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Hooijman

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(54) **ROSE PLANT NAMED 'ESM R031'**

(50) Latin Name: ***Rosa hybrida***
Varietal Denomination: **ESM R031**

(75) Inventor: **Aloysius A. J. Hooijman**, Aalsmeer (NL)

(73) Assignee: **Esmeralda Breeding B.V.**, Aalsmeer (NL)

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See application file for complete search history.

Primary Examiner — Annette Para
(74) *Attorney, Agent, or Firm* — C. A. Whealy

(57) **ABSTRACT**

A new and distinct cultivar of Rose plant named 'ESM R031', characterized by its upright, long and strong flowering stems; vigorous growth habit and high productivity; relatively large red-colored flowers that are typically grown as spray types; excellent postproduction longevity; and relative tolerance to Powdery Mildew.

1 Drawing Sheet

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Botanical designation: *Rosa hybrida.*
Cultivar denomination: 'ESM R031'.

BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of Rose plant, botanically known as *Rosa hybrida*, which is commercially produced as a cut flower Rose plant and hereinafter referred to by the name 'ESM R031'.

The new Rose plant is a product of a planned breeding program conducted by the Inventor in El Quinche, Pichincha, Ecuador. The objective of the breeding program was to develop new cut flower Rose varieties with unique and attractive flowers and excellent postproduction longevity.

The new Rose plant originated from a cross-pollination made by the Inventor in March, 2005 of a proprietary Rose selection identified as Line 90, not patented, as the female, or seed, parent with a proprietary Rose selection identified as Line 42, not patented, as the male, or pollen, parent. The new Rose plant was discovered and selected by the Inventor as a single flowering plant within the progeny of the stated cross-pollination in a controlled greenhouse environment in El Quinche, Pichincha, Ecuador in November, 2006.

Asexual reproduction of the new Rose plant by bud grafting in El Quinche, Pichincha, Ecuador since February, 2007 has shown that the unique features of this new Rose plant are stable and reproduced true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

Plants of the new Rose have not been observed under all possible environmental conditions and cultural practices. The phenotype of the new Rose plant 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 'ESM R031'.

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These characteristics in combination distinguish 'ESM R031' as a new and distinct Rose plant:

1. Upright, long and strong flowering stems.
2. Vigorous growth habit and high productivity.
3. Relatively large red-colored flowers that are typically grown as spray types.
4. Excellent postproduction longevity.
5. Relative tolerance to Powdery Mildew.

Plants of the new Rose differ from plants of the female parent selection in the following characteristics:

1. Plants of the new Rose are more vigorous and larger than plants of female parent selection.
2. Plants of the new Rose have larger flowers than plants of female parent selection.
3. Plants of the new Rose and the female parent selection differ in flower color as plants of the female parent selection have light pink-colored flowers.

Plants of the new Rose differ from plants of the male parent selection in the following characteristics:

1. Plants of the new Rose are more vigorous and larger than plants of the male parent selection.
2. Plants of the new Rose and the male parent selection differ in flower color as plants of the male parent selection have darker red-colored flowers.

Plants of the new Rose can be compared to plants of Rose 'Babe', not patented. In side-by-side comparisons conducted in El Quinche, Pichincha, Ecuador, plants of the new Rose differed from plants of 'Babe' in the following characteristics:

1. Plants of the new Rose were more vigorous and larger than plants of 'Babe'.
2. Plants of the new Rose had shorter internodes than plants of 'Babe'.
3. Plants of the new Rose had larger leaflets than plants of 'Babe'.
4. Plants of the new Rose flowered later than plants of 'Babe'.
5. Plants of the new Rose had larger sprays with more flowers per spray than plants of 'Babe'.

6. Plants of the new Rose had larger flowers than plants of 'Babe'.
7. Plants of the new Rose and 'Babe' differed in flower color as plants of 'Babe' had light orange-colored flowers.
8. Plants of the new Rose had shorter peduncles than plants of 'Babe'.
9. Plants of the new Rose are more tolerant to Powdery Mildew than plants of 'Babe'.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new Rose 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 the new Rose plant. The photograph at the left of the sheet comprises a side perspective view of typical flowering stem of 'ESM R031'.

The photograph at the lower left is a close-up view of a typical flower of 'ESM R031'.

The photograph at the upper right is a close-up view of a typical spray of flowers of 'ESM R031'.

The photographs at the bottom right of the sheet are close-up views of the upper and lower surfaces of typical leaves of 'ESM R031'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs, following observations and measurements describe plants grown in 10-liter containers in a polyethylene-covered greenhouse in El Quinche, Pichincha, Ecuador and under typical hydroponic Rose production practices. Plants were pinched about 13 to 14 weeks after planting. Plants were 3.5 years old when the photographs and detailed description were taken. During the production of the plants, day temperatures ranged from 16° C. to 30° C., night temperatures ranged from 12° C. to 16° C. and light levels ranged from 800 to 1,200 foot-candles. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2001 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Rosa hybrida* 'ESM R031'.

Parentage:

Female, or seed, parent.—Proprietary seedling selection of Rosa hybrida identified Line 90, not patented.

Male, or pollen, parent.—Proprietary seedling selection of Rosa hybrida identified Line 42, not patented.

Propagation:

Type.—By bud grafting.

Time to initiate roots.—About seven to ten days at 26° C. to 30° C.

Time to produce a rooted young plant.—About four to five weeks at 22° C. to 26° C.

Root description.—Fibrous, medium in thickness; close to N199B and N200A in color.

Rooting habit.—Moderately freely branching; medium density.

Plant description:

Plant and growth habit.—Perennial shrub; upright, long and strong flowering stems; typically grown as a spray type cut flower; vigorous growth habit.

Branching habit.—Freely basal branching habit; highly productive with about 10.8 flowering stems developing per plant per year.

Plant height.—About 185 cm.

Plant width (*spread*).—About 77 cm.

Lateral branches (*peduncles*).—Length: About 91.5 cm. Diameter: About 7 mm. Internode length: About 4.3 cm. Texture: Smooth, glabrous; older stems, woody. Color: Close to 146A. Thorns: Density: Medium density. Shape: Triangular with sharp acuminate apices; slightly incurved. Height: About 9 mm. Length, at base: About 9 mm. Color, immature: Close to 173A. Color, mature: Close to 164B and 174A.

Foliage description:

Arrangement.—Alternate; compound with typically five to seven leaflets per leaf.

Leaf length.—About 20.5 cm.

Leaf width.—About 13.1 cm.

Terminal leaflet length.—About 7.1 cm.

Terminal leaflet width.—About 4.6 cm.

Lateral leaflet length.—About 6.2 cm.

Lateral leaflet width.—About 4 cm.

Leaflet shape.—Ovate.

Leaflet apex.—Acute.

Leaflet base.—Attenuate.

Leaflet margin.—Serrate.

Leaflet texture, upper and lower surfaces.—Smooth, glabrous; coriaceous.

Leaflet venation pattern.—Pinnate.

Leaflet color.—Developing leaflets, upper surface: Close to 139A tinted with close to 200A. Developing leaflets, lower surface: Close to 146B tinted with close to 200D. Fully expanded leaflets, upper surface: Close to 139A; venation, close to 146B. Fully expanded leaflets, lower surface: Close to 147B; venation, close to 146C.

Petioles, leaves.—Length: About 2.2 cm. Diameter: About 2 mm. Texture, upper surface: Prickly. Texture, lower surface: Smooth, glabrous. Color, upper surface: Close to 146C tinted with close to 187B. Color, lower surface: Between 146A and 144B.

Petioles, leaflets.—Length: About 3.1 cm. Diameter: About 1.2 mm. Texture, upper surface: Prickly. Texture, lower surface: Smooth, glabrous. Color, upper surface: Close to 146A to 146C. Color, lower surface: Close to 146B to 146C.

Stipules.—Arrangement and appearance: Two, adnate to the petiole, leafy in appearance. Length: About 2.8 cm. Width: About 2.5 mm. Shape: Roughly deltoid. Apex: Acuminate. Base: Truncate. Margin: Serrate. Texture, upper and lower surfaces: Pubescent. Venation pattern: Pinnate. Color, upper surface: Close to 137A. Color, lower surface: Close to 146A.

Flower description:

Flower type and flowering habit.—Symmetrical rosette flowers; flowers typically grown as spray types with about seven flowers developing per spray; flowers face upright.

Flowering season.—Plants of the new Rose flower year-round under greenhouse conditions; early flowering habit, plants begin flowering about 85 days after pinching; in the garden, optimal flowering from spring through autumn; flowering intermittent.

Flower diameter.—About 8 cm.

Flower depth (*height*).—About 3.7 cm.

Flower longevity on plant.—About four weeks; flowers persistent.

Flower longevity as a cut flower.—Excellent postproduction longevity, flowers last about ten days.

Fragrance.—Very faintly fragrant, pleasant.

Spray height.—About 28 cm.

Spray width.—About 21 cm.

Flower buds.—Shape: Ovoid. Length: About 3.7 cm. Diameter: About 3.3 cm. Color: Close to 144A tinted with close to 187B.

Petals.—Quantity: About 36 to 38 per flower; petals imbricate. Length: About 3.4 cm. Width: About 3.9 cm. Shape: Nearly round; transversely ovate. Apex: Blunt to shortly acute. Base: Obtuse. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; papery to coriaceous. Color: When opening, upper surface: Close to 42A and 43B; towards the base, close to 160C. When opening, lower surface: Close to 46C; towards the base, close to 157A. Fully opened, upper surface: Close to 43A and 45B; towards the base, close to 157C. Fully opened, lower surface: Close to 52A; towards the base, close to 157C.

Petaloids.—Quantity: About four; petaloids whorled. Length: Variable. Width: Variable. Shape: Irregularly shaped. Apex: Blunt to shortly acute. Base: Obtuse. Margin: Entire or uneven. Texture, upper and lower surfaces: Smooth, glabrous; papery to coriaceous. Color: When opening and fully opened, upper surface: Close to 44A and 45A; towards the base and occasionally diffusing towards the center, close to 160A and 155A. When opening and fully opened, lower surface: Combination of close to 43A and 157B.

Sepals.—Quantity per flower: Typically five in a single whorl. Length: About 3.2 cm. Width: About 1.1 cm. Shape: Roughly deltoid. Apex: Tapered. Base: Truncate. Margin: Entire; glandular and ciliate. Texture, upper and lower surfaces: Leathery. Color: When opening, upper surface: Close to 146B to 146D. When opening, lower surface: Close to 146B tinted with close to 175A. Fully opened, upper surface: Between 146B and 144C tinted with close to 181B. Fully opened, lower surface: Between 146A and N144C tinted with close to 175A.

Peduncles.—Length: About 3.6 cm. Diameter: About 3.2 mm. Angle: About 42° from vertical. Strength: Strong. Texture: Smooth, glabrous. Color: Between 144A and 146A.

Reproductive organs.—Stamens: Quantity: About 160 per flower. Anther length: About 2.4 mm. Anther shape: Reniform. Anther color: Close to N163D and 160D. Filament color: Close to 160B and 35C. Pollen amount: Abundant. Pollen color: Close to N167A. Pistils: Quantity: About 109 per flower. Pistil length: About 1.3 cm. Stigma shape: Broadly reniform. Stigma color: Close to 160A. Style length: About 1 cm. Style color: Close to 160D. Receptacle height: About 1.1 cm. Receptacle diameter: About 1 cm. Receptacle shape: Cup-shaped. Receptacle texture: Smooth, glabrous. Receptacle color: Close to 144A. Fruits: Quantity per flower: One. Length: About 2.5 cm. Diameter: About 1.6 cm. Texture: Smooth, glabrous. Color: Close to 146D tinted with close to 163A. Seeds: Quantity per fruit: About 16. Length: About 6.7 mm. Diameter: About 4.5 mm. Texture: Smooth, glabrous. Color: Close to 154D tinted with close to 46A.

Pathogen & pest resistance: Plants of the new Rose have been observed to be relatively tolerant to Powdery Mildew. Plants of the new Rose have not been observed to be resistant to pests and other pathogens common to Rose plants.

Temperature tolerance: Plants of the new Rose have been observed to tolerate temperatures ranging from 0° C. to 35° C.

It is claimed:

1. A new and distinct Rose plant named 'ESM R031' as illustrated and described.

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