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United States Patent [19]

Carmel

[11] Patent Number: Plant 8,290

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[54] **ROSE PLANT—CAROLA**

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[73] Assignee: **Yuval Agricultural Products Ltd.**, Israel

[21] Appl. No.: **767,546**

[22] Filed: **Sep. 27, 1991**

Related U.S. Application Data

[63] Continuation of Ser. No. 387,837, Aug. 1, 1989, abandoned.

[30] **Foreign Application Priority Data**

Jan. 12, 1989 [IL] Israel 1392/89

[51] **Int. Cl.**[5] **A01H 5/00**
[52] **U.S. Cl.** **Plt./20**
[58] **Field of Search** Plt./20, 19, 21

[56] **References Cited**

U.S. PATENT DOCUMENTS

P.P. 4,391 3/1979 Delbard ..... Plt. 20
4,724,276 2/1988 Ecke, Jr. 47 58

FOREIGN PATENT DOCUMENTS

855 6/1978 France .

OTHER PUBLICATIONS

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Attorney, Agent, or Firm—Pollock, Vande Sande & Priddy

[57] **ABSTRACT**

A rose plant exhibiting good resistance to powdery mildew, and being characterized by nonfragrant flowers, very high crop, good self-rooting and high stem break forth.

2 Drawing Sheets

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This application is a continuation application of application Ser. No. 07/387,837, filed Aug. 1, 1989, now abandoned.

FIELD OF THE INVENTION

The present invention is concerned with a new variety of hybrid tea rose discovered by me and being a mutation of Deladel (U.S. Plant. Pat. No. 4,391, dated Mar. 6, 1979), Madame G. Delbard variety.

SUMMARY OF THE INVENTION

The mutation was first discovered on a cultivated area, in a farm located in South America, at an altitude of about 2,400–2,500 meters above sea level, with average night temperature of 5–8 degrees centigrade, and day temperature of 5–18 degrees centigrade.

Plants were grown in a green-house, and then brought to Israel, where they were vegetatively propagated by selfrooting of cuttings.

Asexual reproduction of this new cultivar as performed at Yuval Agriculture Products at Moshav Ha'Yogev shows that the foregoing characteristics and distinctions came true to form and are established and transmitted through succeeding propagations.

The resulting plants were found to be stable in their botanical characteristics, as are described below and in the attached drawing.

The following is a description of the characteristics of my new rose cultivar which distinguish it from cultivars of which I am aware and especially from Madame G. Delbard (Deladel):

1. Better branching.
2. Larger flower bud.
3. Distinct larger number of petals.
4. Larger sepals with larger extensions.
5. More water shoots, than the original plant.
6. Good grafting compatibility on *Rosa indica* L.

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BRIEF DESCRIPTION OF THE DRAWING

The first sheet of the drawing depicts buds of the claimed plant in various stages of opening; the characteristic shape and foliaceous appendages of the sepals are shown along with the high-centered character of the buds themselves. The coloration of the other surfaces of the petals at this stage of opening is also depicted.

The second sheet of drawing shows, in comparison, two petals of Carola, designated as A at the top of the drawing, and petals of comparable stage of maturity as taken from the parent variety "Deladel", labelled B, at the bottom of the drawing. This sheet of drawing also depicts the typical difference in size of the petals taken from the mutation as compared to the parent variety; and, also shows the difference in the size of the spot at the point of petal attachment; that of the parent "Deladel" being much smaller in the comparison; and the difference in coloration; that of the sport being clear white while that of the parent being light yellow in color.

DETAILED DESCRIPTION OF THE INVENTION

The following is a detailed description of my new rose cultivar with color in terminology in accordance with Royal Horticultural Society of London, England (R.H.S.) Colour Chart except where ordinary dictionary significance of color is indicated.

The plant originated from a mutation of Madame G. Delbard.

The following description is based on observations made in Moshav Ha'Yogev, Israel, in a greenhouse:

Plant	growth habit	upright
Older stem		corky[1]

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Plant	growth habit	upright
Young shoot	anthocyanin coloration	strong
	hue of anthocyanin coloration	purple
Prickles		present
Prickle	shape of upper sides	straight
	shape of lower side	concave
Short prickles	number	few
Long prickles	number	few
Leaf	size	length 140–170 mm width 110–150 mm
	green color	medium to dark
	glosssiness of upper side	absent or very weak
Leaflet	cross section	slightly convex
	undulation of margin	absent or very weak
Terminal leaflet	length of blade	ca. 60 mm
	maximum width	ca. 35 mm
	length of petiole	ca. 20 mm
	shape of base	rounded
Flowering shoot	number of flowers	few
Flowering habit		continuous
Flower pedicel	number of hairs or prickles	few
Flower bud	longitudinal section	circular to ovoid
Flower	type	double
	number of petals	33–40
	diameter	ca. 110 mm
	view from above	rounded to star-shaped
	side view of upper part	flattened-convex
	side view of lower part	flat
	fragrance	none
Sepal	length	40–55 mm
	extensions	strong
Petal	size	length 50–60 mm width 55–65 mm
	shape	rounded
	color of middle zone of inner side (according to the Royal Horticultural Society Color Chart)	RHS 53-A dark red
	color of marginal zone of inner side	RHS 53-A dark red
	spot at base of inner side	present
	size of spot at base of inner side	medium (length of spot on the upper side of the petal was 8–10 mm)
	color of spot at base of inner side	white (RHS 155-D)
	color of middle zone of outer side	RHS 53-C dark red
	color of marginal zone of outer side	RHS 53-C dark red
	spot of base of outer side	present
	size of spot at base of outer side	very small to small
	color os spot at base of outer side	white
	reflexing of margin	strong
	undulation of margin	weak
Stamen	predominant color of filament	purple
	length	long
	predominant color	purple
	hairiness of upper half	medium
	position as compared with anthers	above

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Plant	growth habit	upright
	size	medium
	shape of longitudinal section	pitcher shaped

[1]Typical for hybrid tea roses.

The time of beginning of flowering is early.

The average number of petals per flower: 33–38.

The bud size at time of picking is 5–6 cm long, and 3 cm in diameter.

The number of side shoots per flowering branch is 5–6.

The annual produce is 150–160 flowers per square meter.

Flowering stem medium green, 70–80 cm long with an average of 13 leaves.

The vase life is up to 15 days, under condition of room temperature.

Average number of water shoots, in 1st year after planting 4–6.

Prickles, per internode — 2–3.

Prickles up to 3rd leaf — 1.

Number of leaflets per leaf — 5–7.

Budding sprout — 8–9.

Fragrance — none.

Plant's height in 8 months after planting 170–180 cm.

Time from planting to commercial flower production 6–8 months.

Good resistance to Rose Powdery Mildew.

Exhibits high stem break forth, very high crop and good self-rooting.

Under condition of room temperature flower opening proceeds

Under condition of room temperature flower opening proceeds slowly.

The variety should be grown under glass.

Comparison Of Production Characteristics Between The New Variety "Carola" and Variety "Deladel"

Observations made in Ecuador from commercial plantings during 1988–1990, where the two varieties were grown side by side, under the same conditions and same age, were both self-rooted and with the same planting time. Each one 10,000 square meters of plants.

	Carola	Deladel
Average number of petals	33–38	18–25
Average number of cut flowers per plant per month (year round production)	1.85–2.00	0.90–1.25
Average number of water-shoots in first year after planting	4–6	2–3
Plant height in 8 months after planting	170–180 cm	80–90 cm
Size of spot at base of inner side	medium	very small
Color of spot at base of inner side of petal	white (RHS 155-D)	yellow
Fragrance of flower	none	slight, not sweet of spicy
Time from planting to commercial flower production	6–8 months	10–12 months
Grafting compatibility on Rosa indicia L.	very good (about 65% success)	very poor

The size of the spot was, for the variety 'Carola' defined

as: size of spot at base of inner side of petal-medium, and size of spot at base of outer side of petal-very small to small, using the sketch of the Test Guidelines for Rose of the Union for Protection of New Plant Varieties (document TG/11/4)-applying the following calculation:

[1+{(average length of spot/average length of petal)−1}]/(35−1)*8

With lower value of length of spot 1 mm, and higher value of length of spot 35 mm.

Statistical Analysis For Additional Observations Made In Ecuador In Order To Compare Carola With Deladel

	Carola	Deladel
Number of petals:		
standard deviation	7.77	3.92
mean	32.05	22.35
Plant height in 8 months:		
standard deviation	0.13	0.10
mean	1.97	1.50
Basal shoots:		
standard deviation	1.48	0.67
mean	3.00	1.32
Flowers per plant:		
standard deviation	0.53	0.48
mean	1.76	1.17

In all tests of the examined characteristics, the conclusion was that the population differ with a high level of significance.

Comparison Of Production Characteristics Between The New Variety Odem And Variety Carola

The new variety Odem is a variety that was subsequently discovered and is a spot of Carola. They differ as described below:

	Odem	Carola
Average number of petals	39–48	33–38
Size of petal		
length	37–45 mm	50–60 mm
width	39–49 mm	55–60 mm
Flower		
diameter	ca. 80 mm	ca. 100 mm
color of upper side	RHS 46-AB	RHS 53-A
Petal's reflexing	medium	strong
Size of spot at base of inner side of petal	small	medium
Color of spot at base of inner side	yellow	white
Length of flowering stem	50–70 cm	70–90 cm
Thickness of flowering stem	medium	thick
Number of flowering stems per plant per year	about double as for Carola	

I claim:

1. A new and distinct variety of rose plant of a hybrid tea rose, variety, named Carola, as shown and described, and consisting mainly of plants being vigorous growing, showing a large flower bud, containing a large number of petals, having nonfragrant with petals with a medium-sized white spot at their base, with early and prolific flower production, and having fast and good propagating features.

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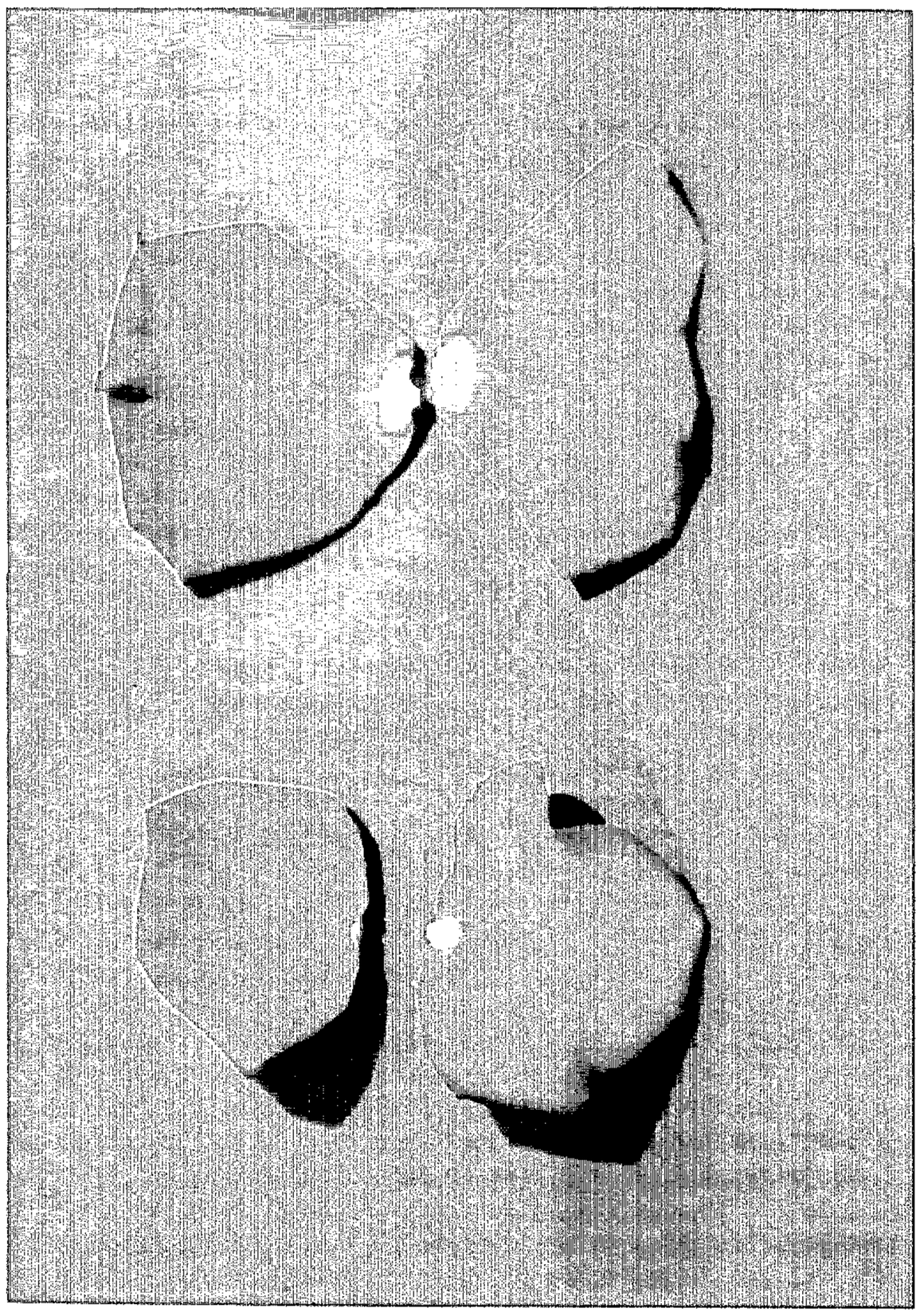
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