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### Danziger

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Field of Classification Search

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#### GAILLARDIA PLANT NAMED 'DGAL7'

Latin Name: Gaillardia pulchella Varietal Denomination: **DGAL7** 

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Subject to any disclaimer, the term of this Notice:

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See application file for complete search history.

**References Cited** (56)

#### U.S. PATENT DOCUMENTS

PP15,966 P3 *	9/2005	Trees	 Plt./226
PP16.649 P2 *	6/2006	Trees	 Plt./431

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(58)

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#### ABSTRACT (57)

A new and distinct *Gaillardia* cultivar named 'DGAL7' is disclosed, characterized by a well habit, unique bi-colored, red-purple and yellow-green flower, early blooming and long lasting and abundant flowering. The new variety begins blooming early in the season and flowers over a long period of time. The new variety is a *Gaillardia*, normally produced as an outdoor garden or container plant.

#### 2 Drawing Sheets

Latin name of the genus and species: Gaillardia pulchella. Variety denomination: 'DGAL7'.

#### BACKGROUND OF THE INVENTION

The new Gaillardia cultivar is a product of a planned breeding program conducted by the inventor, Gavriel Danziger, in Moshav Mishmar Hashiva, Israel. The objective of the breeding program was to produce new Gaillardia varieties for ornamental commercial applications. The cross resulting in this new variety was an open pollination made during August of 2007.

The seed parent is the unpatented, proprietary seedling variety referred to as Gaillardia pulchella 'GI-7-1102' The pollen parent is unknown, as the crossing resulting in 15 'DGAL7' was an open pollination, with unidentifiable pollen parents. The new variety was discovered in July 2008 by the inventor in a group of seedlings resulting from the 2007 crossing, in a research greenhouse in Moshav Mishmar Hashiva, Israel.

Asexual reproduction of the new cultivar 'DGAL7' by vegetative cuttings was first performed at a research greenhouse in Moshav Mishmar Hashiva, Israel in February 2009 and has shown that the unique features of this cultivar are stable and reproduced true to type in successive generations. 25

#### SUMMARY OF THE INVENTION

The cultivar 'DGAL7' has not been observed under all possible environmental conditions. The phenotype may vary 30 somewhat with variations in environment such as temperature, day length, 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 'DGAL7'

These characteristics in combination distinguish 'DGAL7' as a new and distinct Gaillardia cultivar:

- . Abundant flowering
- 2. Exceptionally long flowering season
- 3. Strong branching habit
- 4. Early blooming
- 5. Unique red-purple with green-yellow tipped flower color
- 6. Large flower

Plants of the new cultivar 'DGAL7' are similar to plants of the seed parent, Gaillardia pulchella 'GI-7-1102' in most horticultural characteristics, however, plants of the new cultivar 'DGAL7' produce double flowers compared to the semidouble flower of 'GI-7-1102'. 'DGAL7' also produces a shorter plant with a more upright growth habit and less pubescent stems than 'GI-7-1102'.

#### COMMERCIAL COMPARISON

Plants of the new cultivar 'DGAL7' are comparable to the variety Gaillardia 'Torch Red Embers', U.S. plant Pat. No. 16,649 ('Baltoredem'), after reasonable research by the inventor. The two Gaillardia varieties are similar in most horticultural characteristics, however, the new variety 'DGAL7' differs in having more flowers and larger flowers than 'Torch Red Embers'. 'DGAL7' also flowers earlier, and has a flower that is bi-colored red-purple green-yellow tips whereas 'Torch Red Embers' has a red flower with yellow tip.

Plants of the new cultivar 'DGAL7' can also be compared to the commercial variety Gaillardia 'BALTORYEL' U.S. Plant Pat. No. 15,966. These varieties are similar in most horticultural characteristics, however 'DGAL7' has a bi-color flower, whereas 'Torch Yellow' has a solid yellow flower.

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Additionally, 'DGAL7' has a more upright, firm plant habit and flowers earlier than 'Torch Yellow'.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photograph in FIG. 1 illustrates in full color a typical plant of 'DGAL7' grown in a greenhouse, in a 12 cm basket. Age of the plant photographed is approximately 8 weeks from a rooted cutting.

FIG. 2 illustrates in full color a close up of a typical bloom of 'DGAL7'.

The photographs were taken using conventional techniques and although colors may appear different from actual colors due to light reflectance it is as accurate as possible by conventional photographic techniques.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart 2001 except where general terms of ordinary dictionary significance are used. The following observations and measurements describe 'DGAL7' plants grown outdoors during Spring in Moshav Mishmar Hashiva, Israel. The growing temperature ranged from 18° C. to 28° C. during the day and from 13° C. to 18° C. during the night. General light conditions are bright, normal sunlight. Measurements and numerical values represent averages of typical plant types. Plants are approximately 12 weeks old from a rooted cutting.

Botanical classification: Gaillardia pulchella 'DGAL7'.

#### **PROPAGATION**

Time to initiate roots: About 3-4 days summer, 4-5 days 35 winter.

Root description: Fleshy, white, branching.

### **PLANT**

Growth habit: Upright.

Pot size of plant described: 12 cm.

Height: 30-35 cm.
Plant spread: 30-40 cm.
Growth rate: Moderate.
Branching characteristics:

Length of primary lateral branches.—15 cm. Quantity of primary lateral branches.—12.

Characteristics of primary lateral branches.—Form:
Basal Branching. Diameter: 0.7 cm. Color: RHS Yel- 50
low-Green Group 147D. Texture: Densely covered with short bristly hairs. Strength: Very strong.

Internodes length: 1.5-2 cm.

### FOLIAGE

Leaf:

Shape.—Pinnatifid.

Quantity.—Approximately 50-70 per branch.

Average length.—5 to 8 cm.

Average width.—1.5 to 2.5 cm.

Apex.—Acute.

Base.—Wedge-shaped.

Margin.—Lacerate.

Texture of top surface.—Somewhat pubescent, not 65 dense.

Texture of bottom surface.—Somewhat pubescent, not dense.

Angle of attachment.—45 degrees upwards.

Aspect.—Mainly flat.

Color.—Young foliage upper side: RHS Green 137A. Young foliage under side: RHS Green 137A. Mature foliage upper side: RHS Green 137B. Mature foliage under side: RHS Green 137B.

Venation.—Type: Pinnate. Venation color upper side: RHS Green 138C. Venation color under side: RHS Green 138C.

Petiole.—Absent.

#### **FLOWER**

Natural flowering season: March to August, throughout long day season.

Days to flowering from rooted cutting: 4 to 6 weeks.

Inflorescence and flower type and habit: Solitary, full flower. Rate of flower opening: 3 to 5 days from bud to fully opened flower.

Flower longevity on plant: 5 to 7 days.

Persistent or self-cleaning: Self cleaning.

5 Flower size:

Diameter of entire flower.—Approximately 6 cm.

Depth of flower.—Approximately 3.5 cm.

Disc diameter.—Disk florets absent — Fully double Flower.

Receptacle shape.—Absent.

Quantity of inflorescences per lateral stem.—3-5.

Quantity of open inflorescences and buds per plant.—15-20.

Bud:

Shape.—Flattened globular.

*Length.*—0.5-1.0 cm.

Diameter.—1.4-1.8 cm.

Color.—RHS Yellow-Green 144B.

40 Ray florets:

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Quantity.—130.

Arrangement.—Rotated in a triple whorl.

Length.—2-3 cm.

*Width.*—1.5-1.8 cm.

Shape.—Trumpet-Shaped.

*Apex.*—Looks like 5 separate but fused petals, acute.

Base.—Fused into tubular shape.

Margin.—Entire.

Texture, upper and lower surfaces.—Smooth, Slightly ribbed longwise.

Color.—When opening: RHS Red-Purple 60A (oblong part) and RHS Yellow-Green Group 154C at tips. Fully opened: RHS Red-Purple 59C (oblong part) and RHS Yellow-Green Group 154D at tips.

Disc florets: Disk Flores ABSENT, It's a Fully Double Flower.

Phyllaries/involucal bracts:

*Quantity.*—45-50.

*Length.*—1.5-2.5 cm.

Width.—0.1-0.3 cm.

Shape (overall).—Lanceolate.

Apex.—Acute.

Base.—Wedge-shaped.

Texture.—Dull, Covered with short hairs.

Margin.—Entire, with short hair directly on margin.

Color.—RHS Yellow Green, Group 146A.

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#### Peduncles:

Length.—Average 10-15 cm.

Diameter.—0.2 cm.

Angle.—About 45° to the lateral branch.

Strength.—Medium.

Texture.—Slightly glossy.

Color.—RHS Yellow Green Group 147B.

Fragrance: Slightly sweet scent.

#### REPRODUCTIVE ORGANS

#### Ray florets:

Stamens.—Number: 6.

Anthers.—Shape: Lance-shaped. Length: Approximately 0.2 cm. Color: RHS Red-Purple 60A. Pollen: 15 Color: RHS Yellow-Orange Group 21A. Quantity: Medium amount.

Pistil.—Number: One present. Length: 10 mm. Style: Tubular. Length: 4 mm. Color: RHS Yellow group 6D.

Stigma: Shape: Bifid. Color: RHS Red-Purple 60A. Ovary Color: RHS Yellow-Green Group 149B.

Disc florets: Disk Flores ABSENT, It's a Fully Double Flower.

#### OTHER CHARACTERISTICS

Seeds and fruits: 70-100 seeds per flower, Shape—oblong triangle, size—0.2 cm long×0.15 cm wide, with spiny crow on top 0.3 cm long×0.2 wide.

Disease/pest resistance: Neither resistance nor susceptibility to disease or pests has been observed in this variety.

Temperature tolerance: Upper temperature tolerance to at least 35° C. Lower tolerance unknown.

#### What is claimed is:

1. A new and distinct cultivar of *Gaillardia* plant named 'DGAL7' as herein illustrated and described.

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FIG. 1



a Q