July 18, 1972W. H. JESSEL, JR., ET ALPlant Pat. 3,236CHRYSANTHEMUM PLANTFiled Nov. 30, 19702 Sheets-Sheet 1

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INVENTORS

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July 18, 1972 W. H. JESSEL, JR., ET AL Plant Pat. 3,236 CHRYSANTHEMUM PLANT

Filed Nov. 30, 1970

2 Sheets-Sheet 2

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United States Patent Office

Plant Pat. 3,236 Patented July 18, 1972

3,236 CHRYSANTHEMUM PLANT Walter H. Jessel, Jr., Doylestown, and William E. Duffett, Akron, Ohio, assignors to Yoder Brothers, Inc., Barberton, Ohio Filed Nov. 30, 1970, Ser. No. 93,922 Int. Cl. A01h 5/00 U.S. Cl. Plt.--79 1 Claim The present invention comprises a new and distinct 2

riods of the year. Moreover, the pot mum is more heavily cropped, and there is less reversing because the flower is more semi-incurved in form.

In the following description of Wildfire as a pot mum, 5 color references are to the Munsell Color Book, 1963 edition, and comparisons have been made with Orange Bowl. Some difficulty was encountered in precisely determining the various bronze tones of the cultivars compared, and the indicated colors represent the closest available color 10 key.

#61865–1×#63969–1, with both parents being unpatented and identified for breeding purposes by the above numbers.

cultivar of chrysanthemum plant which is a seedling of

The new cultivar was selected from the progeny of the designated cross and when asexually reproduced by cuttings has been found to retain its distinctive characteristics through successive propagations.

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An important feature of the new cultivar is its versatility. The cultivar can be grown either as a pot mum or a standard cut flower, depending on which established growing procedures are followed. To our knowledge, the new cultivar is the only bronze summer flowering crysanthemum that has this dual capacity.

The unique features of the new cultivar can perhaps best be seen by comparing the same to commercially wellknown pot mum and standard crysanthemums, respectively. With respect to its pot mum form, the new cultivar is similar to the unpatented but commercially well-known pot mum cultivar Orange Bowl in its orange bronze coloration but differs therefrom by the following characteristics: 30

(1) Wildfire has a 9 week response as compared with the 10 week response of Orange Bowl.

(2) The flower color of the new cultivar is more intense, and the flowers are $\frac{1}{4}$ " larger in the tight or opening stage but are smaller when fully open than the flowers of 35 Orange Bowl.

BOTANICAL CLASSIFICATION

Chrysanthemum morifolium

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15		Wildfire	Orange Bowl
	Bloom:	51/11	E//
	Fully expanded	$5\frac{1}{4}''$ - $5\frac{3}{4}''$	- 6 ^{''} .
	Borne	 Singly on disbudded stems. 	Singly on disbudded
	Stems	- Strong	stems. Strong.
20	Form	Generally semi- incurved, becoming	Irregular, decorative.
		increasingly decora-	
		tive as daylength shortens and over-	
		all temperatures	
	Permanence	become lower. 10-14 days	15 90 dama
25	Color:	• • •	10-20 (lays.
	Center of flower.	Light bronze, 5Y7/8 to golden bronze,	Greenish yellow,
		5Y7/10	7.5Y8/10 to yellow, 5Y8/10.
	Base of petals.	Red bronze, 5R3/8 to light bronze,	Bronze, 7.5YR5/8 over dark yellow,
		2.5Y6/8 over yellow	2.5Y8.5/12.
30	Inside of	5Y8.5/10. do	Bronze, 7.5YR5/8
	petals.		over dark yellow.
			2.5Y8.5/12 to light bronze, 2.5Y7/8
			over dark yellow.
	Reverse of	Light bronze, 5Y7/8	5Y8.5/12. Yellow, 5Y8/10 to
35	petals.	to golden bronze,	light yellow, 5Y8/8.
	Tonality '	5Y7/10. Orange bronze	Orange bronze to
	from a distance.		golden yellow
		·	depending on tem- peratures at
40	Discolora-	Golden bronze	finishing time.
40	tion.		dolden yenow.
	Petals: Texture	Smooth	Smooth.
	Appearance and	Open at base, broad	Open at base, broadens
	form.	keel tapering to a hooded point.	quickly, shallow ridged keel, tapering
45	Arrangement	-	to a blunt point.
10	fill angementer	Composite, whorled on a single	Composite, whorled on a single receptacle.
	Persistence	receptacle.	-
		Resist shatter Typical chrysanthe-	Resist shatter. Typical chrysanthe-
	Reproductive organs:	mum.	mum.
50	Stamen, anthers	None to 30	None.
	FUNCH	None to scant Clustered in center	Do.
		of flower, if present.	Clustered in center of flower, if present.
	Styles	Present both ray and disc florets.	Present both ray and disc florets.
	Length	Short	Short.
55	Ovaries	At the base of petal attached to	At the base of petal attached to receptacle.
	Plant:	receptacle.	attached to receptacie.
	Form	Herbaceous	Herbaceous.
	Growth Height	Semi-upright	Spreading.
	spreau	8 ^{''}	$12\frac{1}{2}^{\prime\prime}-14\frac{1}{2}^{\prime\prime}$. 10 ^{''} .
60	Foliage:	Dark green, 10GY3/4	
	DIZE	5¼'' long, 2½'' wide	41/6" long 93/" wide
	Quantity	Numerous	Numerous
	Texture	Spatulate lobed Smooth	Smooth
	Ribs and veins	Prominent Deeply indented	Prominant
65	Serration	Verv slight	Finaly convoted
	Underside	Light green, 10GY5/4_ Prominent	Light green, 7.5GY5/4
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(3) Wildfire has a more incurved flower, and has larger and more deeply indented foliage with less serration of the leaf margin.

(4) Wildfire has more prominent stipules.

(5) Wildfire has a shorter bench life.

(6) Wildfire is more efficient to the grower (9 week tall treatment as compared with a 10 week short or medium treatment of Orange Bowl) which is a saving in crop time of two to three weeks depending on treatment. 45

The new cultivar when grown as a pot mum in the vicinity of Barberton, Ohio, has a response period of approximately 9 weeks, and the following detailed description is based on observations made of the new cultivar grown as a pot mum in a greenhouse in Barberton, Ohio. ⁵⁰ The response time, blooming period, color, and total vigor may vary significantly with varying environmental conditions such as temperature, day length, and light intensity. Suggested flowering in the northern and western United 55 States is from May through October; in coastal California, May through October; in Florida, December through April, and in the southern United States, March through November. In the accompanying drawings, Sheet 1 shows the unique 60 characteristics of the new cultivar displayed in the form of a pot mum. Sheet 2 illustrates the new cultivar as a standard or cut flower. It will be noted that there appears to be a difference in flower color between the pot mum and standard photographs. This apparent difference is for 65two reasons. One, the photograph of the standard was taken in a high light, high temperature period of the year when the flower is more incurved and the reverse side of the petals therefore more visible. The overall tone of the flower is therefore a lighter bronze. The pot mum, on the 70other hand, was photographed very late in the fall, with the top color of the petals being darker than at other pe-

As a standard, the new cultivar can be compared with the unpatented but well-known bronze standard Detroit News, having the same 9 week response of Detroit News,

but differing from Detroit News when grown as a stand- A second state of the second stat ard by the following characteristics:

(1) A longer recommended flowering period in all areas of the United States, thereby providing a longer period of value.

(2) ¹/₄" larger flowers.

- (3) Broader, flatter petals with less incurved form.
- (4) Longer keeping quality.
- (5) More intense orange bronze in color.

(6) Under high temperature, high light conditions Wild-1 fire provides greater color retention and, in fading, has a darker, smoother, more attractive golden bronze color than the faded color of Detroit News under identical conditions.

		Wildfire	Detroit News
5	Petals:		
-	Texture	Smooth	Smooth.
	Appearance and form.	Open at base, broad keel, tapering to a hooded point.	Tubular to slightly open at base deeply keeled tapering to a hooded point.
10	Arrangement	Composite, whorled on a single receptacle.	Composite, whorled on a single receptacle.
	Persistence	Resist shatter	Resist shatter.
	Fragrance	Typical chrysanthemum.	Typical chrysanthemum.
	Reproductive	. •	-
	organs: Stamon onthers	None to 20	None to 25

(7) 7" shorter habit.

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(8) Somewhat lighter colored and less brittle foliage.

(9) More prominent stipules.

The new cultivar when grown as a standard in the vicinity of Barberton, Ohio, has a response period of approximately 9 weeks, and the following detailed descrip- 20 tion is based on observations made of the new standard cultivar grown in a greenhouse in Barbeton, Ohio. The response time, blooming period, color, and total vigor may vary significantly with varying environmental conditions such as temperature, day length, and light intensity. Sug- 25 gested flowering as a standard in the nothern and western United States is from June through October; in coastal California, June through October; in Florida, December through April; and in the southern United States; May 30 through November.

As above, color references are to the Munsell Color Book, 1963 edition, and comparions have been made with the cultivar Detroit News.

Stamen, anthers. _ None to 30_____ None to 25. Pollen...... None to scant None to scant. Arrangement_____ Clustered in center of Clustered in center of flower, if present. flower, if present. Styles_____ Present both ray and Present both ray and disc florets. disc florets. Short_____ Short. Length At the base of petal attached to attached to receptacle. receptacle. Plant: Form_____ Herbaceous_____ Herbaceous. Growth Upright Upright Upright. 43''. Spread_____ None_____ None. Foliage: Top side _____ Dark green, 10GY3/4_ Dark green, 10GY2/4. Quantity_____ Numerous_____ Numerous. Shape_____ Spatulate lobed_____ Spatualte lobed. Texture Smooth Smooth. Ribs and veins___ Prominent_____ Prominent. Edge_____ Deeply indented_____ Deeply indented Underside_____ Light green, 10GY5/4_ Light green, 7.5GY4/4. Stipules_____ Prominent_____ Rudimentary.

We claim:

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1. A new and distinct cultivar of chrystanthemum char-35 acterized generally by its unique bronze color and its capability of being grown either as a standard cut flower or as a pot mum, and characterized particularly as to uniqueness when grown as a standard and when compared with the cultivar Detroit News by its longer peirod of value, ap-40 proximately 1/4" larger flowers, broader, flatter and less tightly incurved petals, more orange bronze color, longer keeping quality, approximately 7" shorter growth habit, greater color retention under high temperature, high light conditions, fading to a darker, smoother, more attractive 45 golden bronze color than the faded color of Detroit News under identical conditions, somewhat lighter colored and less brittle foliage, and its more prominent stipules; and which is further characterized as to uniqueness when grown as a pot mum and when compared with the pot mum Orange Bowl by its one week earlier response, more 50intense orange bronze flower color, more incurved flower, approximately 1/4" larger flower in the opening stage of development but smaller when fully expanded, larger and more deeply indented foliage with less serration of the 55 leaf margin, more prominent stipules, shorter bench life, and its more efficient timing thereby providing a saving in crop time and bench space.

BOTANICAL CLASSIFICATION

Chrysanthemum morifolium

	Wildfire	Detroit News
Bloom:		
Size	51/4"	5''.
Fully expanded.	51/4'' 53/4''	$5\frac{1}{2}''$.
Borne	Terminal on dis- budded plant.	budded plant.
Stems	Strong	Strong.
Form	Semi-incurve	Incurve.
Permanence Color:	10-14 days	7–10 days.
Center of	Light bronze, 5Y7/8	Yellow bronze,
flower.	to golden bronze, 5Y7/10.	2.5Y6/10.
Base of	Red bronze, 5R3/8	Yellow, 7.5Y8.5/10.
petals.	to light bronze, 2.5Y6/8 over yellow, 5Y8.5/10.	
Inside of	do	Bronze, 10R4/10 over
petals.	· · ·	yellow, 7.5Y8/10 to bronze, 10R5/8 over
		yellow, 7.5Y8.5/10.
Reverse of	Light bronze, 5Y7/8	Bronze, 2.5Y6/8 to
petals.	to golden bronze, 5Y7/10.	yellow bronze, 2.5Y6/10.
Tonality from a distance.	Orange bronze	Bronze.
Discoloration.	Golden bronze	Light bronze.

No references cited.

ROBERT E. BAGWILL, Primary Examiner

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