



US00PP09736P

United States Patent

[19]

Carmi**Patent Number:** **Plant 9,736****Date of Patent:** **Dec. 10, 1996**[54] **HYBRID TEA ROSE PLANT NAMED 'LIGHT CAROLA'**P.P. 8,290 7/1993 Carmel Plt./20
P.P. 8,620 3/1994 Carmel Plt./20[75] Inventor: **Carmel Carmi**, Moshav Hayogev,
Israel*Primary Examiner*—Howard J. Locker
Attorney, Agent, or Firm—Pollock, Vande Sande & Priddy[73] Assignee: **Yoval Agricultural Products Ltd.**,
Israel[21] Appl. No.: **323,076****[57] ABSTRACT**[22] Filed: **Oct. 14, 1994**

A new and distinct rose plant of the hybrid tea class named 'Light Carola'. The plant is characterized by vigorous growth, non-fragrant flowers with red (RHS 47 A - 57 B) petals, early and prolific flower production, and fast and good propagating features.

[51] Int. Cl.⁶ **A01H 5/00**[52] U.S. Cl. **Plt./20**

[58] Field of Search Plt./11, 20, 21

[56] References Cited**U.S. PATENT DOCUMENTS**

P.P. 4,391 3/1979 Delbard Plt./20

3 Drawing Sheets**1****CROSS REFERENCE TO RELATED PATENTS**

The new and distinct cultivar described and illustrated herein is related to the cultivar 'Carola', the subject of U.S. Plant Pat. No. 8,290, issued Jul. 6, 1993, which in turn is a mutation of 'Deladel' ('Mme. G. Delbard'), the subject of U.S. Plant Pat. No. 4,391, issued Mar. 6, 1979.

FIELD OF THE INVENTION

The present invention is concerned with a new variety of a Hybrid Tea rose discovered by me and being a mutation of 'Carola', U.S. Plant Pat. No. 8,290, issued Jul. 6, 1993.

BACKGROUND OF THE INVENTION

This mutation was discovered as a branch on a 'Carola' plant in 1993 on a cultivated area in a farm, located in Moshav Ha'yogev, located in Izra'el Valley, Israel, with an average night temperature of 25° C. in summer and 0°-5° C. in winter.

The branch was vegetatively propagated from cuttings by self-rooting. From these cuttings plants were grown in a greenhouse where they were further vegetatively propagated from cuttings by self-rooting.

The resulting plants were found to be stable in their botanical characteristics, as are described below and as illustrated by typical plants parts in the attached photographs.

Asexual propagation of this new variety was performed at Moshav Ha'yogev, Israel.

The presently claimed cultivar was a natural mutation of the cultivar 'Carola'.

All color definitions in this application are taken from The Royal Horticultural Society of London, England (R.H.S.), 35 Colour Chart.

The data in the following table of comparison is based on observations made in the greenhouse at Moshav Ha'yogev, where plants were grown side-by-side, under the same conditions and under the same roof. The following observations were made between the present invention and the parent plant.

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		'CAROLA'	'LIGHT CAROLA'
Prickle(s):	shape: upper side	concave to straight	straight
Leaf:			
size (mm):			
length	140-170	140-160	
width	110-150	100-130	
Petiole:			
length (mm)	ca. 20	20-25	
Foliage:			
15 young: color of upper side	RHS 144B yellow-green	RHS 141B light green	green
mature: color of lower side	red-green		
Flowering stem:			
20 length (cm)	70-80	60-80	
color	medium green	green	
Flower:			
25 diameter (mm)	ca. 110	ca. 100	
number of petals	33-40	28-39	
Sepal:			
length (mm)	40-55	35-48	
Petal:			
size (mm):			
length	50-60	40-60	
width	55-65	40-50	
color of upper side	RHS 53A dark red	RHS 47A/57B red	
color of basal spot	RHS 155D white	RHS 155A white	
color of lower side	RHS 53C dark red	RHS 52A red	

SUMMARY OF THE INVENTION

The present invention provides a Hybrid Tea rose variety which includes the following characteristics which distinguish the new variety from the cultivar 'Carola', to which it is related, and for which the following differences have been noted:

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Distinctly different in the following:

Prickles: Shape of upper side.

Leaf: Size.

Petiole: Length.

Foliage: Color.

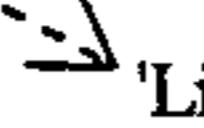
Flower: Diameter, number of petals.

Sepal: Length.

Petal: Size, color, color of basal spot.

The relationship of the presently claimed cultivar to other related cultivars as follows:

'Deladel' ---> 'Carola' ---> 'Odem' ---> 'Seemore' --->

 'Light Carola'

The following table of comparison present the differences between the cultivars in the family:

U.S. Plant Patent/ Application	'DELA- DEL'	'CARO- LA'	'ODEM'	'LIGHT CARO- LA' 08/ 323,076	'SEE- MORE'
	4,391	8,290	8,620	323,076	322,487

Plant:

growth habit: upright

stem: upright

semi-upright

upright

semi-

upright

color: mature: green-brown, corky

corky

green-brown

corky

green-

brown

Young shoot: antho-cyanin coloration: strong

medium

to

strong

medium

to

strong

hue of antho-cyanin coloration: no data

red-brown

purple

red-brown

red-brown

Prickle(s):

size:

length (mm): no data

5

5

4.5

5

height (mm): no data

6

6

5.5

6

shape: upper side: long base hooked downward

concave to straight

concave

straight

concave

short prickles:

quantity per 10 cm at center of stem: many

58

none

59

none

long prickles:

quantity per 10 cm at center of stem: many

8

7

9

8

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U.S. Plant Patent/ Application	'DELA- DEL'	'CARO- LA'	'ODEM'	'LIGHT CARO- LA' 08/ 323,076	'SEE- MORE'
5	4,391	8,290	8,620	323,076	322,487
<u>Leaf:</u>					
<u>size:</u>					
10	length (mm)	no data	140-170	120-150	140-160
	width (mm)	no data	110-150	75-115	100-130
	green color	no data	medium to dark absent to very weak	medium to dark absent to very weak	medium weak
15	glossiness of upper side	no data	weak	weak	weak
	<u>Leaflet:</u>				
20	cross section	oval pointed often curved with convex upper surface	slightly convex	straight	slightly convex
	no data	no data	absent to very weak	weak to medium	absent to very weak
25	undulation of margin	no data	no data	no data	weak to medium
	<u>Terminal leaflet:</u>				
30	width: (mm)	no data	ca. 35	30-43	ca. 33-38
	blade: length (mm)	no data	ca. 60	50-65	ca. 60
	<u>Petiole:</u>				
35	length (mm)	color: green	ca. 20 hairy	15-20 smooth	ca. 20-25 smooth
	rachis	green	red-green	red-green	hairy
	<u>Foliage:</u>				
40	young: color of upper side (RHS)	light brown	144B yellow-green	145B yellow-green	141B light green
	mature: color of lower side	green	red-green	red-green	green
	<u>Flowering stem:</u>				
45	length (cm)	70-90	70-80	40-60	60-80
	color	no data	medium	green	green
50	<u>Flower pedicel:</u>				
	number of hairs or prickles	no data	few	very few to few	few
	<u>Flower bud:</u>				
55	longitudinal section	pointed ovoid	circular	ovoid	circular
	Flower	diameter (mm)	average 102-114	ca. 110	ca. 80
60				ca. 100	ca. 80

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U.S. Plant Patent/ Application	'DELA- DEL'	'CARO- LA'	'ODEM'	'LIGHT CARO- LA' 08/ 323,076	'SEE- MORE'		5
size of bloom height (mm) fading with age	no data	large	medium	large	medium		
	no data	50-70	30-50	50-70	30-50		
	none to end of third day	none	slight fading begins after 7-10 days	none	fading begins after 7-10 days	10	
view from above	rounded	rounded to star shaped	rounded	rounded to star shaped	rounded	15	
number of petals life (days): on the plant in a vase	30-35	33-40	40-43	28-39	43-58		
Sepal:	no data	20-30	15-20	20-30	17-21		
length (mm) extensions Petal:	no data	12-15	15-18	12-15	12-15	20	
size:							
length (mm) width (mm) upper side: color	no data	50-60	37-45	40-60	37-45	30	
	no data	55-65	39-49	40-50	39-49		
Blood red	RHS 53A	RHS dark red	RHS 46AB	RHS 47A/57B	RHS 57A/58B		
basal spot at base of petal: size color	very small	medium	small	medium	small	35	
	yellow	RHS 155C white	RHS 3B yellow	RHS 155A white	RHS 3B yellow		
lower side: color	Blood red	RHS 53C	RHS 52A deep red	RHS 52A Crimson	RHS 55D whitish-purple, very light purple	40	
reflexing of margin undulation of margin	strong	strong	medium	strong	medium	45	
	no data	weak	very weak to weak	weak	very weak to weak		
Stamen: predominant color of filament Style:	yellow	purple	orange-red	purple	yellow-orange	50	
hairiness of upper half Stigma:	no data	medium	absent	medium	absent		
position as compared with anthers color	no data	above	same level	above	above	55	
	Amber yellow	RHS 4C light yellow	RHS 155C white	RHS 4C light yellow	RHS 4D light yellow		

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U.S. Plant Patent/ Application	'DELA- DEL'	'CARO- LA'	'ODEM'	'LIGHT CARO- LA' 08/ 323,076	'SEE- MORE'	'LIGHT CARO- LA' 08/ 322,487
Seed Vessel:						
size: length (mm)	no data	medium	small	medium	small	
diameter (mm)	no data	11	8	11	8	
shape of longitudinal section	no data	pitcher shaped	funnel shaped	pitcher shaped	funnel shaped	
Anthers:						
color	yellow	red	yellow	red	light yellow	
Filament:						
color	yellow-red	yellow-red	pink margin: orange	yellow-red	yellow	

BRIEF DESCRIPTION OF THE DRAWINGS

Sheet 1 represents a typical specimen of the present invention, illustrating a flower bud at picking stage, a part of the stem, leaflets, and flowers at various opening stages;

Sheet 2 represents a side-by-side comparison of the flower size, bud size and color of petal between a typical specimen of the present invention, 'Light Carola' (on the left) and the parent variety, 'Carola' (on the right); and

Sheet 3 represents another side-by-side comparison of various flower parts between a typical specimen of the present invention, 'Light Carola' (on the left) and the parent variety, 'Carola' (on the right).

The colors in the drawings are as true as is reasonably possible in an illustration, depicting green and red colors. The plants illustrated in Sheets 2 and 3 were grown under exactly the same conditions, in a greenhouse at Moshav Ha'yogev, each on its own roots, and being visibly healthy.

BOTANICAL DESCRIPTION

The following observations were made in Moshav Ha'yogev Israel in 1993 in a greenhouse:

Plant:

Form.—Bush.

Growth habit.—Upright.

Height (cm).—150-200.

Spread (cm).—Ca. 80.

Wood:

Color.—Mature, Light brown.

Bark.—Color: young, Green.

Mature, Light brown.

Stem:

Color.—Young, R.H.S. 143 B/152 B, green-yellow green. Mature, RHS 143 A green.

Young shoot:

Anthocyanin coloration.—Strong.

Hue of anthocyanin coloration.—Red-brown.

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Prickle(s): Present.

Size.—Length (mm): ca. 4.5. Height (mm): ca. 5.5.

Shape.—Upper side: straight. Lower side: concave.

Color.—Young: Bases: R.H.S. 173 B grey orange. upper part: R.H.S. 144 B yellow green. Mature: 5 bases: R.H.S. 173 A/176 grey orange. upper part: R.H.S. 152 BC yellow green.

Short prickles:

Quantity.—Many.

Number per 10 cm at center of stem.—Many (59).

Long prickles:

Number per 10 cm at center of stem.—Few (9).

Leaf:

Size.—Length (mm): 140–160. Width (mm): 100–130.

Green color.—Medium to dark.

Glossiness of upper side.—Absent to very weak.

Number of leaflets in the compound leaf.—3, 5, or 7.

Leaflet:

Cross section.—Slightly convex.

Undulation of margin.—Absent to very weak.

Margin.—Serrated.

Terminal leaflet:

Length of blade (mm).—Ca. 60.

Maximum width (mm).—Ca. 33–38.

Shape of base.—Rounded.

Petiole:

Length (mm).—Ca. 20–25.

Rachis.—Straight, flat, smooth.

Color.—R.H.S. 144 A, yellow green.

Foliage:

Color.—Young: upper side: R.H.S. 165 A, grey orange.

Lower side: R.H.S. 178 A/183 B, grey-red purple.

Mature: upper side: R.H.S. 137 A/147 A, green-yellow green. Lower side: R.H.S. 137 C/147 B, green-yellow green.

Stipule: Stitched, split tip.

Bloom:

Borne.—Multiply/in a Cluster.

Flowering shoot:

Number of flowers (after the other flower buds are pinched off).—Few (3–5).

Flowering habit: Continuous.

Flowering stem:

Length (mm).—Ca. 60–80.

Color.—Green.

Flower pedicel:

Number of hairs or prickles.—Few.

Flower bud:

Longitudinal section.—Circular.

Size.—Large (50–70 mm).

Flower:

Type.—Double.

Diameter.—Ca. 100 mm.

Fragrance.—None.

View from above.—Rounded to starshaped.

Side view.—Upper side: Flattened-convex. Lower side: flat.

Number of petals.—28–39.

Life.—on the plant: 20–23 days. In a vase: 12–15 days.

Fading with age.—None.

Petal:

Size.—Length(mm): ca. 60–40.

Width (mm): ca. 40–50.

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Shape.—Rounded.

Color—upper side.—Middle zone: R.H.S. 47A/57B red. Marginal zone: R.H.S. 47A/57B red. Basal spot: present. Basal spot: size: medium. color: R.H.S. 155A white.

Color—lower side.—Middle zone: R.H.S. 52A red. Marginal zone: R.H.S. 52A red. Basal spot: present. Basal spot: color: white.

Reflexing of margin.—Strong.

Undulation of margin.—Weak.

Sepal:

Color.—Upper side: R.H.S. 144 AB, yellow green. Lower side: R.H.S. 144 A, yellow green.

Length (mm).—Ca. 35–48.

Extensions.—Strong.

Color.—Upper side: green-yellow, white hairs. Lower side: green-yellow.

Stamen:

Predominant color of filament.—Purple.

20 Style:

Length.—Long.

Predominant color.—Purple.

Hairiness of upper half.—Medium.

Stigma:

Position as compared with anthers.—Above.

Color.—R.H.S. 4C light yellow.

Seed vessel:

Size.—medium.

Length (mm).—Ca. 11.

Diameter (mm).—Ca. 12.

Shape of longitudinal section.—Pitcher shaped.

Color.—White-yellow.

Description.—Long, hairy.

Pollen:

Color.—Red-yellow.

Anthers:

Color.—Red.

Quantity.—Many.

Arrangement.—Peripheral.

40 Filament:

Color.—Yellow-red.

Time from planting to beginning of flowering: Approx. 4 months.

Self-rooting: Very good.

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The cultivar is intended as and is suitable as a greenhouse rose. The cultivar bears blooms multiply. Blooms may be borne in a cluster.

When reference is made herein to "Number of flowers few," it is understood that such refers to 3, 4 or 5 flowers per cluster (i.e., the flowers that are left on the flowering shoot after the other flowers were pruned off). In addition, the term "fast" represents: within one month from insertion (of the cutting into the bedding) to a commercial plant. The term "good" represents: about 60–70% success in propagation.

I claim:

1. A new and distinct rose plant of the hybrid tea class named 'Light Carola' as shown and described; said plant being characterized by vigorous growth, non-fragrant flowers with red (R.H.S. 47 A-57 B) petals, early and prolific flower production, and fast and good propagating features.

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Sheet 1 of 3

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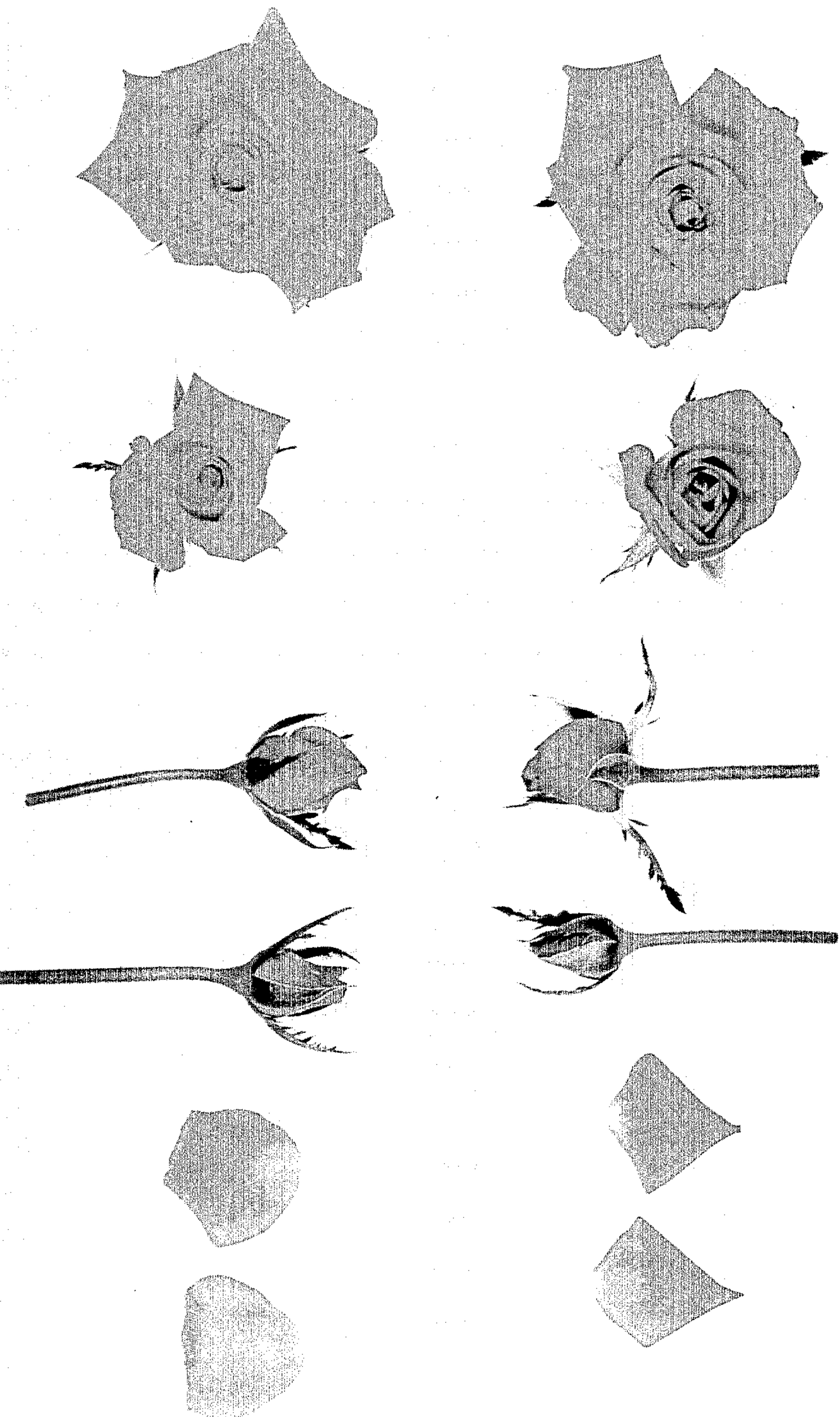


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Sheet 2 of 3

Plant 9,736

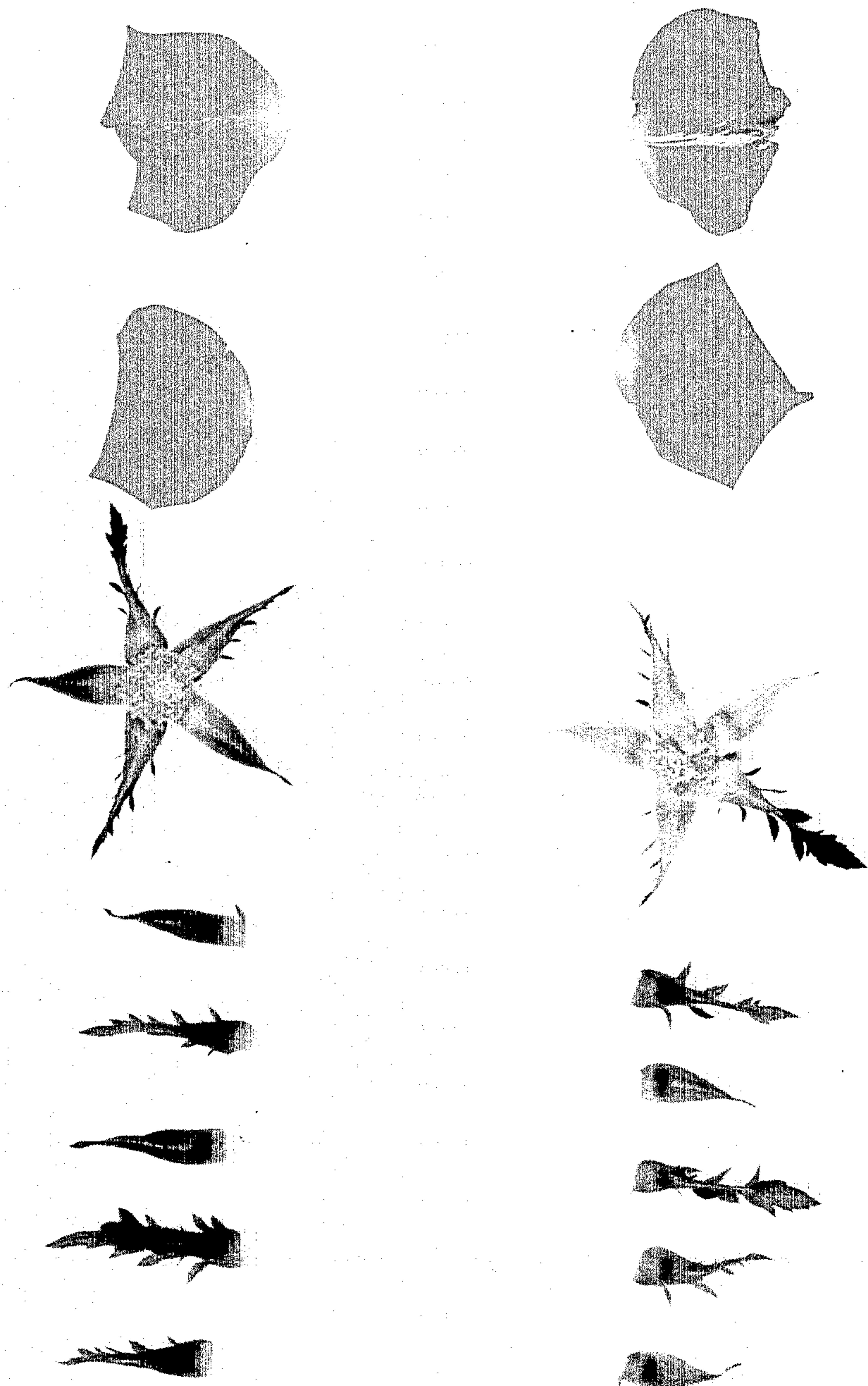


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EGG CARGO A 3