



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

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(54) **CHRYSANTHEMUM PLANT NAMED**
‘YOSPIRIT LAKE’

(50) Latin Name: *Chrysanthemum*×*morifolium*
Varietal Denomination: **Yospirit Lake**

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

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named
‘Yospirit Lake’, characterized by its upright and uniformly
mounded plant habit; freely branching and vigorous growth
habit; dark green-colored foliage; uniform flowering
response; early flowering habit, seven-week response time;
freely flowering habit; daisy-type inflorescences with purple
and white bi-colored ray florets; and good postproduction
longevity.

1 Drawing Sheet

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Botanical designation: *Chrysanthemum*×*morifolium*.
Cultivar denomination: ‘Yospirit Lake’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *Chrysanthemum* plant, botanically known as
Chrysanthemum×*morifolium*, commercially grown as a pot-
ted *Chrysanthemum* and hereinafter referred to by the name
‘Yospirit Lake’.

The objective of the breeding program is to create new
potted *Chrysanthemum* cultivars that are suitable for year-
round production with freely branching habit, uniform plant
growth habit, good vigor, desirable inflorescence form and
florete colors, fast response time and excellent postproduction
longevity.

The new *Chrysanthemum* originated from a cross-
pollination made by the Inventor in March, 2003, in Salinas,
Calif. of a proprietary *Chrysanthemum*×*morifolium* seedling
selection identified as code number YB-4859, not patented,
as the female, or seed, parent with a proprietary
Chrysanthemum×*morifolium* seedling selection identified as
code number YB-A5305, not patented, as the male, or
pollen, parent. The new *Chrysanthemum* was discovered and
selected in December, 2003, by the Inventor as a single flow-
ering plant within the progeny of the stated cross-pollination
in a controlled environment in Fort Myers, Fla. The selection
of this plant was based on its uniform plant growth habit,
freely branching habit, vigor, desirable inflorescence form
and florete colors, fast response time and excellent postpro-
duction longevity.

Asexual reproduction of the new *Chrysanthemum* by veg-
etative tip cuttings was first conducted in Fort Myers, Fla. in
March, 2004. Asexual reproduction by cuttings has shown
that the unique features of this new *Chrysanthemum* are
stable and reproduced true to type in successive generations.

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SUMMARY OF THE INVENTION

Plants of the cultivar Yospirit Lake have not been observed
under all possible environmental conditions. The phenotype
may vary somewhat with variations in environment such as
temperature, daylength 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 ‘Yospirit
Lake’. These characteristics in combination distinguish
‘Yospirit Lake’ as a new and distinct potted *Chrysanthemum*
cultivar:

1. Upright and uniformly mounded plant habit.
2. Freely branching and vigorous growth habit.
3. Dark green-colored foliage.
4. Uniform flowering response.
5. Typically grown as a center-budded or as natural spray
type.
6. Early flowering habit, seven-week response time.
7. Freely flowering habit.
8. Daisy-type inflorescences with red purple and white
bi-colored ray florets.
9. Good postproduction longevity with plants maintaining
good substance and color for about three weeks in an
interior environment.

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

1. Plants of the new *Chrysanthemum* have larger inflores-
cences than plants of the female parent selection.
2. Plants of the new *Chrysanthemum* flower about one
week earlier than plants of the female parent selection.
3. Plants of the new *Chrysanthemum* and the female par-
ent selection differ in ray floret color as plants of the
female parent selection have light purple and white
bi-colored ray florets.

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

1. Plants of the new *Chrysanthemum* flower about one week earlier than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* flower more uniformly than plants of the male parent selection.

Plants of the new *Chrysanthemum* can be compared to plants of the *Chrysanthemum* cultivar Yofort Wayne, disclosed in U.S. Plant Pat. No. 11,758. In side-by-side comparisons conducted in Fort Myers, Fla., plants of the new *Chrysanthemum* differed from plants of the cultivar Yofort Wayne in the following characteristics:

1. Plants of the new *Chrysanthemum* were more mounded than and not as upright as plants of the cultivar Yofort Wayne.
2. Plants of the new *Chrysanthemum* flowered about one week earlier than plants the cultivar Yofort Wayne.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Chrysanthemum*. These photographs show 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 *Chrysanthemum*.

The photograph at the bottom of the sheet comprises a side perspective view of typical flowering plants of 'Yospirit Lake'.

The photograph at the top of the sheet in a close-up view of typical inflorescences of 'Yospirit Lake'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown in Leamington, Ontario, Canada during the autumn in a glass-covered greenhouse and under conditions and practices which approximate those generally used in commercial potted *Chrysanthemum* production. During the production of the plants, day temperatures ranged from about 21° C. to 27° C., night temperatures ranged from about 17° C. to 19° C. and light levels ranged from 4,000 to 6,000 foot candles. Four unrooted cuttings were directly stuck in 15 cm-containers, exposed to long day/short night conditions, and pinched about two weeks later. At that time, the photoinductive short day/long night treatments were started. Plants used in the photographs and for the description were center-budded and were about eleven weeks old. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. Observations and measurements were taken from a single plants.

Botanical classification: *Chrysanthemum*×*morifolium* cultivar Yospirit Lake.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum*×*morifolium* identified as code number YB-4859, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum*×*morifolium* identified as code number YB-A5305, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots.—About four days at temperatures of about 21° C.

Time to produce a rooted young plant.—About ten days at temperatures of about 21° C.

Root description.—Fine to thick, fibrous; white in color.

Rooting habit.—Freely branching; moderately dense.

Plant description:

Appearance.—Herbaceous daisy-type potted *Chrysanthemum* typically grown as a center-budded or as a natural spray type. Stems upright and outwardly spreading giving a uniformly mounded appearance to the plant. Freely branching habit, about four lateral branches develop after removal of terminal apex (pinching); dense and full plant habit. Strong and vigorous growth habit.

Plant height.—About 19.5 cm.

Plant width.—About 16 cm.

Lateral branches.—Length: About 16 cm. Diameter: About 4 mm. Internode length: About 1.4 cm. Strength: Strong. Texture: Pubescent. Color: 147B.

Foliage description:

Arrangement.—Alternate, simple.

Length.—About 5.1 cm.

Width.—About 3.5 cm.

Shape.—Palmately lobed.

Apex.—Cuspidate.

Base.—Attenuate.

Margin.—Palmately lobed, sinuses between lateral lobes mostly parallel.

Texture, upper and lower surfaces.—Fine pubescence; veins prominent on lower surface.

Color.—Developing foliage, upper surface: 137A. Developing foliage, lower surface: 137C. Fully expanded foliage, upper surface: 147A; venation, 147B. Fully expanded foliage, lower surface: 147B; venation, 147B.

Petiole.—Length: About 6 mm. Diameter: About 4 mm. Texture, upper and lower surfaces: Pubescent. Color, upper and lower surfaces: Close to 147B.

Inflorescence description:

Appearance.—Daisy-type inflorescence form with ligulate-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets arranged acropetally on a capitulum. Inflorescence faintly fragrant, typical of *Chrysanthemum*. Typically grown as a center-budded or as a natural spray type.

Flowering response.—Under natural conditions, plants flower in the autumn/winter in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Early flowering habit; plants exposed to two weeks of long day/short night conditions followed by photoinductive short day/long night conditions flower about seven weeks later.

Postproduction longevity.—Inflorescences maintain good color and substance for about three weeks in an interior environment.

Quantity of inflorescences.—Freely flowering, about 15 inflorescences develop per plant.

Inflorescence bud.—Height: About 1.8 cm. Diameter: About 1.1 cm. Shape: Ovoid. Color: Close to 183D.

Inflorescence size.—Diameter: About 7.4 cm. Depth (height): About 1.8 cm. Diameter of disc: About 1.2 cm. Receptacle height: About 7 mm. Receptacle diameter: About 1.7 cm. Receptacle color: 146B.

Ray florets.—Shape: Ligulate. Orientation: Initially upright, then about 30° from vertical, eventually perpendicular to peduncle. Aspect: Initially incurved, then mostly flat. Length: About 4.2 cm. Width: About 1 cm. Apex: Emarginate. Base: Attenuate; short corolla tube. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; velvety. Number of ray florets per inflorescence: About 20 arranged in about two whorls. Color: When opening, upper surface: Close to 71A. When opening, lower surface: Close to 186B to 186C. Fully opened, upper surface: Close to 71A; towards the basal margins, close to 71C; longitudinal stripes and towards the base, close to 155D. Fully opened, lower surface: Close to 155D; center and towards the apex, tinted with close to 186B to 186D.

Disc florets.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 7 mm. Width: About 2 mm. Number of disc florets per inflorescence: About 116. Color, Immature: Apex: Close to 150B. Mid-section: Close to 145D. Base: Close to 145D. Color, mature: Apex: Close to 1A. Mid-section: Close to 145D. Base: Close to 145D.

Phyllaries.—Number of phyllaries per inflorescence: About 16 arranged in about two whorls. Length: About 5 mm. Width: About 3 mm. Shape: Elliptical. Apex: Acute. Base: Truncate. Margin: Entire.

Texture, upper surface: Smooth, waxy. Texture, lower surface: Pubescent. Color, upper surface: Close to 146B. Color, lower surface: Close to 146A.

Peduncles.—Length: First peduncle: About 3.7 cm. Fourth peduncle: About 4.8 cm. Diameter (first peduncle): About 1.5 mm. Angle: About 45° from vertical. Strength: Strong, flexible. Texture: Pubescent. Color: Close to 148A.

Reproductive organs.—Androecium: Present on disc florets only. Filament length: About 2 mm. Filament color: Close to 145D. Anther shape: Narrowly oblong. Anther length: About 2 mm. Anther color: Close to 15B. Pollen amount: Scarce. Pollen color: Close to 15B. Gynoecium: Present on both ray and disc florets. Pistil length: About 7 mm. Stigma shape: Bi-parted. Stigma color: Close to 2A. Style length: About 3.5 mm. Style color: Close to 145D. Ovary color: Close to 157A.

Seed/fruit.—Seed and fruit production has not been observed.

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

Temperature tolerance: Plants of the new *Chrysanthemum* have demonstrated good tolerance to low temperatures of about 5° C. and high temperatures of about 38° C.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named ‘Yospirit Lake’ as illustrated and described.

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