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(54) **CHRYSANTHEMUM PLANT NAMED**
'GOLDEN ALLISON'

(75) Inventor: **Cornelis P. Vandenberg**, Salinas, CA
(US)

(73) Assignee: **Yoder Brothers, Inc.**, Barberton, OH
(US)

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patent is extended or adjusted under 35
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(58) **Field of Search** **Plt./289**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,616,099 A * 10/1986 Sparkes 47/58

OTHER PUBLICATIONS

Shukla, et al., 1993, "Mutation studies on early and late
varieties of garden chrysanthmums", J. Nuclear Agric. Biol.,
22(3-4): 138-142.*

Broertjes et al., 1980, "A mutant of a mutant of a . . .
Irradiation of progressive radiation induced mutants in a
mutation breeding programme with *Chysanthemum morifo-*
lium", Euphytica, 29:525-530.*

Gosling, ed., 1979, "The Chrysanthemum Manual—6th edi-
tion", The National Chrysanthemum Society, London, Essex
Telegraph Press, Ltd. pp. 329-336.*

Broetjes, et al., 1978, "Application of Mutation Breeding
Methods in the Improvement of Vegetatively Propagated
Crops", Elsevier Sci. Pub. Co., New York, pp. 162-175.*

Searle, et al., 1968, "Chrysanthemums the Year Round",
Blanford Press, London, pp. 27-29, 320-327.*

Chan, 1966, "Chrysanthemum and rose mutations induced
by x-rays", Am. Soc. Hort. Sci. Proc., pp. 613-620.*

Broertjes, 1966, "Mutation breeding of chrysanthemums",
Euphytica, 15:156-162.*

Dowrick, et al., 1966, The induction of mutations in chry-
santhemum using X- and gamma radiation, Euphytica,
15:204-210.*

* cited by examiner

Primary Examiner—Howard J. Locker

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

(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named 'Golden
Allison', characterized by its upright plant habit; freely
branching growth habit; uniform and freely flowering habit;
decorative-type inflorescences; and golden yellow-colored
ray florets.

1 Drawing Sheet

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BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of Chrysanthemum plant, botanically known as *Chrysan-*
themum×*morifolium* and hereinafter referred to by the name
'Golden Allison'.

The new cultivar is a product of a planned breeding
program conducted by the Inventor in Salinas, Calif. and
Fort Myers, Fla. The objective of the breeding program is to
create new garden-type Chrysanthemum cultivars having
inflorescences with desirable inflorescence forms, attractive
flore colors and good garden performance.

The new Chrysanthemum is a naturally-occurring whole
plant mutation of a proprietary induced mutation that origi-
nated by exposing unrooted cuttings of the Chrysanthemum
cultivar Allison, disclosed in U.S. Plant Pat. No. 11,826, to
X-ray radiation in March, 1997, in Fort Myers, Fla. The new
Chrysanthemum was discovered and selected by the Inven-
tor as a single flowering plant within a population of
flowering plants of the irradiated selection in October, 1997
in a controlled environment in Salinas, Calif. The selection
of this plant was based on its desirable inflorescence form,
attractive ray floret color and good garden performance.

Asexual reproduction of the new cultivar by terminal
cuttings taken in a controlled environment in Salinas, Calif.
since December, 1997, has shown that the unique features of

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this new Chrysanthemum are stable and reproduced true to
type in successive generations.

SUMMARY OF THE INVENTION

The cultivar Golden Allison has 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 'Golden
Allison'. These characteristics in combination distinguish
'Golden Allison' as a new and distinct cultivar:

1. Upright plant habit.
2. Freely branching, dense, full plants.
3. Uniform and freely flowering.
4. Decorative-type inflorescences.
5. Golden yellow-colored ray florets.

Compared to plants of the cultivar Allison, plants of the
new Chrysanthemum have slightly smaller inflorescences,
flower slightly earlier, flower more uniformly, and differ in
ray floret color.

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 top of the sheet comprises a side perspective view of a typical flowering plant of 'Golden Allison'.

The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of the cultivar 'Golden Allison'.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown in Salinas, Calif., under conditions which approximate those generally used in commercial garden Chrysanthemum production. One rooted cutting was planted in a 15-cm container in July, 2000 and plants were grown under natural season conditions. Plants were not pinched, that is, the terminal apex was not removed to enhance branching. Measurements and numerical values represent averages for typical flowering plants.

Botanical classification: *Chrysanthemum* × *morifolium* cultivar Golden Allison.

Commercial classification: Decorative-type garden Chrysanthemum.

Parentage: Naturally-occurring whole plant mutation of a proprietary *Chrysanthemum* × *morifolium* induced mutation, not patented.

Propagation:

Type.—Terminal tip cuttings.

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

Time to produce a rooted cutting.—About ten days at 21° C.

Root description.—White, fine and fibrous.

Rooting habit.—Freely branching.

Plant description:

Appearance.—Perennial herbaceous decorative-type garden Chrysanthemum. Inverted triangle; upright plant form. Stems initially upright, then slightly outwardly spreading giving a uniformly flat-top appearance to the plant. Freely branching with about 15 lateral branches per plant.

Plant height.—About 22.5 cm.

Plant diameter.—About 23 cm.

Lateral branches.—Length: About 17 cm. Diameter: About 5 mm. Internode length: About 2.7 cm. Aspect: Mostly upright. Texture: Pubescent. Color: 144A with anthocyanin, close to 59A, at nodes.

Foliage description.—Leaf arrangement: Alternate. Length: About 6.2 cm. Width: About 3.9 cm. Apex: Cuspidate to mucronate. Base: Attenuate. Margin:

Palmately lobed, sinuses mostly divergent. Texture: Both surfaces, pubescent; veins prominent on lower surface. Color: Young foliage upper surface: 147A. Young foliage lower surface: Close to 147B. Mature foliage upper surface: 147A. Mature foliage lower surface: 147B. Venation upper surface: 147A to 147B. Venation lower surface: 147B. Petiole length: About 2.1 cm. Petiole diameter: About 2.5 mm. Petiole color, both surfaces: 146B to 146C.

Inflorescence description:

Appearance.—Decorative-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage, arising from leaf axils. Disk and ray florets arranged acropetally on a capitulum. About 7 inflorescences per lateral; about 105 inflorescences per plant.

Flowering response.—Under natural season conditions, plants flower in early October in the Northern Hemisphere and continue to flower for at least three weeks depending on weather conditions.

Inflorescence bud (before showing color).—Height: About 7.5 mm. Diameter: About 8.5 mm. Phyllary color: More green than 147A.

Inflorescence size.—Diameter: About 4.75 cm. Depth (height): About 2.1 cm. Disc diameter: About 2 mm or less, inconspicuous. Receptacle diameter: About 6 mm.

Ray florets.—Shape: Elongated oblong. Length: About 2.4 cm. Corolla tube length: About 9 mm. Width: About 7 mm. Apex: Acute, emarginate or dentate. Margin: Entire. Texture: Smooth, glabrous, satiny. Orientation: Initially upright and incurved, then perpendicular to the peduncle and eventually flat. Number of ray florets per inflorescence: About 195. Color: When opening, upper and lower surfaces: 9A. Opened inflorescence, upper surface: 9A. Opened inflorescence, lower surface: 9B to 9C.

Disc florets.—Shape: Tubular, apex dentate. Length: About 7 mm. Width: Apex: About 2 mm. Base: About 1 mm. Number of disc florets per inflorescence: Less than 10. Color: Immature: 154A. Mature: Apex: 9A. Mid-section: 154D. Base: 155D.

Peduncle.—Aspect: Flexible, angled about 30 to 35° from the stem. Length: First peduncle: About 5.8 cm. Fourth peduncle: About 7.6 cm. Diameter: About 3.5 mm. Texture: Pubescent. Color: 146A.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 12A. Pollen: Scarce. Pollen color: 15A. Gynoecium: Present on both ray and disc florets.

Seed.—Seed production has not been observed.

Disease resistance: Plants of the new Chrysanthemum have not been shown to be resistant to pathogens common to Chrysanthemums.

Garden performance: Plants of the new Chrysanthemum have been observed to be tolerant to rain and wind.

It is claimed:

1. A new and distinct cultivar of Chrysanthemum plant named 'Golden Allison', as illustrated and described.

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