



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

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(54) **ASTER PLANT NAMED ‘ESMHOLANDA’**

(50) Latin Name: *Aster hybrida*
Varietal Denomination: **Esmholanda**

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

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

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patent is extended or adjusted under 35
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See application file for complete search history.

Primary Examiner—Kent Bell

(74) *Attorney, Agent, or Firm*—C. A. Whealy

(57) **ABSTRACT**

A new and distinct cultivar of cut flower *Aster* plant named
‘Esmholanda’, characterized by its strong and erect flower-
ing stems; symmetrical branching habit with long lateral
branches; dark green-colored foliage; early, uniform and
freely flowering habit; daisy-type inflorescences with light
violet-colored ray florets that resist fading; flat and straight
ray florets; and excellent postproduction longevity.

1 Drawing Sheet

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Botanical classification/cultivar designation: *Aster*
hybrida cultivar Esmholanda.

BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct culti-
var of cut flower *Aster* plant, botanically known as *Aster*
hybrida and hereinafter referred to by the name ‘Esm-
holanda’.

The new *Aster* is a product of a planned breeding program
conducted by the Inventor in El Quinche, Pichincha, Ecua-
dor. The objective of the breeding program is to create new
cut flower *Aster* cultivars with durable leaves, strong and
long stems, desirable floret colors and good postproduction
longevity.

The new *Aster* originated from a cross-pollination made
by the Inventor in El Quinche, Pichincha, Ecuador in
February, 2000, of a proprietary *Aster* selection identified as
Line 51, not patented, as the female, or seed, parent with an
unknown *Aster* selection, not patented, as the male, or
pollen, parent. The new *Aster* was discovered and selected
by the Inventor as a single flowering plant within the
progeny of the stated cross-pollination grown in a controlled
environment in El Quinche, Pichincha, Ecuador. The selec-
tion of this plant was based on its durable foliage, strong and
long stems and desirable inflorescence form and attractive
ray floret color.

Asexual reproduction of the new *Aster* by vegetative tip
cuttings was first conducted in El Quinche, Pichincha,
Ecuador in January, 2001. Asexual reproduction by cuttings
has shown that the unique features of this new *Aster* are
stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The cultivar Esmholanda has not been observed under all
possible environmental conditions. The phenotype may vary
somewhat with variations in environment such as
temperature, daylength, and/or light level, 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 ‘Esm-
holanda’. These characteristics in combination distinguish
‘Esmholanda’ as a new and distinct cut flower *Aster*:

1. Strong and erect flowering stems.
2. Symmetrical branching habit with long lateral
branches.
3. Dark green-colored foliage.
4. Early, uniform and freely flowering habit.
5. Daisy-type inflorescences with light violet-colored ray
florets that resist fading.
6. Flat and straight ray florets.
7. Excellent postproduction longevity.

Plants of the new *Aster* can be compared to plants of the
female parent selection. Plants of the new *Aster* differ
primarily from plants of the female parent selection in ray
floret coloration as plants of the female parent selection have
white-colored ray florets. In addition, plants of the new *Aster*
are taller than plants of the female parent selection.

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

1. Plants of the new *Aster* were more vigorous than plants
of the cultivar Chantal.
2. Plants of the new *Aster* had longer leaves than plants of
the cultivar Chantal.
3. Leaves of plants of the new *Aster* were linear in shape
whereas leaves of plants of the cultivar Chantal were
lanceolate in shape.
4. Inflorescences of plants of the new *Aster* lasted longer
than inflorescences of plants of the cultivar Chantal.
5. Inflorescences of plants of the new *Aster* had more ray
florets than inflorescences of plants of the cultivar
Chantal.
6. Ray florets of plants of the new *Aster* were slightly
lighter in color than ray florets of plants of the cultivar
Chantal.

7. Inflorescences of plants of the new *Aster* had smaller disc ray florets than inflorescences of plants of the cultivar Chantal.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

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

The photograph at the top of the first sheet comprises a side perspective view of a typical flowering stem of 'Esmholanda'.

The photograph on the second sheet is a close-up view of a typical inflorescence of 'Esmholanda'.

DETAILED BOTANICAL DESCRIPTION

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. The aforementioned photographs, following observations and measurements describe plants grown and flowered during the summer in El Quinche, Pichincha, Ecuador, in an outdoor nursery and under conditions which approximate those generally used in commercial cut flower *Aster* production. During the production of these plants, day temperatures ranged from 12 to 30° C. and night temperatures ranged from 5 to 12° C. Plants were about four to six months from planting rooted young plants when the photographs and the botanical description were taken.

Botanical classification: *Aster hybrida* cultivar Esmholanda.
Parentage:

Female, or seed, parent.—Proprietary *Aster hybrida* selection identified as Line 51, not patented.

Male, or pollen, parent.—Unknown *Aster hybrida* selection, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots.—About 12 to 16 days at 17 to 25° C.

Time to produce a rooted young plant.—About 21 to 25 days at 17 to 25° C.

Root description.—Fine, fibrous; 161B in color.

Rooting habit.—Freely branching.

Plant description:

Appearance.—Herbaceous daisy-type cut flower *Aster*. Flowering stems upright and strong. Vigorous. Symmetrical branching habit with long lateral branches.

Plant height.—About 130 cm.

Plant width.—About 28 cm.

Lateral branches.—Quantity per plant: About 18. Length: About 66 cm. Diameter: About 3.1 mm. Internode length: About 2.8 cm. Strength: Strong. Texture: Smooth, pubescent; waxy. Color: 144A.

Foliage description.—Arrangement: Alternate, simple; sessile. Length: About 15.2 cm. Width: About 1.8 cm. Shape: Linear. Apex: Acute. Base: Sheathed; lobes, slightly cordate. Margin: Slightly dentate. Texture, upper and lower surfaces: Glabrous, smooth; waxy. Color: Developing foliage, upper surface: 137A to 147A. Developing foliage, lower surface: 137A. Fully expanded foliage, upper surface: 137A. Fully expanded foliage, lower surface:

137A to 146B. Venation, upper surface: 144B. Venation, lower surface: 146C.

Inflorescence description:

Appearance.—Daisy-type inflorescence form with narrowly elliptic-shaped ray florets. Inflorescences terminal or axillary. Disc and ray florets develop acropetally on a capitulum. Inflorescences not fragrant. Inflorescences persistent. Inflorescences face mostly upright. Uniform and freely flowering habit.

Flowering response.—Plants flower year-round in Ecuador. Plants begin flowering about 14 to 15 weeks after planting.

Postproduction longevity.—Inflorescences maintain good color and substance for about two weeks as a cut flower and about 25 days on the plant.

Quantity of inflorescences.—About 38 inflorescences develop per lateral branch.

Inflorescence bud.—Height: About 6.6 mm. Diameter: About 5.3 mm. Shape: Nearly globose. Color: 137C to 143C.

Inflorescence size.—Diameter: About 3.6 cm. Depth (height): About 1.2 cm. Diameter of disc: About 1.5 cm. Receptacle diameter: About 1 cm. Receptacle height: About 7 mm.

Ray florets.—Number of ray florets per inflorescence/arrangement: About 44 in arranged in about two whorls. Length: About 1.8 cm. Width: About 3 mm. Shape: Narrowly elliptic. Apex: Obtuse with emarginations. Base: Attenuate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Orientation: Initially upright, then horizontal. Aspect: Mostly straight. Color: When opening, upper surface: N87C. When opening, lower surface: N82D. Fully opened, upper surface: N88C to N87C; color becoming closer to 85B with development; ray florets resist fading. Fully opened, lower surface: 85B to 85C.

Disc florets.—Arrangement: Massed at center of receptacle. Number of disc florets per inflorescence: About 45. Length: About 5.6 mm. Diameter, apex: About 1.6 mm. Diameter, base: About 0.7 mm. Shape: Tubular, salverform, elongated. Apex: Five lobes; lobes acute. Color, immature: 153C. Color, mature: Apex: 151B. Mid-section and base: 145C.

Phyllaries.—Quantity per inflorescence: About 39. Length: About 6 mm. Width: About 1.3 mm. Shape: Narrowly triangular. Apex: Acute. Base: Truncate. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper surface: 137B. Color, lower surface: 143C.

Peduncles.—Length, terminal peduncle: About 1.4 cm. Length, fourth peduncle: About 5 mm. Length, seventh peduncle: About 8 mm. Diameter: About 1 mm. Aspect: Erect to about 35° from vertical. Strength: Strong. Texture: Pubescent. Color: 137B.

Reproductive organs.—Androecium: Present on disc florets only. Quantity of stamens per disc floret: Four. Anther shape: Linear. Anther length: About 1.3 mm. Anther color: 9A. Pollen amount: Scarce. Pollen color: 9A. Gynoecium: Present on both ray and disc florets. Quantity per floret: One. Pistil length: About 8 mm. Stigma shape: Bilobed; lobes linear. Stigma color: 1C to 150D. Style length: About 5.4 mm. Style color: 145D to 157A. Ovary color: 157C.

Seed.—Length: With pappus, about 5 mm; without pappus, about 3 mm. Diameter: About 1 mm. Color: Dried, 199A.

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Disease/pest resistance: Resistance to pathogens and pests common to *Asters* has not been observed on plants grown under commercial greenhouse conditions.

Temperature tolerance: Plants of the new *Aster* have been observed to tolerate temperatures from about 7 to about 30° C.

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It is claimed:

1. A new and distinct cultivar of cut flower *Aster* plant named 'Esmholanda', as illustrated and described.

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