



US00PP26829P3

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

(10) **Patent No.:** **US PP26,829 P3**

(45) **Date of Patent:** **Jun. 14, 2016**

(54) **CHRYSANTHEMUM PLANT NAMED**  
**'ZANMUHOTS'**

(65) **Prior Publication Data**

US 2015/0189817 P1 Jul. 2, 2015

(50) Latin Name: *Chrysanthemum*×*morifolium* Ramat.  
Varietal Denomination: **Zanmuhots**

(51) **Int. Cl.**  
**A01H 5/02** (2006.01)

(71) Applicant: **Chrysanthemum Breeders Association**  
**Research B.V.**, Valkenburg ZH (NL)

(52) **U.S. Cl.**  
USPC ..... **Plt./293**

(72) Inventor: **Henricus Cornelius Maria Jacobs**,  
Valkenburg (NL)

(58) **Field of Classification Search**  
USPC ..... Plt./293  
See application file for complete search history.

(73) Assignee: **Chrysanthemum Breeders Association**  
**Research B.V.**, Valkenburg (NL)

*Primary Examiner* — Keith Robinson  
(74) *Attorney, Agent, or Firm* — Steptoe & Johnson LLP

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 199 days.

(57) **ABSTRACT**

A *Chrysanthemum* plant named 'Zanmuhots' characterized  
by its large sized blooms with dark red ray florets and prolific  
branching; natural season flower date September 9-13 (week  
37); blooming for a period of 5 weeks.

(21) Appl. No.: **13/998,972**

(22) Filed: **Dec. 30, 2013**

**3 Drawing Sheets**

**1**

**2**

Botanical designation: *Chrysanthemum*×*morifolium*  
Ramat.

Cultivar denomination: 'Zanmuhots'.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar  
of *Chrysanthemum* plant, botanically known as *Chrysanthemum*×*morifolium* Ramat., commercially known as a garden  
mum, and hereinafter referred to by the cultivar denomination  
'Zanmuhots'. 'Zanmuhots' is a product of a breeding and  
selection program for outdoor pot mums (garden mums)  
which had the objective of creating new cultivars with a  
double type inflorescence, a natural season flowering date  
around week 37, blooming for a period of 5 weeks. 'Zanmu-  
hots' is a seedling resulting from a cross of the female parent  
id 24446 (not patented) with the male parent id 310538 (not  
patented). Plants of the new cultivar 'Zanmuhots' differ from  
plants of the parent in growth habit; the plants of the female  
parent are more spreading in shape compared to those of the  
seedling, while those of the male parent are more erect in  
shape than those of the seedling.

The new and distinct cultivar was discovered and selected  
as a flowering plant by Henricus Cornelius Maria Jacobs on a  
cultivated field in Rijnsenhout, The Netherlands in 2010. The  
first act of asexual production of 'Zanmuhots' was accom-  
plished when vegetative cuttings from the initial selection in  
2010 were propagated further in a controlled environment in  
Rijnsenhout, The Netherlands. In summer, about 6-8 days  
are needed to initiate roots in cuttings of the new cultivar, after  
another 5 days rooted plants are formed. The new cultivar has  
been found to retain its distinctive characteristics through  
successive propagations.

**BRIEF DESCRIPTION OF THE DRAWINGS**

The present invention of a new and distinct variety of  
*Chrysanthemum* (of about 16 weeks) is shown in the accom-

panying drawings, the color being as nearly true as possible  
with color photographs of this type.

FIG. 1 shows a plant of the cultivar in full bloom.

FIG. 2 shows the various stages of bloom of the new cul-  
tivar.

FIG. 3 shows the various stages of foliage of the new  
cultivar.

**DESCRIPTION OF THE INVENTION**

The observations and measurements were gathered from  
plants in the period of 15 to 22 weeks of age, grown outdoor  
in Rijnsenhout, The Netherlands, under natural day length and  
temperature and planted in week 23 in 2013 (with a warm  
summer), receiving drip irrigation. The natural blooming date  
of this crop was September 9-13 (week 37). The average  
height of the plants was 30 cm. No growth retardants were  
used. No tests were done on disease or insect resistance or  
susceptibility. No tests were done on cold or drought toler-  
ance. This new variety produces large sized blooms with dark  
red ray florets blooming for a period of 5 weeks.

From the cultivars known to the inventor the most similar  
existing cultivar in comparison to 'Zanmuhots' is 'Jenny  
Wren' (U.S. Plant Pat. No. 10,213). When 'Jenny Wren' and  
'Zanmuhots' are being compared the following differences  
are noticed: (1). Inflorescence size. And (2). Growth habit.  
(1). Inflorescences of 'Jenny Wren' are smaller in size than  
those of 'Zanmuhots'. (2). Plants of 'Jenny Wren' are less  
ball-shaped than those of 'Zanmuhots'.

The following is a description of the plant and character-  
istics that distinguish 'Zanmuhots' as a new and distinct vari-  
ety.

The color designations are taken from the plant itself.  
Accordingly, any discrepancies between the color designa-  
tions and the colors depicted in the photographs are due to  
photographic tolerances. The color chart used in this descrip-  
tion is: The Royal Horticultural Society Colour Chart, edition  
2001.

TABLE 1

Botanical Description of <i>Chrysanthemum × morifolium</i> Ramat. 'Zanmuhots'	
<b>Bud</b>	
Size:	Small; cross-section 9 mm, height 5 mm
Shape:	Round
Texture:	Pubescent
Outside color:	Greyed-green 191A
<b>Phyllaries</b>	
Number:	21, arranged in 3 rows
Shape:	Elliptic
Apex:	Acute
Base:	Truncate
Margin:	Entire
Color:	Upper side: Green 136B Lower side: Green N138B
Length and width:	4 mm; 1 mm
Texture:	Pubescent
<b>Inflorescences</b>	
Type:	Double
Height:	2 cm
Diameter:	6 cm
Peduncle length:	10 cm
Peduncle color:	Green 138A
Peduncle diameter:	15 mm
Peduncle texture:	Pubescent
Number per branch:	About. 5 ? 8 inflorescences
Duration of flowering:	5 weeks
Seeds:	Produced in small quantities, ovate, Greyed-brown 199A, length 1.5 mm, diameter 0.5 mm; texture: rough with ribs
Fragrance:	Faint <i>chrysanthemum</i> odor
<b>Color inflorescences</b>	
Center of inflorescence:	Immature stage: Greyed-purple 187A; Mature stage: Greyed-purple 187A
Color of upper side of ray florets:	Red-purple 60A
Color of lower side of ray florets:	Greyed-purple 184B
Tonality from distance:	A garden mum with decorative dark red blooms
Color of ray florets after aging of the plant:	Red-purple 60C
<b>Ray florets</b>	
Type:	Ligulate
Texture:	Upper and lower side smooth
Number:	160-180
Shape:	Elliptic
Apex:	Dentate
Base:	Acute
Cross-section:	Flat
Longitudinal axis:	Straight
Length of corolla tube:	3 mm
Diameter corolla tube:	1 mm
Ray floret margin:	Entire
Ray floret length:	1.5-2.6 cm
Ray floret width:	1-5 mm
Ratio length/width:	High
Disc florets	Absent
<b>Receptacle</b>	
Color:	Yellow-green 145D
Shape:	Domed raised
Height:	6 mm
Diameter:	4 mm
<b>Reproductive Organs</b>	
Androecium:	Absent
Pollen:	Absent
Gynoecium:	Present on ray florets
Style color:	Yellow-green 154C

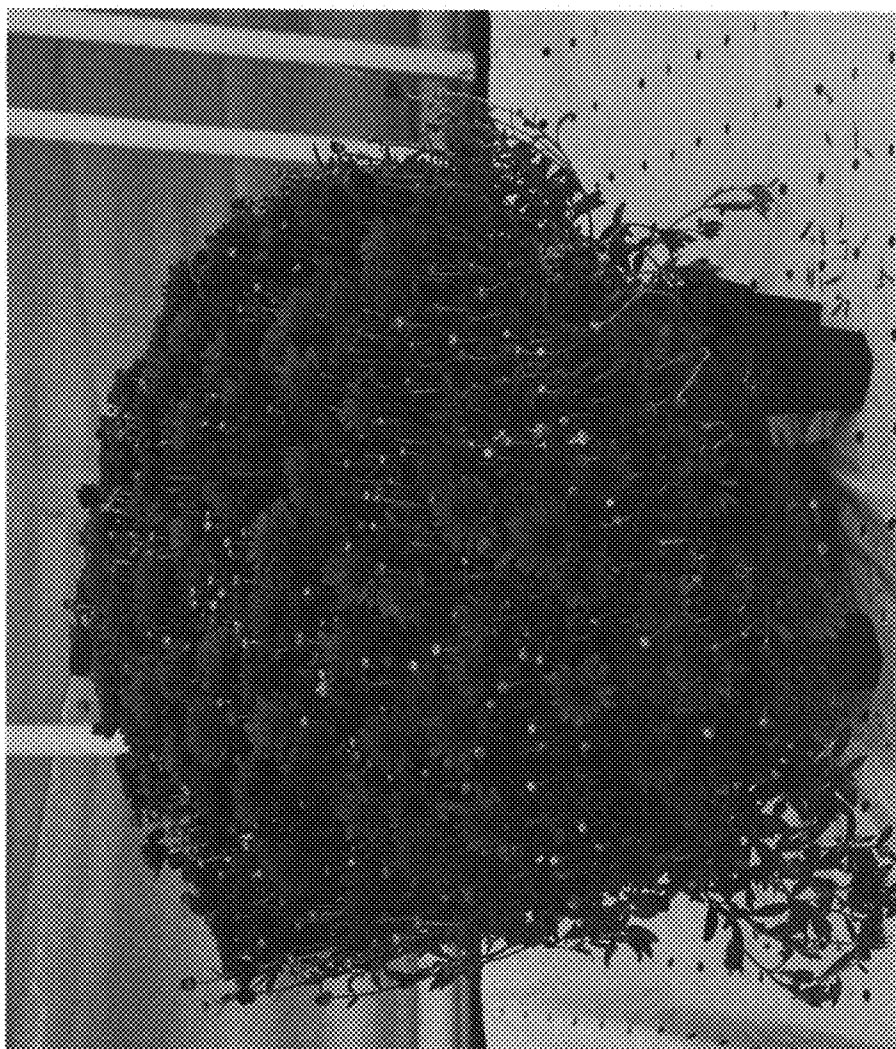
TABLE 1-continued

Botanical Description of <i>Chrysanthemum × morifolium</i> Ramat. 'Zanmuhots'	
5	Style length: 4 mm Stigma color: Yellow 7A Stigma width: 1 mm Ovary: Enclosed in calyx; color: Yellow-green 149D
<b>Plant</b>	
10	Plant type: Bushy Growth habit: Spherical shape Growth rate: Vigorous Height: 30 cm Width: 60 cm
15	Stem color: Greyed-brown 199A Stem strength: weak Stem brittleness: brittle Stem anthocyanin coloration: present, streaks of Greyed-purple 183D Internode length: 1.5-3 cm Length of lateral branch: From top to bottom 22-25 cm Lateral branch color: Green 137 C
20	Lateral branch, attachment: Weak Lateral branch diameter: 3 mm Lateral branch, texture: Pubescent with ribs Branching (average number of lateral branches): Dense with 7 breaks after pinching
25	Natural season blooming date: September 9 (week 37) in Rijsenhout, The Netherlands Roots - habits: Fine, freely branching Roots - color: White 155A
<b>Foliage</b>	
30	Glossiness: Leaf upper side: very weak Leaf lower side: very weak Leaf color: Upper side: Green 139A-B Lower side: Green 138A Color midvein: Upper side: Yellow-green 147D Lower side: Yellow-green 148D
	Size: Small; length 2.3-4.5 cm, width 1.3-2.3 cm
35	Quantity (number per lateral branches): 24-28 Shape: Broadly elliptic Texture upper side: Sparsely pubescent Texture under side: Pubescent Venation arrangement: Palmate
40	Shape of margin: Serrated Shape of base of sinus between lateral lobes: Rounded Margin of sinus between lateral lobes: Diverging
45	Shape of base: Acute Apex: Mucronulate Peduncle strength: Weak Petiole attitude: Moderately upwards Petiole length: 0.4-0.8 cm Petiole diameter: 2 mm Petiole color: Yellow-green 147D
50	Stipule: Small, about 8 mm

TABLE 2

Differences with the comparison variety, when grown under identical conditions			
	'Zanmuhots'	'Jenny Wren'	
55	Inflorescence size	6 cm	4.3 cm
60	Growth habit	ball- shaped	more spreading

I claim:  
1. A new and distinct *Chrysanthemum* plant named 'Zanmuhots' as described and illustrated.



**FIG. 1**

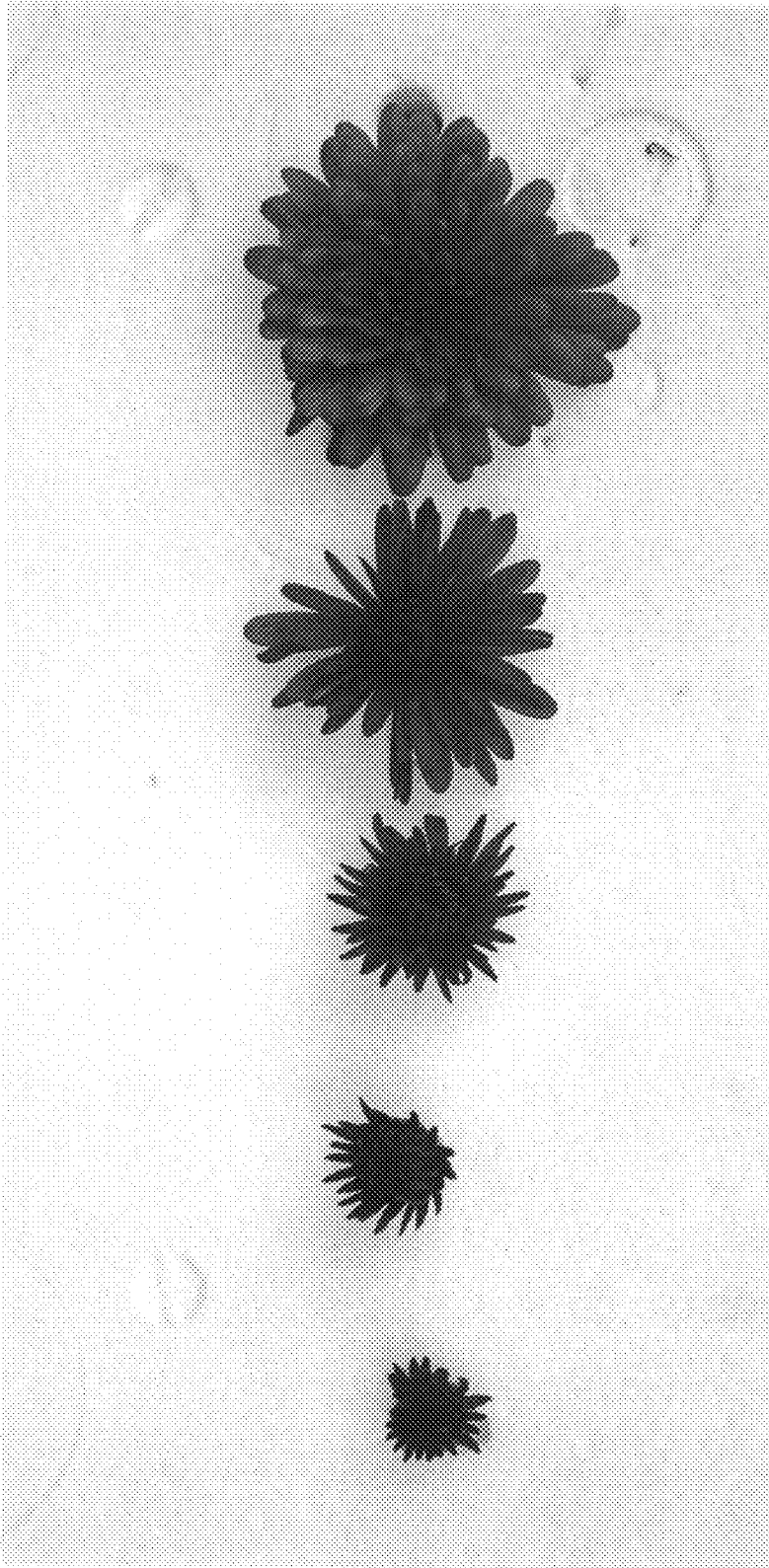


FIG. 2

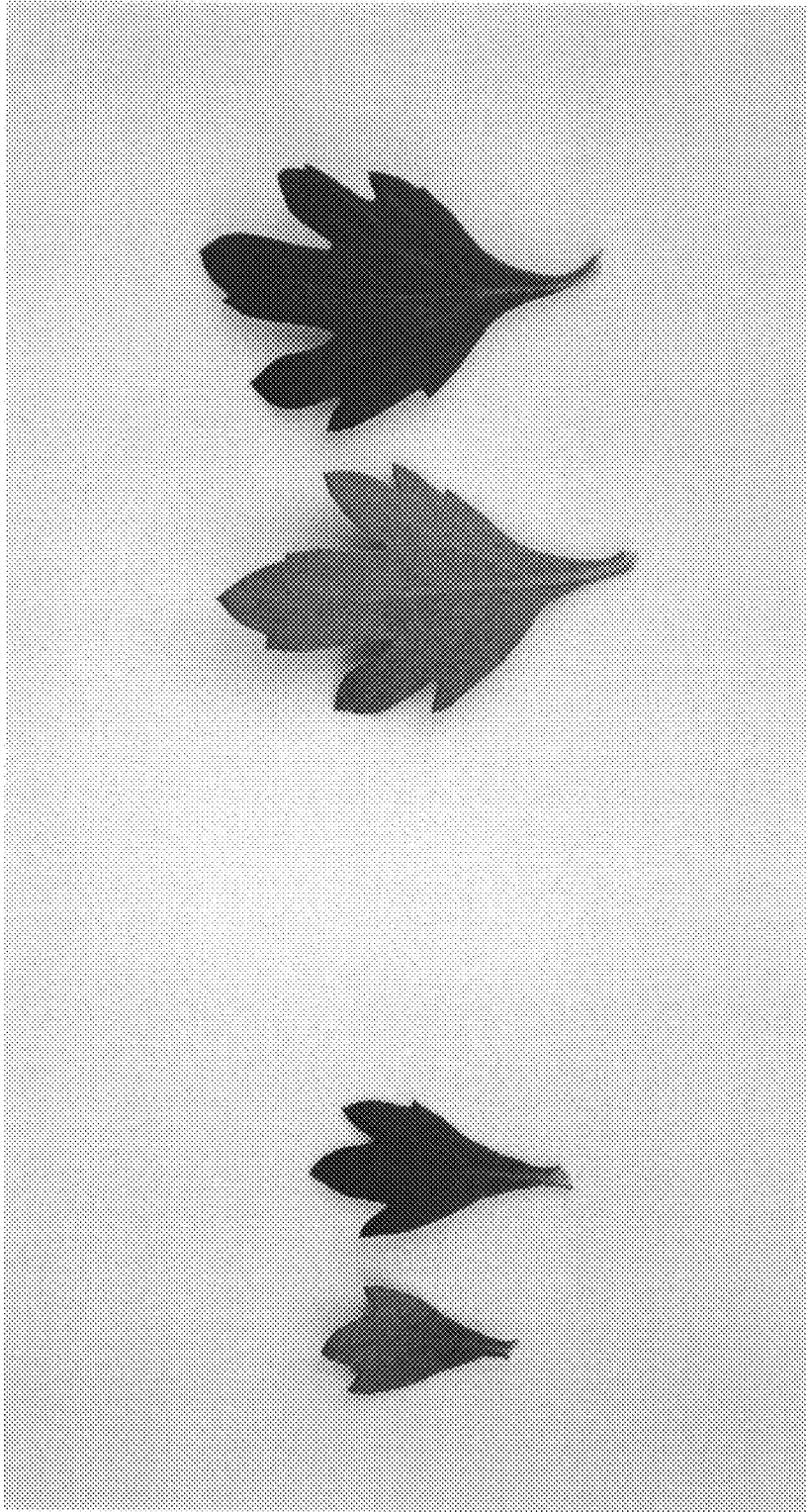


FIG. 3