amount: Scarce. Pollen color: Close to 156D. Pistils: Quantity per flower: Two. Pistil length: About 1.75 mm. Stigma diameter: About 0.1 mm. Stigma shape: Club-shaped. Stigma color: Close to 59C. Style length: About 1.5 mm. Style color: Close to 70C. Ovary color: Close to 70C. Seeds and fruits.—To date, seed and fruit development

have not been observed on plants of the new *Astilbe*. Pathogen & pest resistance: To date, plants of the new *Astilbe* have not been noted to be resistant to pathogens and pests common to *Astilbe* plants.

Garden performance: Plants of the new *Astilbe* have been observed to have good garden performance and tolerate rain, wind, temperatures ranging from about -25° to 35° C. and to be suitable for USDA Hardiness Zones 5 through 10.

It is claimed:

1. A new and distinct *Astilbe* plant named 'Lucky Day' as illustrated and described.

* * * *

FIG. 1



FIG. 2

