



(12) **United States Plant Patent**
Deng et al.

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(54) **GERBERA PLANT NAMED ‘UFGE 7032’**

(50) Latin Name: *Gerbera hybrida*
Varietal Denomination: **UFGE 7032**

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See application file for complete search history.

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(57) **ABSTRACT**

A new *Gerbera* plant particularly distinguished by having a novel combination of medium lengths of peduncles, semi-double yellow inflorescence color, an overall inflorescence diameter of approximately 10.5 cm, a moderate level of resistance to powdery mildew, and demonstrated potential to produce attractive plants in large (≥ 20 -cm in diameter) containers, is disclosed.

3 Drawing Sheets

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Genus and species: *Gerbera hybrida*.
Variety denomination: ‘UFGE 7032’.

BACKGROUND OF THE NEW PLANT

The invention relates to a new and distinct variety of *Gerbera hybrida* plant named ‘UFGE 7032’. ‘UFGE 7032’ originated from a cross made at Wimauma, Fla. in 2005 between the female parent, ‘UFGE 5006’ (unpatented), an unreleased breeding line selected at Bradenton, Fla. from a population of progeny of the cross ‘UFGE 39-26’ (unpatented) and ‘UFGE 5-23’ (unpatented), and the male parent, ‘Sunburst Yellow’ (unpatented). ‘UFGE 7032’ was selected by the inventors from the progeny of the stated parentage in summer 2007 at Wimauma, Fla. The first asexual reproduction of ‘UFGE 7032’ was accomplished when crown division was done in late 2007 at Wimauma, Fla. Plants of ‘UFGE 7032’ have been asexually propagated by crown division and/or tissue culture for more than three generations. Asexually propagated plants of ‘UFGE 7032’ have remained true to the original selected plant, and all characteristics of the plant have been transmitted and retained through three successive asexual vegetative generations.

Plant Breeder’s Rights for this cultivar have not been applied for. ‘UFGE 7032’ has not been made publicly available more than one year prior to the filing of this application.

SUMMARY OF THE INVENTION

The new and distinct variety of *Gerbera* plant is characterized by a novel combination of medium lengths of peduncles, semi-double yellow inflorescences, an overall inflorescence diameter of approximately 10.5 cm, a moderate level of resistance to powdery mildew, and demonstrated potential to produce attractive plants in large (≥ 20 -cm in diameter) containers. ‘UFGE 7032’ has not been observed under all possible environmental conditions. Its phenotype may vary significantly with variations in environment such as light intensity, temperature, and day length. The following are the most

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outstanding and distinguishing characteristics of this new cultivar when grown at Wimauma, Fla. under normal horticultural practices in greenhouse conditions which closely approximate those generally used in commercial practice.

1. Peduncle length of approximately 38 cm;
2. Semi-double inflorescence type;
3. Yellow (RHS 12A) ray florets;
4. Yellow-green (RHS 145A) discs before opening of disc florets;
5. Yellow (RHS 10A) perianth lobe of disc florets;
6. Inflorescence diameter of approximately 10.5 cm; and
7. Moderate resistance to powdery mildew.

DESCRIPTION OF THE PHOTOGRAPHS

This new *Gerbera* plant is illustrated by the accompanying photographs which show the plant’s form, inflorescences, and foliage. The colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of a plant approximately 2.5 months old which was produced from one tissue culture liner and is potted in a 2.7-L container. Colors in the photograph may differ slightly from the color values cited in the detailed botanical description, which accurately describe the colors of the new *Gerbera*.

FIG. 1 shows the overall plant habit including inflorescences and foliage and is taken from a side perspective view.

FIG. 2 shows a close-up of the inflorescence.

FIG. 3 shows a close-up of the typical leaf.

DESCRIPTION OF THE NEW CULTIVAR

The following detailed description sets forth the distinctive characteristics of ‘UFGE 7032’. The present botanical description is that of the variety at approximately 2.5 months old on Oct. 23, 2009 at 3:30 p.m. in a room under north light at Wimauma, Fla. The colors (except those in common terms) are described from R.H.S. Colour Chart published by The

Royal Horticultural Society in London (1986 ed.), in association with the Flower Council of Holland.

DETAILED BOTANICAL DESCRIPTION

Classification:

Botanical.—*Gerbera hybrida* cv. 'UFGE 7032'.

Common name.—*Gerbera*.

Parentage:

Female, or seed, parent.—'UFGE 5006' (unpatented).

Male, or pollen, parent.—'Sunburst Yellow' (unpatented).

Inflorescence:

Appearance.—Semi-double type inflorescence form; solitary inflorescences borne on upright and strong scapes above the foliar plane; ray and disc florets arranged acropetally on a capitulum.

Type.—Semi-double.

Diameter.—Large, approx. 105 mm.

Color (general tonality from a distance of 3 meters).—Bright yellow (RHS 12A).

Shape.—Incurving funnel-shaped.

Fragrance.—None detected.

Flowering season.—Plants begin flowering about six to seven weeks after planting and flower year-round in outdoor gardens in Wimauma, Fla., until plants are killed by frosts or freezes; plants flower year-round under greenhouse conditions in Wimauma, Fla.

Inflorescence longevity.—Inflorescences last about two to three weeks on the plant in Wimauma, Fla.; inflorescences not persistent.

Quantity of inflorescences.—Free flowering habit, with up to 14 open and developing inflorescences per plant at one time.

Inflorescence bud.—Height: About 1.2 cm. Diameter: About 2.1 cm. Shape: Oblate. Color (opening buds): Close to yellow-green (RHS 154B).

Inflorescence size.—Depth (height): About 1.9 cm. Diameter of disc: About 2.7 cm. Receptacle height: About 2.5 mm. Receptacle diameter: About 1.7 cm. Receptacle color: Close to green-white (RHS 157B).

Phyllaries.—Number of phyllaries per inflorescence: About 70 arranged in about three whorls. Length: About 1.2 cm. Width: About 2 mm. Shape: Subulate. Apex: Narrowly acute. Base: Truncate. Margin: Entire. Texture, upper surface: Smooth, glabrous. Texture, lower surface: Moderately tomentose. Color, upper surface: Close to yellow-green (RHS 144A). Color, lower surface: Close to green (RHS 137C). Color, towards the base: Close to green (RHS 137B).

Inner ray florets.—Number per inflorescence: About 128 arranged in about three whorls. Length: About 2.4 cm. Width: About 2 mm. Shape: Narrow elliptic. Apex: Emarginate to obtuse. Base: Truncate. Margin: Entire. Texture, upper surface: Smooth, glabrous, slightly velvety, longitudinally ridged. Texture, lower surface: Smooth, glabrous, slightly velvety, longitudinally ridged. Color, upper surface: Close to yellow (RHS 9A). Color, lower surface: Close to yellow (RHS 10A). Longitudinal axis of outer row: Moderately reflexing. Longitudinal axis of inner rows: Straight.

Outer ray floret.—Cross section: Straight. Number: About 67 arranged in about three whorls. Length: Medium, approx. 42 mm. Width: Medium, approx. 7

mm. Shape: Narrow elliptic. Apex: Emarginate to obtuse. Base: Truncate. Margin: Entire. Depth of incision: Very shallow. Texture, upper surface: Smooth, glabrous, slightly velvety, longitudinally ridged. Texture, lower surface: Smooth, glabrous, slightly velvety, longitudinally ridged. Color, upper surface (top-side): Close to yellow (RHS 12A). Color, lower surface (bottom side): Close to yellow (RHS 10B). Color distribution on inner side: Uniform. Edge of different color: Absent.

Disc florets.—Number: About 342. Length: About 1.6 cm. Width: About 4 mm. Shape: Tubular, fused. Apex: Narrowly obtuse. Base: Fused. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, fully opened upper surface: Close to yellow (RHS 10A). Color, fully opened lower surface: Close to yellow (RHS 10C). Color, fully opened mid-section: Close to yellow (RHS 11C). Color, fully opened base: Close to yellow (RHS 11D).

Reproductive organs.—Androecium: On disc floret only. Quantity: one. Gynoecium: On ray and disc florets. Quantity per floret: one. Style color: Close to yellow (RHS 10B). Stigma color: Close to yellow (RHS 10B). Filament length: About 3 mm. Filament color: Close to yellow (RHS 13D). Anther shape: Linear. Anther length: About 4 mm. Anther width: About 1 mm. Anther color: Close to yellow (RHS 12B). Pollen: amount: Very scarce to none. Pollen color: Close to yellow (RHS 8B). Pistil: One per floret. Pistil length: About 1.5 cm. Stigma shape: Cleft. Style length: About 1.1 cm. Ovary, color: Close to yellow-green (RHS 145B to 145C).

Pappus.—Quantity of hairs per floret: About 92. Length: About 6 mm. Diameter: Less than 1 mm. Texture: Soft. Main color: Close to white (RHS 158D).

Peduncle.—Length: Medium, approx. 38 cm. Tendency to fasciation: Slight. Thickness: Medium, approx. 8 mm. Strength: Strong. Texture: Moderately densely tomentose. Color: Close to yellow-green (RHS 144B). Anthocyanin coloration. At base: Weak (greyed-purple, RHS 185C). At top: Absent.

Plant:

General appearance.—Herbaceous perennial, typically grown as container or garden plants; upright and mounding growth habit, roughly globular in shape; leaves arranged in basal rosettes and outwardly arching; dense and bushy habit; inflorescences held above the foliar plane on erect and strong basal peduncles (or scapes); moderately vigorous.

Plant height, soil level to top of foliar plane.—Approx. 28 cm.

Plant height, soil level to top of inflorescence.—About 39 cm.

Plant width.—Approx. 55 cm.

Foliage.—Leaf arrangement: Basal rosette, alternate, simple. Leaf blade: Length: Long, approx. 24 cm. Width: Medium, approx. 15 cm. Shape: Oblong. Base: Truncate. Margin: Irregular crenate, sinuses divergent, undulate. Texture, upper surface: Sparsely pubescent. Texture, lower surface: Moderately pubescent. Blistering: Medium. Depth of incisions in leaf: Basal part: Deep. Central part: Deep. Distal part: Shallow. Color: Upper side: Close to yellow-green (RHS 147A). Bottom side: Close to yellow-green

(RHS 147B). Glossiness on upper side: Medium. Apex: Moderately acute. Venation pattern: Pinnate. *Petiole*.—Petiole length: Medium, approx. 9.5 cm. Diameter: About 3 mm. Texture, upper and lower surfaces: Moderately pubescent. Color: Close to yellow-green (RHS 144B). Petiole anthocyanin coloration: At the base, close to greyed purple (RHS 186B and 186C).

Resistance to diseases: ‘UFGE 7032’ has been observed in multiple experiments in which it was compared with two common commercial cultivars, ‘Pensacola’ *gerbera* (unpatented) and ‘Bimini’ *gerbera* (unpatented), for the incidence and severity of powdery mildew, *Podosphaera* (syn. *Sphaerotheca*) *fusca* (Fr.) S. Blumer. ‘UFGE 7032’ has consistently been found to have a moderate level of resistance to powdery mildew. In one experiment (Experiment 1), conducted in summer 2009 and fall 2009 at Wimauma, Fla., tissue culture liners of ‘UFGE 7032’, ‘Bimini’, and ‘Pensacola’ were transplanted on into 2.7-L containers filled with commercial potting mix amended with controlled release fertilizer at the rate of 5.28 kg·m⁻³ and trace element fertilizer at the rate of 1.05 kg·m⁻³. Plants were grown under a plastic tunnel within a screen house with approximately 45% light exclusion. Fungicides were not applied throughout the experiments to subject the plants to natural powdery mildew disease pressures. In Experiment 1, the severity of powdery mildew on *gerbera* leaves was assessed at week 8 after transplanting (Oct. 15, 2009), week 10 after transplanting (Oct. 29, 2009) and week 12 after transplanting (Nov. 12, 2009). A randomized complete block design was used with eight replications. The experimental unit was a single containerized plant. ‘UFGE 7032’ showed a moderate level of resistance to powdery mildew (Table 1). ‘UFGE 7032’ remained to be more productive than ‘Bimini’ and ‘Pensacola’ when natural powdery mildew disease pressure existed (Table 1). No other disease resistance characterizations have been made.

TABLE 1

Powdery mildew (PM) severity ratings and inflorescence counts of ‘UFGE 7032’ and two commercial gerbera cultivars, ‘Bimini’ and ‘Pensacola’, grown under natural powdery mildew pressure in Experiment 1 (Summer 2009 through Fall 2009) in Wimauma, FL.				
Cultivars	PM Ratings ^Z			Inflorescence
	Week 8	Week 10	Week 12	counts ^Z
Experiment 1 (Summer 2009 through Fall 2009)				
‘UFGE 7032’	1.4	4.0	6.1	4.6
‘Bimini’	2.6	8.6	9.4	2.6
‘Pensacola’	1.8	7.5	9.8	1.1

^ZPowdery mildew severity was rated on a scale of 1 to 10 as described by Hausbeck et al. (2002): 1 = no disease, 2 = trace to 10%, 3 = 10% to 20%, 4 = 20 to 30%, 5 = 30% to 40%, 6 = 40% to 50%, 7 = 50% to 60%, 8 = 60% to 70%, 9 = 70% to 80%, and 10 = 80% to 100% of leaf surface covered with powdery mildew.

^YTotal number of inflorescences produced per plant over nine weeks from Sep. 25, 2009 to Nov. 20, 2009 in a screen house in Wimauma, FL

COMPARISON WITH PARENTAL AND KNOWN CULTIVARS

‘UFGE 7032’ differs from the female parent ‘UFGE 5006’ (unpatented) by having yellow inflorescences under growing conditions in Wimauma, Fla. ‘UFGE 7032’ differs from the male parent ‘Sunburst Yellow’ (unpatented) by having intermediate peduncles, semi-double inflorescences, and a mod-

erate level of powdery mildew resistance under growing conditions in Wimauma, Fla. In contrast, the female parent ‘UFGE 5006’ has light orange inflorescences, and the male parent ‘Sunburst Yellow’ has short peduncles, single inflorescences, and susceptibility to powdery mildew.

‘UFGE 7032’ can be compared to *Gerbera* hybrid ‘UFGE 7034’, disclosed in the co-pending application (Ser. No. 13/068,288). Plants of ‘UFGE 7032’ differ from plants of ‘UFGE 7034’ in the following characteristics:

1. ‘UFGE 7032’ produces semi-double inflorescences while ‘UFGE 7034’ produces full-double inflorescences;
2. Inflorescences of ‘UFGE 7032’ are bright yellow while those of ‘UFGE 7034’ are orange-red;

Comparisons were made with the commercial *gerbera* variety ‘Bimini’ (unpatented) and the commercial *gerbera* variety ‘Pensacola’ (unpatented). Two experiments were conducted in a greenhouse at Wimauma, Fla. under standard greenhouse management practices to evaluate the plant performance (days to flower, inflorescence quality, inflorescence count, and plant quality) of ‘UFGE 7032’ for container plant production in comparison to ‘Bimini’ and ‘Pensacola’. In the first of the two plant performance experiments (Experiment 2), tissue culture liners were transplanted on Dec. 9, 2008 into 2.7-L containers filled with commercial potting mix amended with controlled release fertilizer at the rate of 5.28 kg·m⁻³ and trace element fertilizer at the rate of 1.05 kg·m⁻³. Potted plants were grown on metal benches in a glass house and spaced 46 cm×46 cm apart. Temperatures inside the greenhouse ranged from 18° C. to 33° C. Two hours of additional photoperiodic lighting were provided between Dec. 9, 2008 and Mar. 17, 2009. Fungicides and insecticides were applied as needed to control powdery mildew and western flower thrips. Inflorescence quality was rated on a 1 to 5 scale: 1=very poor, 3=fair, some blemishes, but acceptable, and 5=excellent, bright, uniform, and no blemishes. Inflorescence counts were recorded weekly from Jan. 20, 2009 through Mar. 17, 2009. Plant quality was rated three times, on Jan. 20, 2009, Feb. 3, 2009, and Feb. 17, 2009, using a 1 to 5 scale: 1=few leaves or long petioles, container surface visible, very poor and unacceptable as flowering pot plants, 3=fair and marketable, and 5=excellent, full, symmetrical, attractive plants.

In the second of the two plant performance experiments (Experiment 3), tissue culture liners were transplanted on Aug. 13, 2009 into 2.7-L plastic containers filled with commercial potting mix amended with controlled release fertilizer at the rate of 5.28 kg·m⁻³ and trace element fertilizer at the rate of 1.05 kg·m⁻³. Plants were grown on metal benches in a greenhouse with a spacing of 46 cm×46 cm. The greenhouse was covered with aluminum shading cloth with approximately 30% light exclusion. Greenhouse temperatures ranged from 21° C. to 35° C. Two hours of additional photoperiodic lighting was provided beginning Sep. 15, 2009. Fungicides and insecticides were applied as needed to control powdery mildew and western flower thrips. Inflorescence quality and plant quality were rated as above for Experiment 2, but on Sep. 25, 2009, Oct. 15, 2009, and Nov. 5, 2009. The number of inflorescences produced per plant was recorded weekly from Sep. 25, 2009 through Nov. 20, 2009.

The experiment design for the plant performance experiments was a randomized complete block design with five

replications in Experiment 2 and eight replications in Experiment 3. The experimental unit was a single containerized plant.

‘UFGE 7032’ came into flowering 22.8 to 27.6 days earlier than ‘Bimini’ and ‘Pensacola’ in Experiment 2 and 4.8 to 10.5 days earlier than ‘Bimini’ and ‘Pensacola’ in Experiment 3 (Table 2). Inflorescence quality ratings of ‘UFGE 7032’ were 4.8, similar to that of ‘Bimini’ (5.0 to 4.8), and higher than that of ‘Pensacola’ (4.1 to 4.3) (Table 2). In both Experiment 2 and Experiment 3, ‘UFGE 7032’ produced more inflorescences (206% to 163% more than ‘Bimini’ and 443% to 360% more than ‘Pensacola’) (Table 2). The plant quality rating of ‘UFGE 7032’ was 3.9 in Experiment 2 and 4.8 in Experiment 3; higher than that of the controls (Table 2).

TABLE 2

Plant performance of ‘UFGE 7032’ and two commercial cultivars, ‘Bimini’ and ‘Pensacola’ grown in Experiment 2 (Winter 2008 through Spring 2009) and Experiment 3 (Summer 2009 through Fall 2009) in Wimauma, Florida.				
Cultivars	Days to 1st open inflorescence (no.)	Inflorescence quality ^Z	Inflorescence counts ^Z (no.)	Plant quality ^Y
Experiment 2 (Dec. 9, 2008 to Mar. 17, 2009)				
‘UFGE 7032’	41.2	4.8	6.2	3.9
‘Bimini’	64.0	5.0	3.0	3.1
‘Pensacola’	68.8	4.1	1.4	3.3

TABLE 2-continued

Plant performance of ‘UFGE 7032’ and two commercial cultivars, ‘Bimini’ and ‘Pensacola’ grown in Experiment 2 (Winter 2008 through Spring 2009) and Experiment 3 (Summer 2009 through Fall 2009) in Wimauma, Florida.				
Cultivars	Days to 1st open inflorescence (no.)	Inflorescence quality ^Z	Inflorescence counts ^Z (no.)	Plant quality ^Y
Experiment 3 (Aug. 13, 2009 to Nov. 20, 2009)				
‘UFGE 7032’	45.3	4.8	9.0	4.8
‘Bimini’	50.1	4.8	5.5	3.2
‘Pensacola’	55.8	4.3	2.5	3.3

^ZInflorescence count data were collected over nine weeks from Jan. 20, 2009 to Mar. 17, 2009 in Experiment 2 and another nine weeks from Sep. 25, 2009 to Nov. 20, 2009 in Experiment 3. Each value represents the mean of five (Experiment 2) or eight (Experiment 3) replicates.
^YThe plant quality rating value in Experiment 2 was the mean of five replicates over three times (Jan. 20, Feb. 3, and Feb. 17, 2009), and the plant quality rating value in Experiment 3 was the mean of eight replicates over three times (Sep. 25, Oct. 15, and Nov. 5, 2009).

OTHER CHARACTERISTICS

‘UFGE 7032’ is noted for its very sturdy inflorescence.
Literature Cited
Hausbeck, M. K., W. R. Quackenbush, and S. D. Linderman. 2002. Evaluation of cultivars of African daisy for resistance to powdery mildew, 2002. B&C Tests 18:O0004.
We claim:
1. A new and distinct cultivar of *Gerbera* plant named ‘UFGE 7032’, as illustrated and described herein.

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FIG 1



FIG 2



FIG 3

