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(54) **STRAWBERRY PLANT NAMED 'PERSEPHENE'**

(50) Latin Name: ***Fragaria* x *ananassa***
Varietal Denomination: **Persephene**

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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 0 days.

(21) Appl. No.: **16/873,475**

(22) Filed: **Apr. 17, 2020**

(65) **Prior Publication Data**

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A01H 5/08 (2018.01)
A01H 6/74 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./208**
CPC ***A01H 6/7409*** (2018.05)

(58) **Field of Classification Search**
USPC Plt./156, 208
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP7,614 P 8/1991 Bringhurst et al.
2020/0337191 P1 10/2020 Larse
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(57) **ABSTRACT**

The present invention provides a new and distinct strawberry variety designated as 'Persephene' (a.k.a. '110195'). The 'Persephene' cultivar is primarily adapted to growing conditions of the central coast of California and produces strong vigorous plants that remain in fruit production from March through October.

7 Drawing Sheets

Latin name of the genus and species: *Fragaria* x *ananassa*.

Varietal denomination: 'Persephene'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct strawberry variety designated as 'Persephene' (a.k.a. '110195').

'Persephene' (a.k.a. '110195') is the result of a controlled-cross between a female parent cultivar designated '108080' and a male parent cultivar designated '107801', and was first fruited in Watsonville, Calif. growing fields. Both parents are proprietary strawberry plant varieties made by the inventor and are not available to the public. Following selection and during testing, the plant was originally designated '110195' and subsequently named 'Persephene'.

This new variety was asexually reproduced via runners (stolons) by the inventor at Watsonville, Calif. Asexual propagules from the original source have been tested in Watsonville growing fields and to a limited extent, grower fields in high elevation. The properties of this variety were found to be transmissible by such asexual reproduction. This cultivar is stable and reproduce true to type in successive generations of asexual reproduction.

DESCRIPTION OF THE DRAWINGS

The accompanying color photographs depict various characteristics of the cultivar as nearly true as possible to make color reproductions. The age of the plants in FIGS. **1-7** is six months old.

FIG. **1** shows 'Persephene' plant with florescence and fruit.

FIG. **2** shows 'Persephene' fruit.

FIG. **3** shows 'Persephene' fruit cross section.

FIG. **4** shows 'Persephene' flowers.

FIG. **5** shows 'Persephene' leaf.

FIG. **6** shows 'Persephene' underside leaf.

FIG. **7** shows 'Persephene' petiole.

SUMMARY OF THE INVENTION

This invention relates to a new and distinctive strawberry cultivar designated as 'Persephene' (a.k.a. '110195'). This cultivar is primarily adapted to the climate and growing conditions of the central coast of California. This region provides the necessary temperatures required for it to produce a strong vigorous plant and to remain in fruit production from March through October. The nearby Pacific Ocean provides the needed humidity and moderate day temperatures and evening chilling to maintain fruit quality for the production months.

The following traits and photographs in combination distinguish the strawberry variety 'Persephene' from known strawberry varieties. Plants for the botanical measurements in the present application were grown as annuals. Any color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The age of the plants in Table 1 is seven months old.

TABLE 1

Characteristics of Persephene

Characteristic Type	Characteristic	Persephene
General	Plant Habit	annual
	Plant Growth Habit	semi-upright to spreading
	Day length	neutral
	Planting season	Fall
	Height	41 cm
	Width	47 cm
	Density of foliage	light to medium
	Plant vigor	high
	Freezing Quality	moderate
	Rain/weather tolerance	moderate
	Harvest Ease	easy
Leaf	Leaf Shape	concave
	Leaf texture	soft
	Leaf average width	138 mm
	Leaf average length	114 mm
	Terminal leaflet width	79 mm
	Terminal leaflet length	76 mm
	Terminal leaflet length/width ratio	0.96
	Teeth per terminal leaflet	16 to 22
	Shape of the terminal leaflet base	acute to rounded
	Shape of terminal leaflet in cross-section	concave
	Shape of the terminal leaflet margin	serrate to crenate
	Color of upper side of leaflet	RHS 137A
	Color of lower side of leaflet	RHS 138B
	Leaf blistering	weak
	Leaf glossiness	weak to medium
	Leaf variegation	absent
	Number of leaflets per leaf	3
	Terminal Leaflet margin	revolute
	Terminal Leaflet shape	orbicular
	Terminal Leaflet shape of apex	rounded
Limbs	Petiole length	29 cm
	Petiole diameter	3.86 mm
	Petiole pubescence	sparse to medium
	Petiole pose of hairs	upwards
	Petiole color	RHS 145A
	Petiolule length	1.3 to 6.0 cm
	Petiolule diameter	2.86 mm
	Petiolule color	RHS 145A
	Stipule length	4.5 cm
	Stipule width	1.2 cm
	Stipule pubescence	medium
	Stipule anthocyanin	present
	Stipule color (color code)	RHS 145C
	Pedicel average length	19.4 cm
	Pedicel average diameter	2.7 mm
	Pedicel color (color code)	RHS 145A
	Attitude of hairs on peduncle and pedicel	upwards
	Peduncle average length	125 mm
	Peduncle average diameter	4.5 mm
Inflore-scence	Inflorescence position relative to foliage	above
	Flower arrangement of petals	free to touching
	Flower size	medium
	Flower diameter	2.8 cm
	Petal shape	orbicular
	Petal apex	rounded
	Petal margin	entire
	Petal base shape	concave
	Petal length	1.1 to 1.3 cm
	Petal width	1.1 to 1.2 cm
	Petal length/width ratio	1 to 1.08
	Petal number per flower	5
	Number of flowers	36 to 40
	Upper Petal color	RHS 155D
	Lower Petal color	RHS 155D
	Floral Calyx Diameter	41 cm
	Corolla diameter	28 cm
	Calyx diameter relative to corolla	larger

TABLE 1-continued

Characteristics of Persephene

Characteristic Type	Characteristic	Persephene
	Inner calyx diameter relative to outer calyx	same size
	Sepal shape	elliptical
	Sepal apex	convex
	Sepal margin	entire
	Sepal length	1.1 cm
	Sepal width	0.4 to 0.7 cm
	Sepal number per flower	12
	Sepal color (upper)	137A
	Sepal color (lower)	138B
	Receptacle color	RHS 141D
	Fertility	not tested
	Time of flowering (50% of plants in bloom)	May
	Shape of stigma	capitate
	Color of stigma	163B
	Length of style	1.4 mm
	Color of style	RHS 4A
	Color of the ovary	RHS 150B
	Number of stamen	18 to 24
	Length of the stamens	1.5 to 5.0 mm
	Shape of anther	dorsifixed
	Size of anther	1.5 mm
	Color of anther	RHS 20A
	Amount of pollen	scarce
	Color of pollen	RHS 21B
	Color of filament	RHS 150B
	Length of filament	0.5 to 3.5 mm
Stolon	Stolon number	1 to 4
	Stolon anthocyanin	RHS 166A
	Stolon thickness	medium
	Stolon pubescence	sparse
	Widest diameter of stolon at leaf attachment	2.71 mm
	Stolon average length	50.6 cm
	Stolon color	RHS 145A
Fruit	Fruiting truss length	6.5 to 24.0 cm
	Fruiting truss diameter	3.03 mm
	Number of fruit per truss	3 to 7
	Truss color	RHS 145A
	Fruit length	3.7 to 4.3 cm
	Fruit width	3.7 to 3.9 cm
	Fruit skin color	RHS 45A
	Fruit flesh color excluding core	RHS 41A
	Fruit core color	RHS 38A
	Fruit length/width ratio	1.0 to 1.11
	Fruit weight	June: 26.7 g
	Relative fruit size	medium to small
	Predominant fruit shape	conic to globose conic
	Shape difference between primary & second	No shape difference
	Width of band without of achenes	medium to narrow
	Fruit glossiness	medium
	Position of achenes	below surface
	Achene color	RHS 185B
	Achenes per fruit	405
	Achene weight	0.238 g
	Position of calyx	below surface
	Fruit Calyx Diameter	4.1 cm
	level of adherence of calyx	weak
	Color of calyx	RHS 137C
	Pose of calyx segments	reflexed
	Size of calyx in relation to fruit	larger
	Firmness of flesh	medium
	Evenness of flesh color	nearly even
	Fruit hollow length	1.8 cm
	Fruit hollow width	1.2 cm
	Fruit hollow length/width ratio	1.5
	Hollow center	small
	Sweetness	7 to 7.5 Brix
	Acidity	3.54

TABLE 1-continued

Characteristics of Persephene

Characteristic Type	Characteristic	Persephene
	Texture when tasted	medium
	Time of flowering	May
	Time of fruit ripening	June
	Harvest maturity (50% of plants with ripe fruit)	June
	Type of bearing	day neutral
	Grams of fruit per plant (weeks 17 to 37)	1468 g
	Yield (lb per acre)	June: 30,000 lb/acre
	Firmness	firm
	Surface Texture	smooth
	Fruit Appearance (1-7 scale; 7 = best)	6
	Storage longevity	10 days
	Mean percent marketable fruit (weeks 17 to 37)	86%
Horti-cultural	Crop suitability	Fresh market
	Temperature tolerance range	−1° C. to 36° C.
	USDA Hardiness Zone adaptability for annual transplanting of California grown commercial rootstock	6a,6b,7a,7b, 8a,8b,9a,9b
	Cull rate (% Usable)	12%

'Seascape' (U.S. Plant Pat. No. 7,614) is a commercial strawberry variety that is similar to, but distinguished from 'Persephene'. The foliage of the new strawberry plant variety 'Persephene' was observed to be more dense than the foliage of the check variety 'Seascape'. The florescence of the new variety 'Persephene' pollinates beyond the canopy and differs in this way from 'Seascape'. Some of the flowers of the comparison strawberry variety 'Seascape' do not extend beyond the leaf canopy and some of the fruit of 'Seascape' ripens beneath the canopy. The new variety 'Persephene' is easier to harvest than the check variety 'Seascape'. The fruit color of check variety 'Seascape' is deeper red than the fruit color of new variety 'Persephene'. The yield and percent of marketable fruit of 'Persephene' is greater the yield and percent marketable fruit of 'Seascape'.

The strawberry plant 'Persephene' is differs from each of its parents. The fruit of new variety 'Persephene' is conic shaped, however, the fruit of both of the parents of 'Persephene' are long-conic with the ratio of fruit height to fruit width greater than that of 'Persephene'. The fruit of 'Persephene' is firmer than the fruit of its female parent '107801'. The fruit yield of 'Persephene' is similar to the fruit yield of female parent '107801', however, the fruit yield of 'Persephene' is greater than the fruit yield of male parent '108080' and the percent of marketable fruit produced by 'Persephene' is greater than that of both female parent '107801' and male parent '108080'. The fruit of 'Persephene' is larger than the fruit of male parent '108080'. The strawberry plant 'Persephene' is larger than its male parent '108080'.

The invention claimed is:

1. A new and distinct cultivar of strawberry plant named 'Persephene' substantially as shown and described herein.

* * * * *

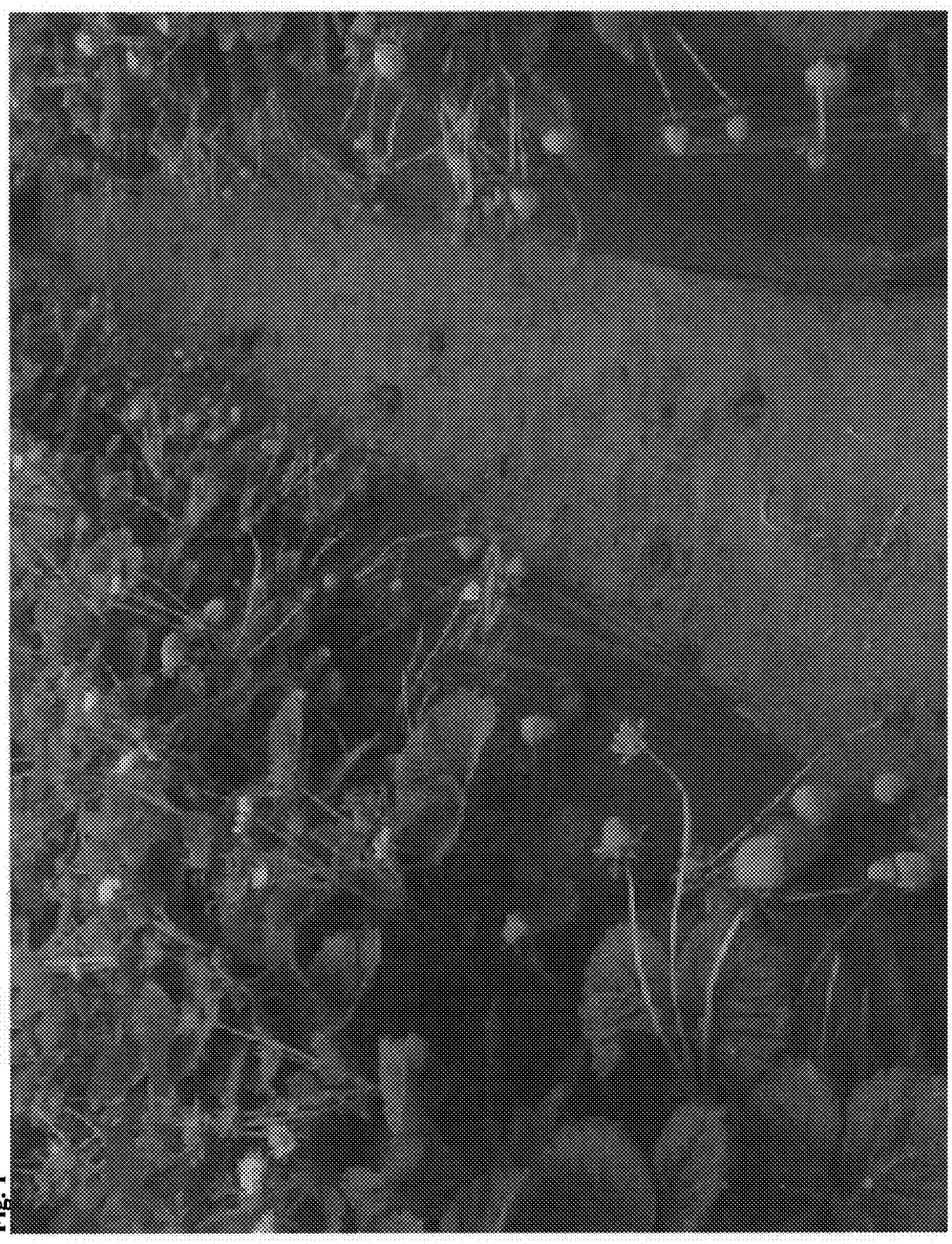

Fig. 1

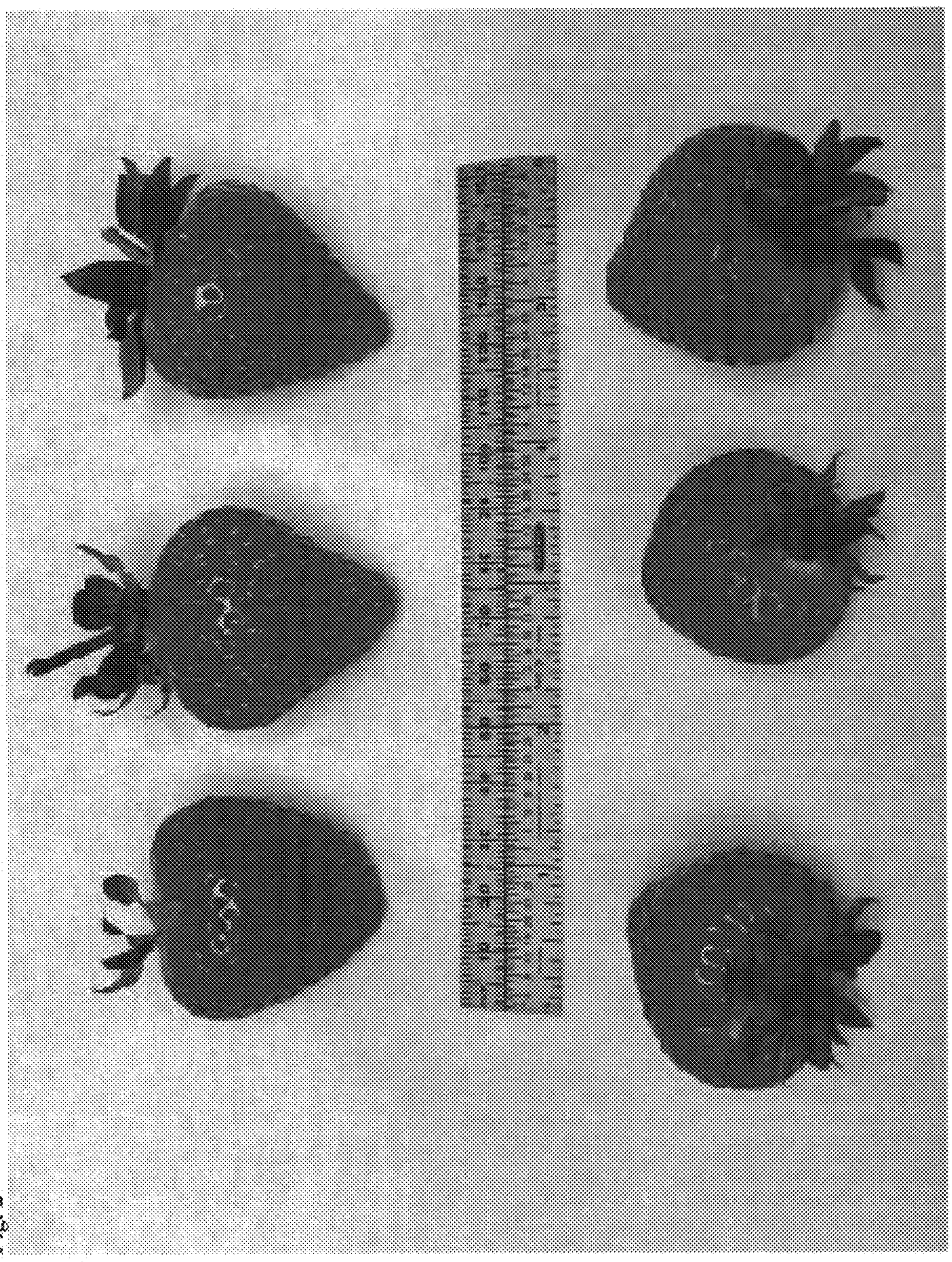

Fig. 2

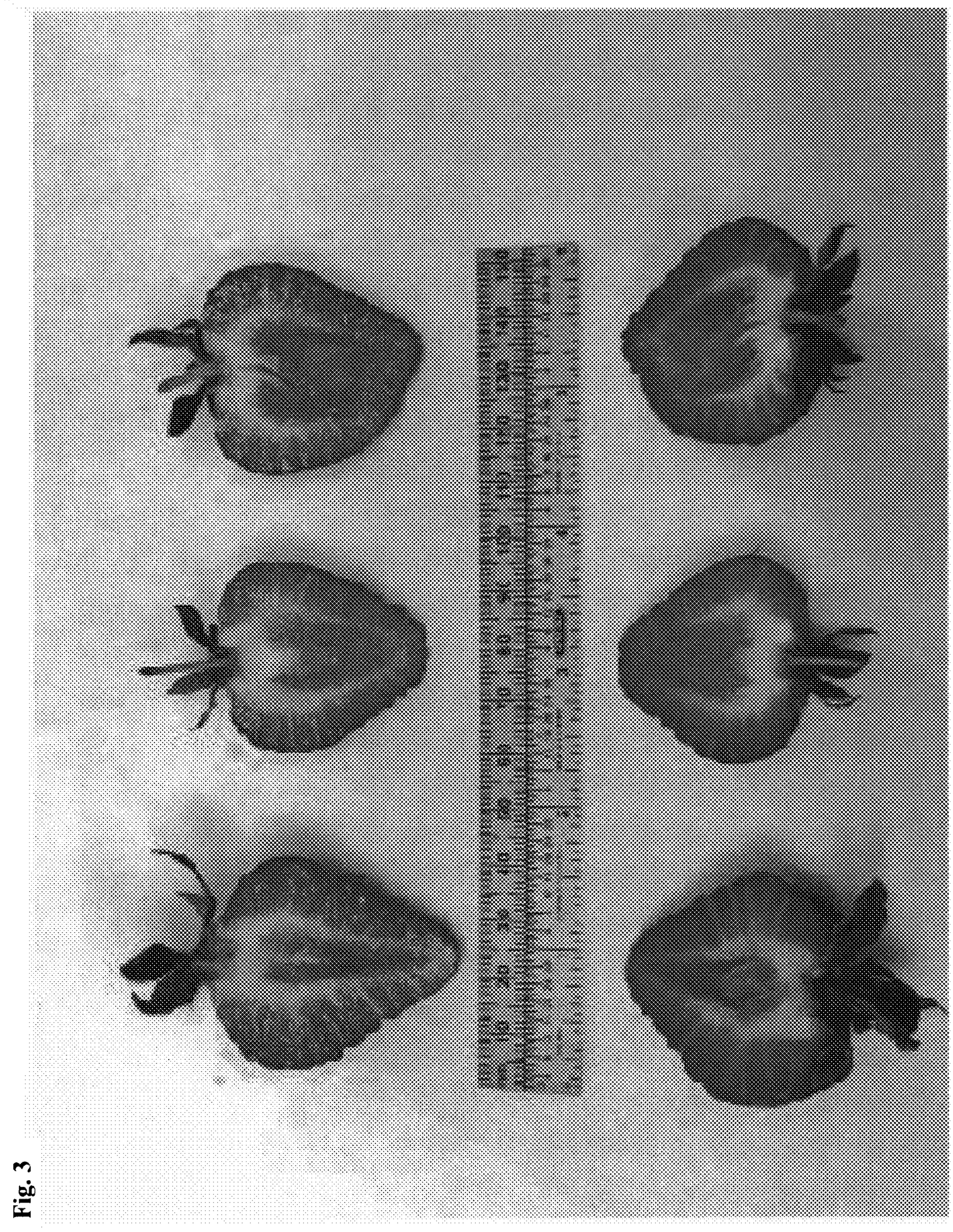

Fig. 3

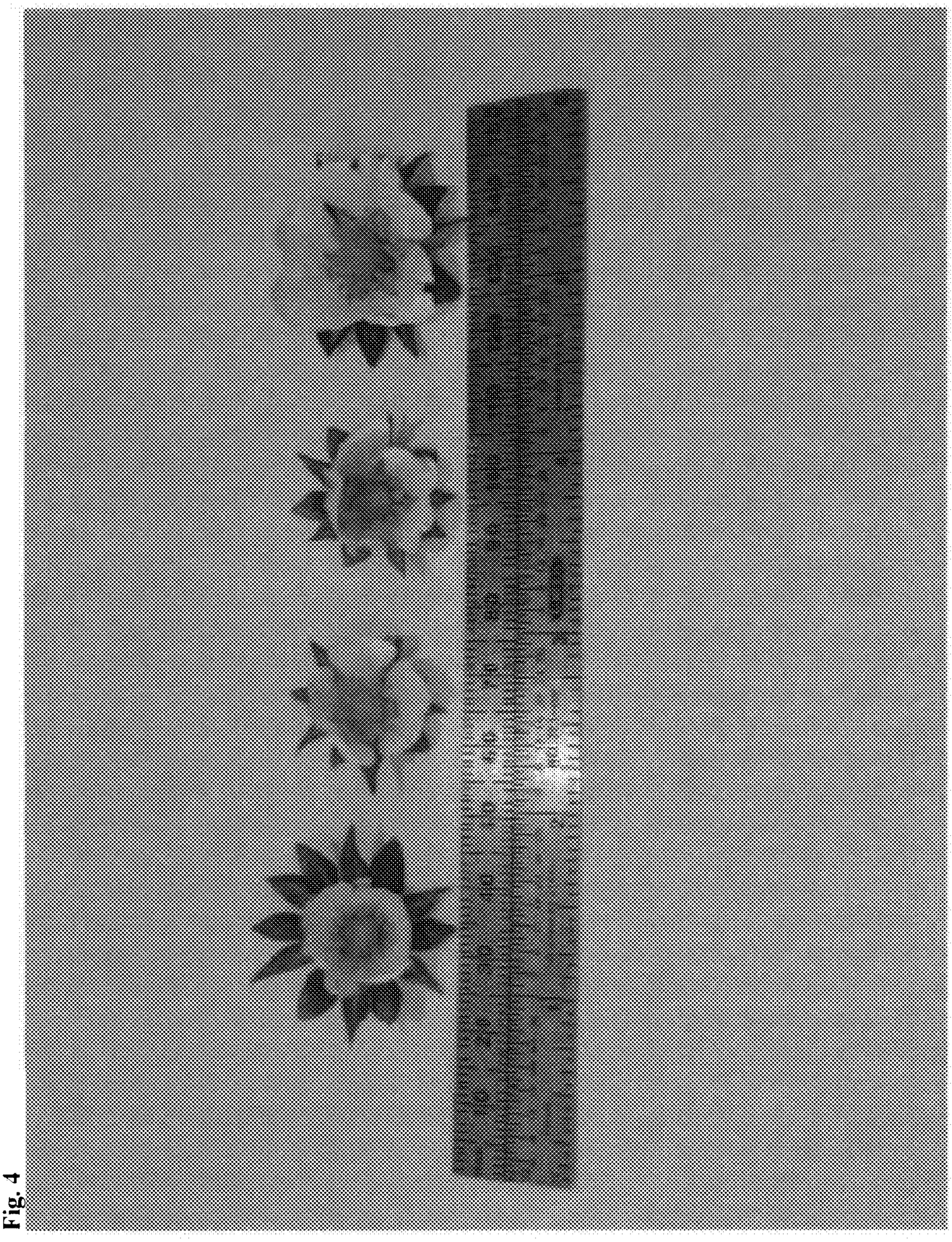

Fig. 4

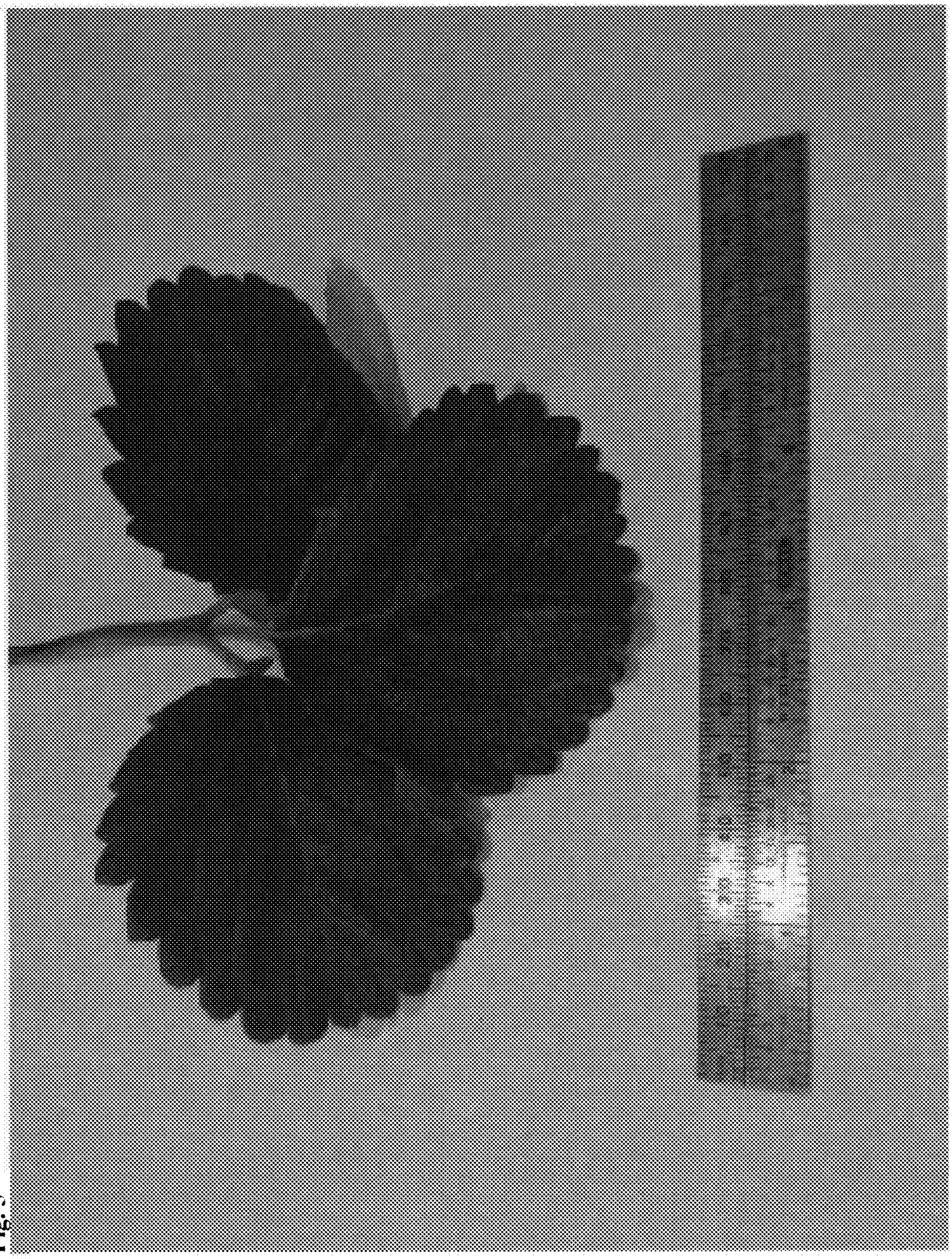

Fig. 5

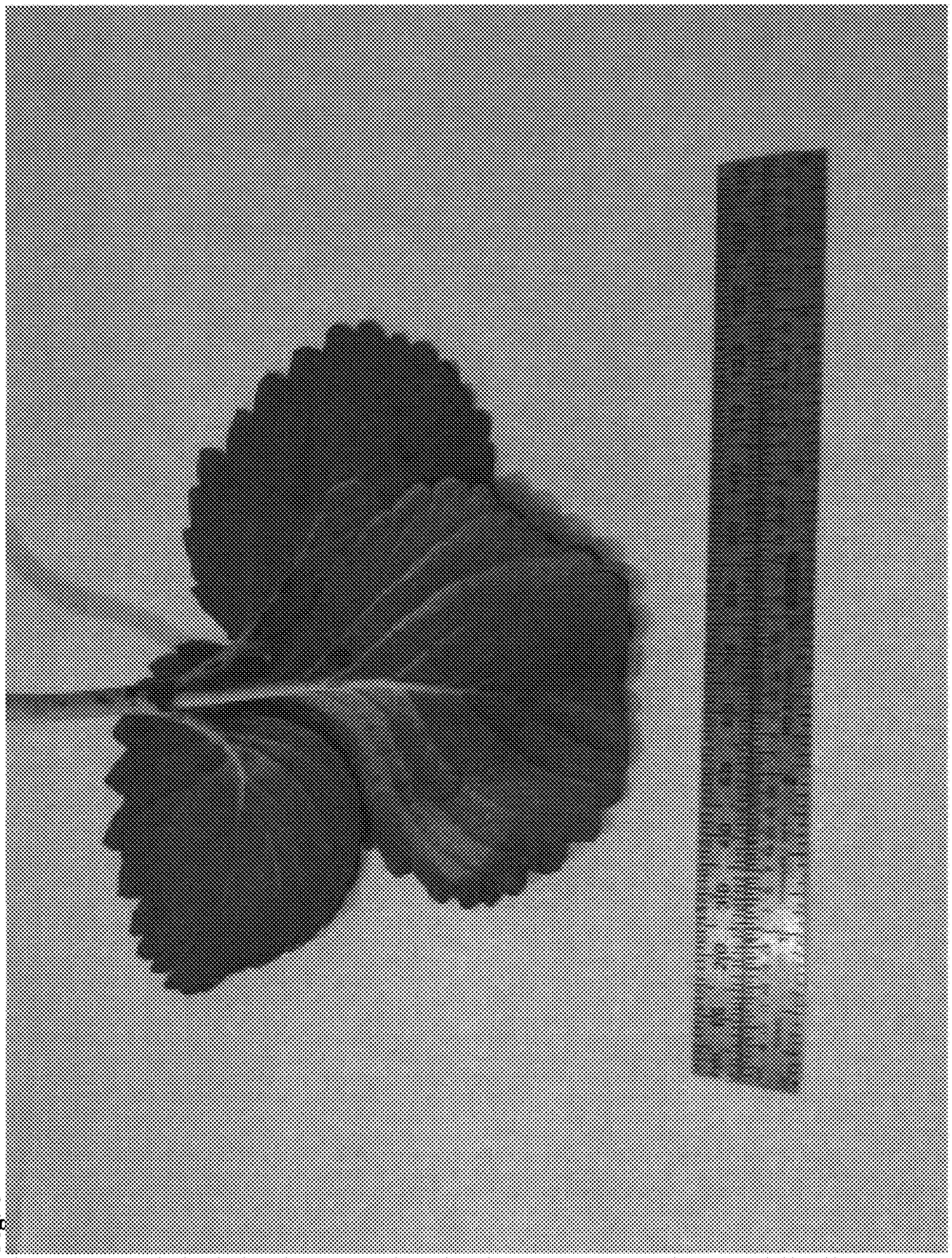

Fig. 6

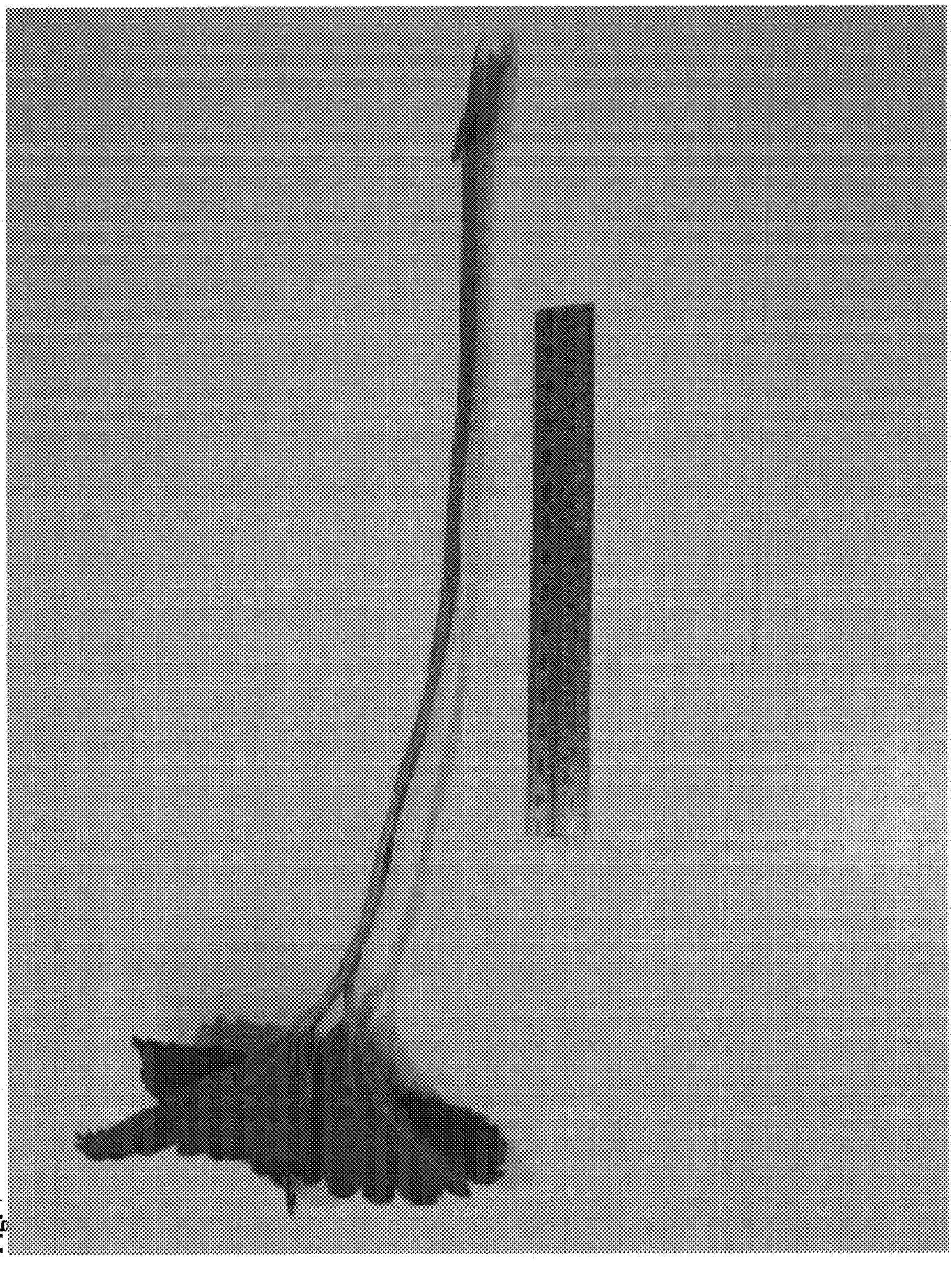

Fig. 7