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### (54) CHRYSANTHEMUM PLANT NAMED 'ZANMUTANG'

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

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(73) Assignee: Chrysanthemum Breeders Association

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(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 94 days.

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(65) **Prior Publication Data** 

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51) **Int. Cl.** A01H 5/00 (2

**A01H 5/00** (2006.01) **U.S. Cl.** 

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#### (57) ABSTRACT

A *chrysanthemum* plant named 'Zanmutang' characterized by its small sized blooms with yellow ray florets and prolific branching; natural season flower date September 20 (week 38) blooming for a period of 4 weeks.

3 Drawing Sheets

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Botanical designation: Chrysanthemum×morifolium Ramat.

Cultivar denomination: 'Zanmutang'.

#### RELATED CULTIVARS

This new plant cultivar 'Zanmutang' is related to 'Zanmudande' (U.S. Plant patent application Ser. No. 13/200, 327), a sibling obtained from the same cross with parent plants.

## BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as Chrysanthe- 15 mum×morifolium Ramat., commercially known as a garden mum, and hereinafter referred to by the cultivar denomination 'Zanmutang'. 'Zanmutang' 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 flower date around September 20 (week 38), blooming for a period of 4 weeks. 'Zanmutang' is a seedling resulting from a cross of the female parent id 21570 with the male parent id 23262. Both parents are unpatented plants. Plants of the new cultivar 'Zanmutang' differ from plants of the female parent in the follow- 25 ing characteristics. (1) Plant vigor and (2) Natural season flower date. (1) Plants of the seedling are more vigorous than plants of the female parent. (2). Plants of the seedling flower earlier in season than plants of the female parent.

Plants of the new cultivar 'Zanmutang' differ from plants of the male parent in the following characteristics. (1) Plant vigor and (2) Natural season flower date. (1) Plants of the seedling are less vigorous than plants of the male parent. (2). Plants of the seedling flower earlier in season than plants of the male parent.

The new and distinct cultivar was discovered and selected as a flowering plant by Wilhelmus Bernardus Blom on a cultivated field in Rijsenhout, The Netherlands in 2005. The first act of asexual production of 'Zanmutang' was accomplished when vegetative cuttings from the initial selection in 2005 were propagated further in a controlled environment in Rijsenhout, The Netherlands. The new cultivar has been found to retain its distinctive characteristics through succes-

sive propagations.

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## BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of *Chrysanthemum* is shown in the accompanying 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 cultivar

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

#### DESCRIPTION OF THE INVENTION

The observations and measurements were gathered from plants grown out door in Rijsenhout, The Netherlands under natural day length and temperature and planted in week 23 in 2005. The natural blooming date of this crop was September 20 (week 38). The average height of the plants was 35 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 tolerance. This new variety produces small sized blooms with yellow ray florets blooming for a period of 4 weeks.

From the cultivars known to inventor the most similar existing cultivar in comparison to 'Zanmutang' is 'Zanmusundance' (U.S. Plant Pat. No. 21,163.). When 'Zanmusundance' and 'Zanmutang' are being compared the following difference are noticed: (1) Inflorescence shape. And (2) Number ray florets. (1) The decorative type inflorescences of 'Zanmutang' are more round shaped, while those of 'Zanmusundance' are more flat. (2). The number of ray florets is higher in 'Zanmutang' than in 'Zanmusundance'.

The following is a description of the plant and characteristics that distinguish 'Zanmutang' as a new and distinct variety.

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The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society Colour Chart, edition 5 2001.

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# TABLE 1

Detailed Botanical Description				
Bud	_			
Size	Small; cross-section 5 mm, height 4 mm			
Shape	Round			
Texture	Pubescent			
Outside Color	Greyed-green 191A			
Phyllaries	_			
Number	20, arranged in 3 rows			
Shape	Elliptic			
Apex Base	Acute Truncate			
Margin	Entire			
Color	Upper surface: Green 137C			
	Lower surface: Green 137D			
Length and width	4 mm; 2 mm			
Texture	Pubescent			
Inflorescences	_			
Туре	Double			
Height	1.2-1.3 cm			
Diameter	3 cm			
Peduncle length Peduncle color	5.6-6 cm Green 137C			
Peduncle diameter	1.5 mm			
Peduncle texture	Pubescent			
Number per branch	Approx. 5 inflorescences			
Duration of flowering	4 weeks			
Seeds	Produced in small quantities, ovate,			
	Greyed-brown 199A, length 1.5 mm, diameter 0.5 mm			
Fragrance	Faint chrysanthemum odor			
Color				
Center of inflorescence	Immature stage: Yellow 13B			
Center of innovenee	Mature stage: Yellow 7A			
Color of upper surface of the ray-	Yellow 13C			
florets				
Color of the lower surface of the	Yellow 11C			
ray-florets Tonality from Distance	A garden mum with yellow blooms			
Color of the ray-florets after aging	Yellow 13c			
of the plant	101101111101			
Ray florets	_			
Texture	Upper and lower surface smooth			
Number	230-240			
Shape	Elliptic			
Apex	Dentate			
Base	Attentuate			
Cross-section Longitudinal axis of majority	Flat Straight			
Length of corolla tube	4 mm			
Ray-floret margin	Entire			
Ray-floret length	1.2-2 cm			
Ray-floret width	3-4 mm			
Ratio length/width	High			
Disc florets	_			
Disc diameter in mature	2-4 mm			
inflorescences				
Distribution of disc florets	Scarce			
Shape Color	Tubular Yellow-green 145C at base to Green			
00101	Yellow 1D at apex			
Length	3.8 mm			
Diameter	2.5 mm			

# TABLE 1-continued

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	Detailed Botanical Description				
_	Receptacle	_			
5	Color	Yellow-green 145D			
	Shape	Conical raised			
	Height	4 mm			
	Diameter	3 mm			
1.0	Reproductive Organs	<u> </u>			
10	Androecium	Present on only disc florets			
	Stamen length	3 mm			
	Stamen color	Yellow-green 144A			
	Anther color	Yellow 3A			
	Pollen	Present			
15	Pollen color	Yellow 13A			
	Gynoecium	Present on both ray and disc florets			
	Style color Style Length	Yellow-green 154C 3 mm			
	Stigma color	Yellow 7A			
	Stigma Width	1 mm			
	Ovary	Enclosed in calyx			
20	Plant	_			
	Form	Grown as a spray type pot mum,			
	Tomi	outdoor raised and mounded			
	Growth habit	Spherical shape			
25	Growth rate	Medium			
	Height	35 cm			
	Width	50-55 cm			
	Stem Color	Greyed-brown 199A			
	Stem Strength	Strong			
	Stem Brittleness	Brittle			
•	Stem Anthocyanin Coloration	Not observed 2-2.5 cm			
30	Internode length Length of lateral branch	From top to bottom 18-20 cm			
	Lateral branch color	Green 137 C			
	Lateral branch, attachment	Brittle			
	Lateral branch diameter	2 mm			
	Branching (average number of	Prolific with 7 breaks after pinching			
35	lateral branches)				
-	Natural season blooming date	September 20 (week 38)			
	Foliage	<u> </u>			
	Leaf color	Upper side: Green 139A to 139B			
		Lower side: Green 137D			
40	Color midvein	Upper side: Yellow-green 147D			
70	a'	Lower side: Yellow-green 148D			
	Size	Small; length 1.5-3 cm, width 1-			
	Quantity (number per lateral	2.5 cm 17-19			
	branch)	1, 17			
	Shape	Elliptic			
45	Texture upper side	Sparsely pubescent			
	Texture under side	Pubescent			
	Venation arrangement	Palmate			
	Shape of the margin	Smooth to serrated			
	Shape of Base of Sinus Between	Rounded			
	Lateral Lobes	D' '			
50	Margin of Sinus Between Lateral Lobes	Diverging			
	Shape of Base	Attenuate			
	Apex	Mucronulate			
	Petiole length	3-4 mm			
	Petiole diameter	1 mm			
55	Petiole color	Yellow-green 147D			
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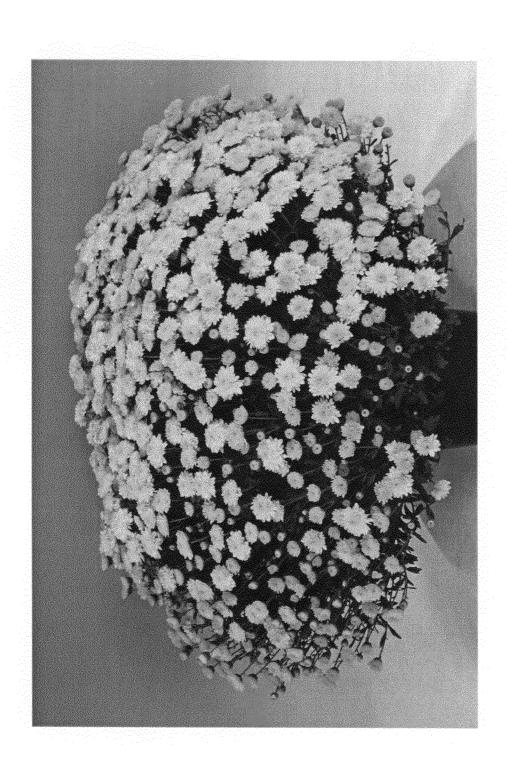
# TABLE 2

0	Differences with the comparison varieties			
		'Zanmutang'	'Zanmusundance'	
	Inflorescence height Number ray florets	1.2-1.5 cm 230-240	0.5 cm Approx. 140	

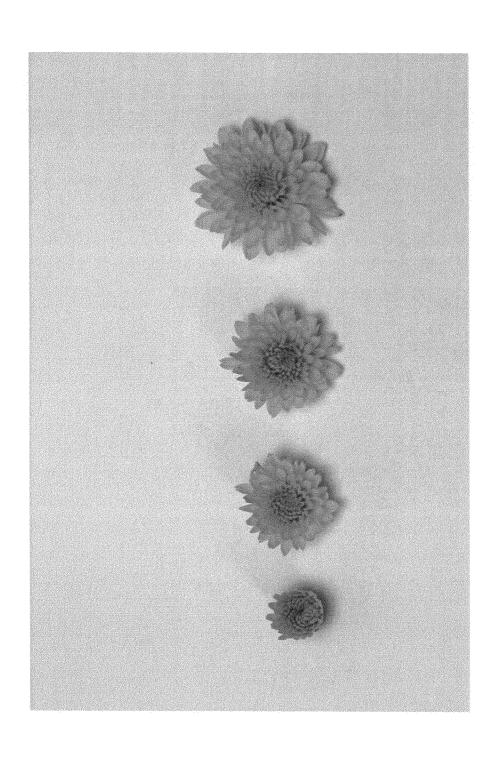
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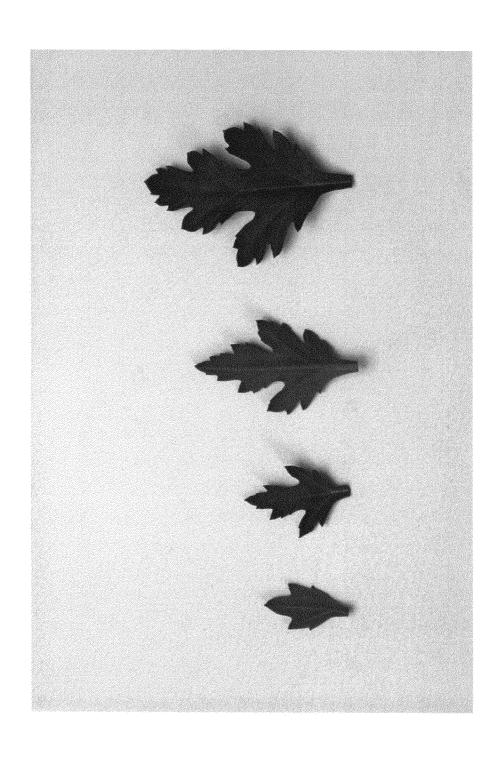
I claim:
1. A new and distinct *Chrysanthemum* plant named 'Zanmutang' as described and illustrated.

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May 21, 2013





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