

United States Patent 1191

[54] CHOVEANTHEMILM DEASIT MANUEL

Machin

Plant 9,304 [11] Patent Number: Sep. 26, 1995 [45] Date of Patent:

tion", The National Chrysanthemum Society, London, Essex

[54]	'BRONZE MAJESTY'		
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[73]	Assignee:	Goldstock Breeding Limited, Hants, England	
[21]	Appl. No.:	254,266	
[22]	Filed:	Jun. 3, 1994	
[52]	U.S. Cl		
[56]		References Cited	

References Cited

U.S. PATENT DOCUMENTS

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Chan, 1966, "Chrysanthemum and Rose Mutations Induced by X-Rays", Am. Soc. Hort. Sci. Proc., pp. 613-620.

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Dowrick, et al., 1966, "The Induction of Mutations in Chrysanthemum Using X- and Gamma Radiation", Euphytica, 15:204–210.

Primary Examiner—Howard J. Locker Attorney, Agent, or Firm-Foley & Lardner

ABSTRACT

A new Chrysanthemum cultivar named Bronze Majesty characterized by the combined features of flat capitulum form, daisy capitulum type, bronze floret color, capitulum diameter of 66-76 mm, a response period of 59-63 days when grown with 14 long days prior to start of short days, a plant height of 90-100 cm, and an inverted pyramid flower formation.

3 Drawing Sheets

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The present invention comprises a new and distinct cultivar of Chrysanthemum, botanically known as Dendranthema grandiflora, and referred to by the cultivar named Bronze Majesty.

Bronze Majesty is a mutation of Majesty which originated from a cross made by the inventor Barrie J. Machin in a controlled breeding program in Fareham, England in 1986. The parent cultivar is disclosed in application Ser. No. 08/139,009, now U.S. Plant Pat. No. 8,944.

Bronze Majesty is a product of a mutation induction program carried out by the inventor in Fareham, England. The program had the objective of creating new cultivars that would expand the ray floret color range of Majesty, which has very light pink ray floret color.

Bronze Majesty was discovered and selected by Barrie J. Machin in April 1988 in Wareham, England as one flowering plant within a flowering block established as rooted cuttings from plants of Majesty that had been exposed as unrooted 20 cuttings to an X-ray source of 1500 rads.

The first act of asexual reproduction of Bronze Majesty was accomplished when vegetative cuttings were taken from the initial selection in June 1988 in a controlled environment in Fareham, England by Barrie J. Machin.

Horticultural examinations of controlled flowerings of successive plantings has shown that the unique combination of characteristics as herein disclosed from Bronze Majesty are firmly fixed and are retained through successive generations of asexual reproduction.

Bronze Majesty has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, 2

light intensity and day length, without, however, any variance in genotype.

The following observations, measurements and comparisons describe plants of Bronze Majesty grown in Fareham, England under greenhouse conditions which approximate those generally used in commercial greenhouse practice.

The following traits have been repeatedly observed and are determined to be basic characteristics of Bronze Majesty which in combination distinguish this Chrysanthemum as a new and distinct cultivar.

- 1. Flat capitulum form.
- 2. Daisy capitulum type.
- 3. Bronze ray floret color.
- 4. Diameter across face of capitulum of 66-76 mm when
 - 5. Flowering response under normal temperatures is 59 to 63 days after start of short days.
- 6. Peduncle length of the first lateral at flowering after removal of the apical bud and without growth regulator applications is 9.0 cm, and the peduncle length of the fourth lateral at flowering is 12.0 cm.
 - 7. Plant height of 90-100 cm.

The accompanying photographic drawings show typical inflorescence and leaf characteristics of Bronze Majesty, with the colors being as nearly true as possible with illustrations of this type.

The color photograph on sheet 1 illustrates flower and foliage colors of Bronze Majesty grown as a cut spray mum.

The black and white photo on sheet 2 illustrates three views of the inflorescence of Bronze Majesty.

The black and white photo on sheet 3 shows the upper and under surfaces of the leaves of Bronze Majesty at three stages of development.

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Of the commercial cultivars known to the inventor the most similar in comparison to Bronze Majesty is the unpatented cultivar identified as Bronze Marble. Reference is made to attached chart A which compares certain characteristics of Bronze Majesty with the same characteristics of 5 Bronze Marble. Similar traits are capitulum form and type, response and spray formation. The bronze ray floret color of Bronze Majesty is substantially darker than Bronze Marble, and Bronze Majesty has a slightly smaller capitulum diameter, is slightly shorter and has shorter peduncles.

In comparison to the parent cultivar Majesty, the ray floret color of Bronze Majesty is completely different, Bronze Majesty has a slightly smaller capitulum diameter, and the plant height of Bronze Majesty is slightly shorter. All other characteristics are the same or comparable.

In the following description, color references are made to The Royal Horticultural Society Color Chart. The color values were determined on plant material of Bronze Majesty grown as a single spray cut mum in Fareham, England. Classification:

Botanical.-Dendranthema grandiflora cv Bronze Majesty.

Commercial.—Daisy spray cut mum.

Inflorescence

A. Capitulum

Form.—Flat.

Type—Daisy.

Diameter across face.-66-76 mm.

B. Corolla of ray florets:

Color (general).—Bronze.

Color (upper surface).—24A.

Color (under surface).—23B.

Shape.—Broad, pointed and slightly curved.

C. Corolla of disc florets:

Color (mature).--13A.

Color (immature).—143C.

Quantity.—Approximately 200 per flower.

D. Reproductive organs:

Androecium.-Present only on disc florets; small quantity of pollen.

Gynoecium.—Present in disc and ray florets.

Plant

A. General appearance:

Height.-90-100 cm.

Branching pattern.-Regular branching habit, typically one branch developing per leaf axil.

B. Foliage:

Color (upper surface).—147A.

Color (under surface).—147B.

Shape.—Pinnately lobed with deep marginal indentations; see photograph on sheet 3.

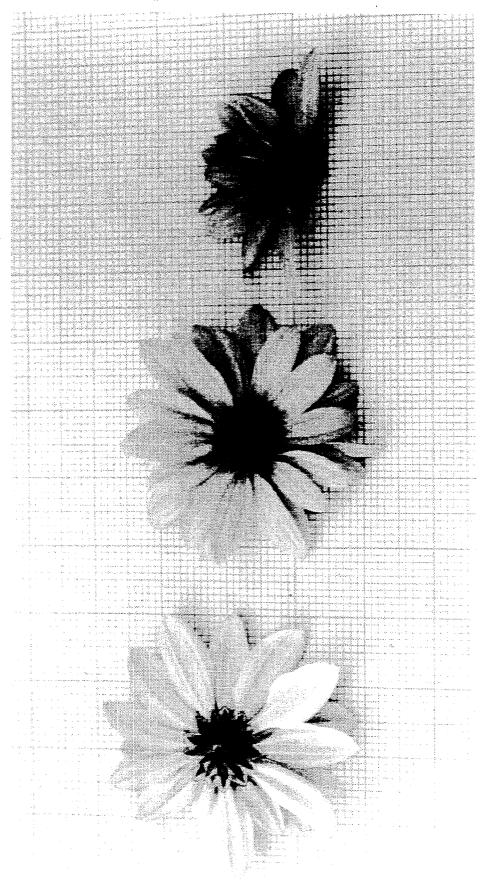
CHART A

CHARACTERISTICS	BRONZE MAJESTY	BRONZE MAJESTY	
Ray floret color	Bronze	Light Bronze	
Capitulum form and type	flat daisy	flat/daisy	
Diameter across face of capitulum	66–76 mm	70-80 mm	
Plant height Peduncle length	90-100 cm	95–105 cm	
1st lateral	9 cm	11 cm	
4th lateral	12 cm	14 cm	
Spray formation	Inverted pyramid	Inverted pyramid	

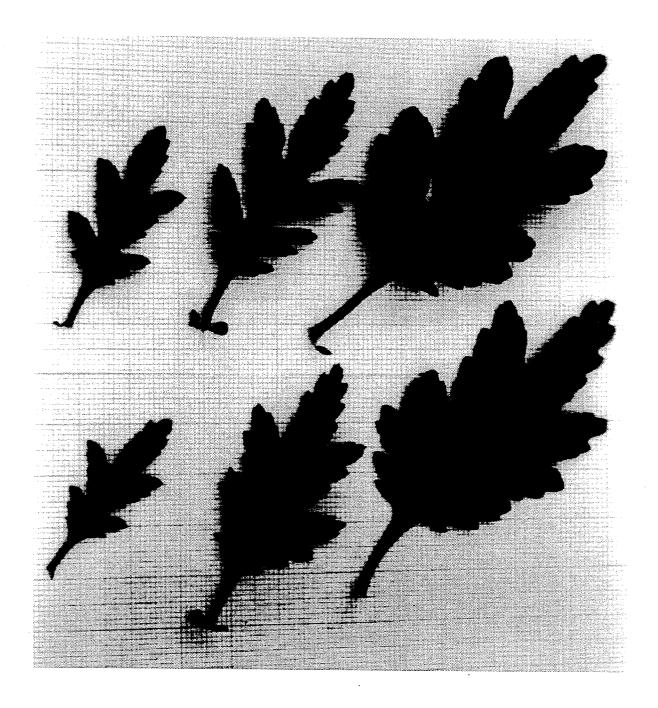
It is claimed:

1. A new and distinct Chrysanthemum plant named Bronze Majesty, as described and illustrated.





Sep. 26, 1995



UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. :

Plant 9,304

DATED

September 26, 1995

INVENTOR(S):

MACHIN

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 1, line 10, "8,944" should read --8,994--;

line 17, "Wareham" should read -- Fareham--.

Signed and Sealed this

Twentieth Day of February, 1996

Attest:

BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks