US00PP29965P3

(12) **United States Plant Patent**
**Larse**

(10) **Patent No.: US PP29,965 P3**
(45) **Date of Patent: Dec. 11, 2018**

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

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

(71) Applicant: **Sweet Darling Sales, Inc.**, Aptos, CA (US)

(72) Inventor: **John Larse**, Watsonville, CA (US)

(73) Assignee: **Sweet Darling Sales, Inc.**, Aptos, CA (US)

( * ) 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.: **15/731,554**

(22) Filed: **Jun. 28, 2017**

(65) **Prior Publication Data**

US 2018/0303019 P1 Oct. 18, 2018

**Related U.S. Application Data**

(60) Provisional application No. 62/355,575, filed on Jun. 28, 2016.

(51) **Int. Cl.**
***A01H 5/08*** (2018.01)
***A01H 6/74*** (2018.01)

(52) **U.S. Cl.**
USPC ..... **Plt./209**
CPC ..... ***A01H 6/7409*** (2018.05)

(58) **Field of Classification Search**
USPC ..... Plt./208, 209
See application file for complete search history.

*Primary Examiner* — Annette H Para
(74) *Attorney, Agent, or Firm* — Cooley LLP

(57) **ABSTRACT**

The present invention provides a new and distinct strawberry plant designated as 'Vaulter' (a.k.a. '109261').

**3 Drawing Sheets**

## 1

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

Varietal denomination: 'Vaulter' (a.k.a. '109261').

### BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct strawberry plant designated as 'Vaulter' (a.k.a. '109261'). 'Vaulter' is a day neutral strawberry plant.

'Vaulter' (a.k.a. '109261') is the result of a controlled-cross between a female parent cultivar designated '108171' (unpatented, proprietary cultivar) and a male parent cultivar designated '108229' (strawberry plant named 'Flame', U.S. Plant Pat. No. 28,470) made by the Inventor and was first fruited in Watsonville, Calif. growing fields. Following selection and during testing, the plant was originally designated '109261' and subsequently named 'Vaulter'.

This new strawberry plant 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 new strawberry plant were found to be transmissible by such asexual reproduction. This new strawberry plant is stable and reproduce true to type in successive generations of asexual reproduction.

### BRIEF SUMMARY OF THE INVENTION

This invention relates to a new and distinctive strawberry plant designated as 'Vaulter'. This strawberry plant 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

## 2

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 strawberry plant 'Vaulter' from known strawberry varieties. In addition, this new strawberry plant was confirmed to be a unique strawberry germplasm when tested against the California Seed & Plant Lab, Inc. (Elverta, Calif.) database using Short Sequence Repeats (SSRs). 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 fruit produced by each new cultivar is attractive and of excellent quality.

### DESCRIPTION OF THE DRAWINGS

The accompanying color photographs depict various characteristics of the cultivars as nearly true as possible to make color reproductions.

FIG. **1** shows fruits of 'Vaulter'.

FIG. **2** shows sliced fruits of 'Vaulter'.

FIG. **3** shows 'Vaulter' plants.

### DETAILED DESCRIPTION OF THE INVENTION

'Vaulter' (a.k.a. '109261')

This invention relates to a new and distinctive day-neutral type strawberry cultivar designated as 'Vaulter'. It 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 in combination distinguish strawberry variety 'Vaulter' from the known strawberry varieties. Plants for the botanical measurements in the present application were grown as annuals. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

The detailed botanical description in Table 1 was observed when the plants were 33 weeks after planting. The plants observed were grown in a plot located on a commercial strawberry farm, at 187 San Andreas Rd, Watsonville, Calif. The outdoor field without cover was a sandy loam on a polyethylene-film-covered-raised-bed. A grower standard 1.25 mil thickness of polyethylene film was used to cover raised bed. Each row was spaced 52 inches apart according to a grower standard.

'Vaulter' has not been observed under all possible environmental conditions, and the phenotype may vary significantly with variations in environment. The following observations, measurements, and comparisons describe this plant as grown under normal conditions in Watsonville, Calif. unless otherwise noted.

TABLE 1

| | Vaulter | |
|---|---|---|
| Char Type | Characteristic | Vaulter |
| General | Plant Habit | annual |
| | Plant Growth Habit | upright |
| | Plant Height | 35 cm |
| | Plant Width | 41 cm |
| | Plant Width-Crown | 6.5 cm |
| | Density of foliage, vigor | light |
| | Plant vigor | moderate to high |
| Leaf | Terminal leaflet width (mm) | 90 |
| | Terminal leaflet length (mm) | 83 |
| | No. teeth/terminal leaflet: | 20 |
| | Shape of the terminal leaflet base | acute to obtuse |
| | Shape of terminal leaflet in cross-section | concave |
| | Margin description of the terminal | serrate |
| | Color of upper side of leaves | 137A |
| | Color of lower side of leaves | 139A |
| | Leaf blistering | weak |
| | Leaf glossiness | medium |
| Limbs | Petiole length (cm) | 23 |
| | Petiole diameter (mm) | 3.55 |
| | Petiole color | 145B |
| | Petiolule length (mm) | 20 |
| | Petiolule diameter (mm) | 3.55 |
| | Attitude of hairs on petiole and pedicel | upwards |
| | Stipule pubescence | sparse |
| | Stipule length (cm) | 3.1 |
| | Stipule size | small to medium |
| | Stipule width (cm) | 0.9 |
| | Stipule anthocyanin | present |
| | Stipule color (color code) | 145A |
| | Pedicel color (color code) | 145A |
| | Peduncle length (cm) | 24.5 |
| | Peduncle size | medium to large |
| | Peduncle attitude | erect |
| | Peduncle pubescence, attitude of hairs | medium, upwards |
| Inflorescence | Inflorescence position relative to foliage | above |
| | Flower arrangement of petals | free to touching |
| | Petal length (cm) | 1.2 |
| | Petal width (cm) | 1.1 |
| | Petal number per flower | 6 |
| Stolon | Stolon number | 6 |
| | Stolon anthocyanin | 183A |
| | Widest diameter of stolon At leaf attachment (mm) | 5.07 |
| | Stolon color | 145A |
| Fruit | Number of fruit per truss | 3 to 4 |
| | Fruit length (cm) | 5 |
| | Fruit width (cm) | 4.5 |
| | Fruit skin color | 44A |
| | Fruit flesh color excluding core | 44A |
| | Fruit core length (cm) | 4.2 |
| | Fruit core width (cm) | 1.8 |
| | Fruit core color | 41B |
| | Fruit weight (g) | 30.5 |
| | Predominant fruit shape | conic to globose conic |
| | Shape difference between primary & secondary fruits | Similar shape |
| | Width of band without of achenes | medium |
| | Fruit glossiness | strong |
| | Position of achenes | even to below surface |
| | Achene color | 145A |
| | Achenes per fruit | 252 |
| | Achene weight (g) | 0.11 |
| | Position of calyx | even to inserted |
| | level of adherence of calyx | strong |
| | Color of calyx | 137A |
| | Firmness of flesh | medium to firm |
| | Evenness of flesh color | nearly even |
| | Sweetness (brix) | 7.5 |
| | pH | 3.32 |
| | Yield (g per plant per season) | 2658 |

When 'Vaulter' is compared to the proprietary female parent (108171), 'Vaulter' has a greater fruit yield than the female parent. The volumetric fruit shape of 'Vaulter' is a fuller figure than a long conic shaped fruit of the female parent.

When 'Vaulter' is compared to the proprietary male parent 'Flame' (U.S. Plant Pat. No. 28,470), the fruit pulp of 'Flame' has a deep red color, while 'Vaulter' has a pale color. In terms of plant shape, 'Vaulter' is more upright than 'Flame'.

When 'Vaulter' is compared to the check variety 'Monterey' (U.S. Plant Pat. No. 19,767), the ratio of flower stem length compared to petiole length for 'Vaulter' is longer than that of 'Monterey'. Consequently, 'Vaulter' flowers are placed above the leaf canopy further than 'Monterey' flowers. Also, the ripened fruits of 'Vaulter' hang

down below the plant further than those of 'Monterey' on the raised bed. 'Vaulter' leaves are thinner than 'Monterey' leaves in terms of leaf thickness. In terms of fruit hardness, 'Vaulter' fruits are softer than 'Monterey' fruits. 'Vaulter' has more open space between the leaves than 'Monterey'. That is, the foliage of 'Vaulter' is less dense than that of 'Monterey'. Furthermore, 'Vaulter' differs from 'Monterey' as 'Vaulter' does not produce stolons during the fruiting season.

TABLE 2

Comparison of fruit features of 'Vaulter' with the proprietary male and female parents

| HYBRID ID | HYBRID NAME | FRUIT WIDTH (mm) | FRUIT HEIGHT (mm) | FRUIT RATIO (Height/Width) |
|---|---|---|---|---|
| 108171 | Female Parent | 40.13 | 46.90 | 1.17 |
| 108229 (Flame) | Male Parent | 40.46 | 45.86 | 1.13 |
| 109261 | Vaulter | 41.32 | 45.37 | 1.10 |

| HYBRID ID | FRUIT SHAPE* | HARDNESS (newtons) | Yield (g/clone) |
|---|---|---|---|
| 108171 | 7 | 6.80 | 688 |
| 108229 (Flame) | 6 | 7.79 | 1196 |
| 109261 | 6 | 7.32 | 744 |

*Fruit shape: 1. Oblate; 2. Globose; 3. Fan Lobes; 4. Necked; 5. Short wedge; 6. Symmetric conic; 7. Conic; 8. Long conic; 9. Long wedge

TABLE 3

Comparison of fruit features between 'Vaulter' and the check variety

| HYBRID ID | HYBRID NAME | FRUIT WIDTH (mm) | FRUIT HEIGHT (mm) | FRUIT RATIO (Height/Width) |
|---|---|---|---|---|
| Check Variety | Montery (U.S. Plant Pat. No. 19,767) | 43.70 | 48.33 | 1.11 |
| 109261 | Vaulter | 41.32 | 45.37 | 1.10 |

| HYBRID ID | FRUIT SHAPE* | HARDNESS (newtons) | Yield (g/clone) |
|---|---|---|---|
| Check Variety | 6 | 9.04 | 840 |
| 109261 | 6 | 7.32 | 744 |

*Fruit shape: 1. Oblate; 2. Globose; 3. Fan Lobes; 4. Necked; 5. Short wedge; 6. Symmetric conic; 7. Conic; 8. Long conic; 9. Long wedge

The invention claimed is:

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

* * * * *

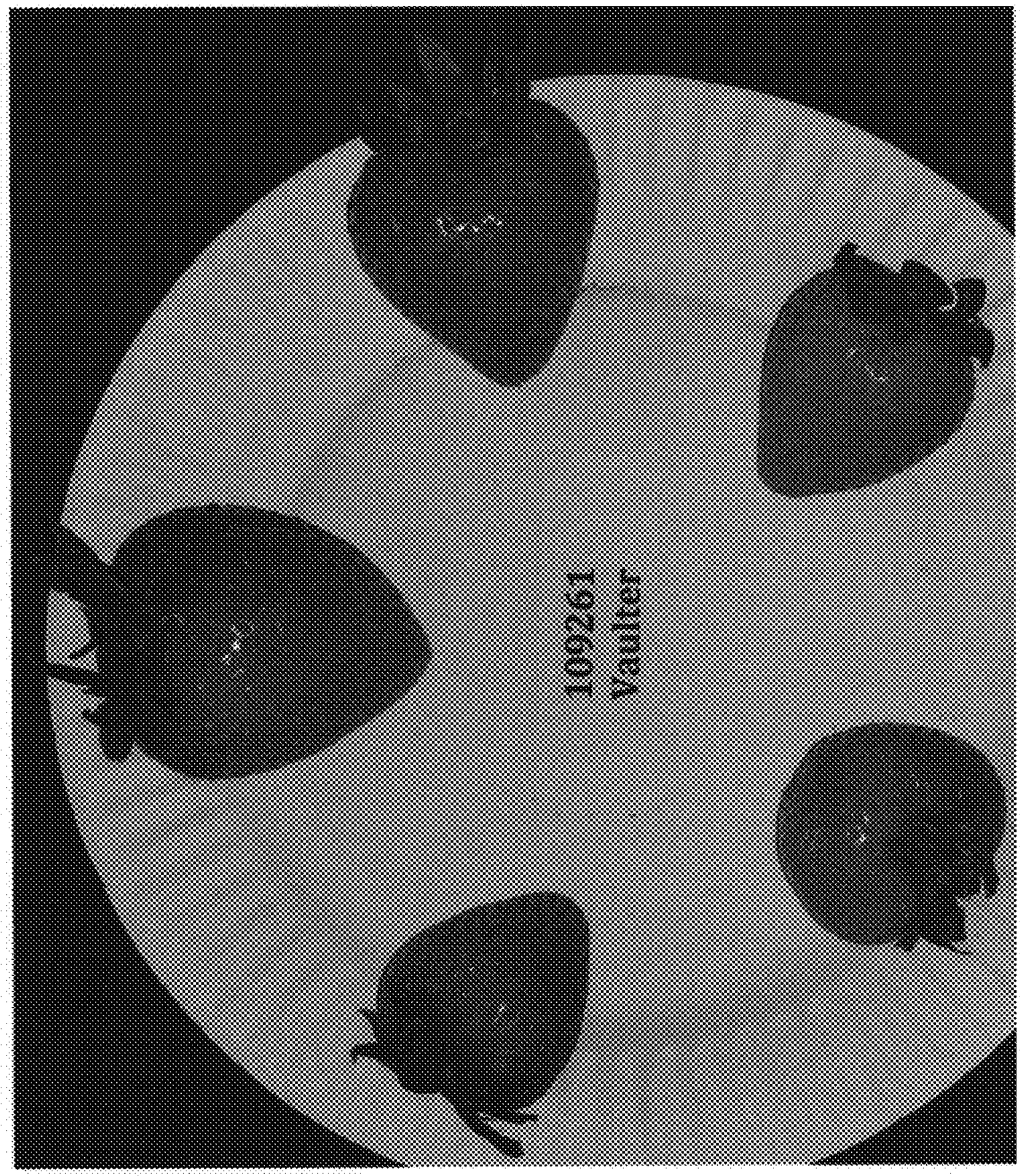


Figure 1

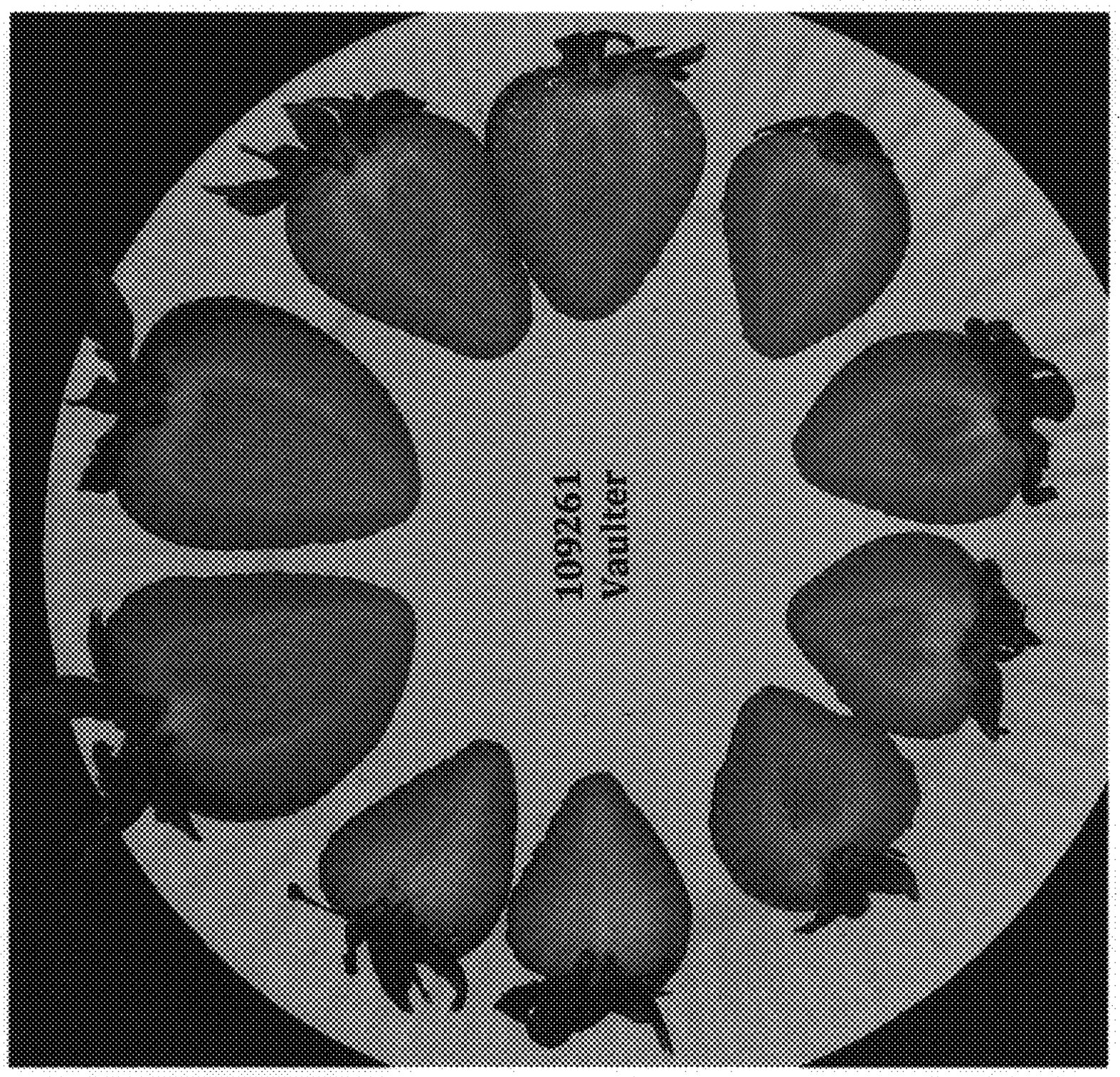


Figure 2

Figure 3