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Blaker

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(54) **STRAWBERRY PLANT NAMED**
‘SB_14_223-007’

(50) Latin Name: *Fragaria ananassa*
Varietal Denomination: **SB_14_223-007**

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patent is extended or adjusted under 35
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(58) **Field of Classification Search**
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP25,574 P3 5/2015 Whitaker et al.
PP30,564 P3 6/2019 Whitaker

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(57) **ABSTRACT**
This invention relates to a new and distinct variety of
strawberry plant named ‘SB_14_223-007’. This new straw-
berry plant named ‘SB_14_223-007’ is primarily adapted to
the growing conditions of West Central Florida, and is
primarily characterized by its achenes typically set even
with the surface of the fruit, very firm fruit, very high
marketable yield, early time of first flower and fruit, and
very large berry size.

4 Drawing Sheets

1

Latin name of the genus and species of the plant claimed:
Fragaria ananassa.
Variety denomination: ‘SB_14_223-007’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct straw-
berry variety named ‘SB_14_223-007’. This new variety is
the result of an open pollination made in 2014 between the
strawberry variety designated ‘Florida127’ (U.S. Plant Pat.
No. 25,574) as the seed (female) parent, and an unknown
pollen (male) parent. The variety is botanically known as
Fragaria ananassa.
The seedling resulting from the aforementioned cross was
selected from a controlled breeding plot in Hillsborough
County, Fla. in the fall/winter of 2021-2022. After its
selection, the new variety was asexually propagated by
stolons in both Siskiyou County, Calif. and San Joaquin
County, Calif. The new variety was extensively tested over
the next several years in fruiting fields in Hillsborough
County, Fla. This propagation has demonstrated that the
combination of traits disclosed herein as characterizing the
new variety are fixed and remain true-to-type through suc-
cessive generations of asexual reproduction.

BRIEF SUMMARY OF THE INVENTION

‘SB_14_223-007’ is primarily adapted to the climate and
growing conditions of West Central Florida. The subtropical
climate of West Central Florida provides the day length and
moderate temperatures needed to produce an early yielding,
vigorous plant and maintain fruit quality during the fall and
winter production months.

2

The following traits have been repeatedly observed and
are determined to be unique characteristics of ‘SB_14_223-
007’, which in combination distinguish this strawberry plant
as a new and distinct variety:

1. Achenes typically set even with the fruit;
2. Very firm fruit firmness;
3. Very high marketable yield;
4. Early time of first flower and fruit; and
5. Very large berry size.

‘Florida Brilliance’ (U.S. Plant Pat. No. 30,564) is cur-
rently the dominant strawberry variety in Hillsborough
County, Fla. The fruits of ‘SB_14_223-007’ are larger in
size, lighter in color, and more elongated than those of
‘Florida Brilliance’. The achenes of ‘Florida Brilliance’ are
more sunken than those of ‘SB_14_223-007’. The plant
vigor of ‘SB_14_223-007’ is similar to that of ‘Florida
Brilliance’ but its plant architecture is slightly less open. In
side-by-side comparisons from the 2021-2022 season (Nov.
23, 2021 to Feb. 25, 2022) ‘SB_14_223-007’ compares with
‘Florida Brilliance’ (U.S. Plant Pat. No. 30,564) in the
following combination of characteristics as described in
Table 1.

TABLE 1

Characteristic	‘SB_14_223-007’	‘Florida Brilliance’ (U.S. Plant Pat. No. 30,564)
November marketable yield (gm/plt)	97	18
Season marketable yield (gm/plt)	1093	818
November average berry size (gm)	26.8	27.4

TABLE 1-continued

Characteristic	'SB_14_223-007'	'Florida Brilliance' (U.S. Plant Pat. No. 30,564)
Season average berry size (gm)	36.1	27.7
Average runners/plant	3.7	5.5

For identification, a series of molecular markers have been determined for this new variety.

'SB_14_223-007' compares with its parent, 'Florida127' (U.S. Plant Pat. No. 25,574) in the following combination of characteristics as described in Table 2.

TABLE 2

Characteristic	'SB_14_223-007'	'Florida127' (U.S. Plant Pat. No. 25,574)
Fruit: size	Very Large	Very Large
Fruit: early marketable yield	High	Medium
Fruit: firmness	Very Firm	Very Firm
Fruit: seed position	Even with surface	Slightly below to even with surface

BRIEF DESCRIPTIONS OF THE PHOTOGRAPHS

The accompanying color photographs illustrate the overall appearance of typical specimens of the new strawberry variety 'SB_14_223-007' at various stages of development, as true as it is reasonably possible with color reproductions of this type. Color in the photographs may differ slightly from the color value cited in the botanical descriptions which accurately describe the color of 'SB_14_223-007'. The depicted plant and plant parts of the new strawberry variety 'SB_14_223-007' are approximately four months old. The photographs were taken in Hillsborough County, Fla.

FIG. 1 shows typical fruiting field characteristics of 'SB_14_223-007', taken in the month of February 2022;

FIG. 2 shows a close-up view of a typical plant of 'SB_14_223-007', taken in the month of February 2022;

FIG. 3 shows typical mature and immature field fruit of 'SB_14_223-007', taken in the month of February 2022; and

FIG. 4 shows typical internal and external mature fruit characteristics of 'SB_14_223-007', taken in the month of February 2022.

DETAILED BOTANICAL DESCRIPTION

The new variety 'SB_14_223-007' has not been observed under all possible environmental conditions. The characteristics of the new variety 'SB_14_223-007' may vary in detail, depending upon variations in environmental factors, including weather (temperature, humidity and light intensity), day length, soil type and location. In addition, the characteristics of any parental variety or comparison variety included in Table 1 of the present invention may vary in detail, depending upon variations in environmental factors, including weather (temperature, humidity and light intensity), day length, soil type and location.

The aforementioned photographs, together with the following description of the new variety 'SB_14_223-007', unless otherwise noted, are based on observations taken

during the 2021-2022 growing season in Hillsborough County, Fla. These measurements and ratings were taken from plants of 'SB_14_223-007' dug from a high-elevation nursery located in Siskiyou County, Calif. during mid-September 2021 and planted approximately four to five days later in Hillsborough County, Fla. The approximate age of the observed plants is four months. Yield observations including average weight and marketable yield, along with fruit quality characteristics including soluble solids, were measured during the 2021-2022 growing season. Flower measurements and characteristics are from secondary flowers unless otherwise noted. Fruit characteristics and measurements are from secondary fruit, unless otherwise noted.

Where noted, color terminology follows The Royal Horticultural Society Colour Chart, London (2015).

The following characteristics describe fruit, plant, stolon, foliage, fruiting truss, flower, reproductive organs and pest and disease characteristics of the new strawberry 'SB_14_223-007'.

Fruit characteristics:

Color of mature fruit.—RHS N34B (orange-red group).

Color of internal flesh (excluding core).—RHS 36B (red group).

Color of core.—RHS 35A (orange-red group).

Average length (cm).—5.1.

Average width (cm).—4.1.

Size.—Very Large.

Average length/width ratio.—1.2 (slightly longer than broad).

Average calyx diameter (cm).—3.7.

Season average weight (gm).—36.1.

Achene color, shaded side.—RHS 164B (greyed-orange group).

Achene color, sun-exposed side.—RHS 162A (greyed-yellow group).

Average achene weight (mg).—<4.6.

Average achenes per berry.—215.

Average achene length (mm).—1.8.

Average achene width (mm).—0.8.

Season marketable yield (gm/plant).—1093.

Predominant shape.—Conical.

Difference in shape between primary and secondary fruit.—Ranges from moderate to large.

Band without achenes.—Narrow.

Evenness of surface.—Even.

Evenness of color.—Slightly uneven.

Glossiness.—Medium.

Insertion of achenes.—Even.

Position of calyx attachment.—Inserted.

Attitude of sepals.—Outward/down.

Size of calyx in relation to fruit diameter.—Slightly smaller.

Adherence of calyx (when fully ripe).—Strong.

Firmness of flesh (gf).—383.5 — grams of force.

Distribution of red color of the flesh.—Mildly marginal and central.

Hollow center expression.—Mild to absent.

Average cavity length (mm).—11.4.

Average cavity width (mm).—5.9.

Soluble solids (% brix).—6.7.

Time of first flowering.—Early (early to mid-October in Hillsborough County, Fla.).

Flowering season.—October-February.

Time of first fruit.—Early (mid-November in Hillsborough County, Fla.).

Fruiting season.—November-March.
Post-harvest fruit longevity.—9-11 days if stored according to industry standards.
Type of bearing.—Not remontant.

Plant characteristics: 5
Average height (cm) —29.5.
Average spread (cm).—38.7.
Size.—Large.
Habit.—Upright.
Density.—Medium.
Vigor.—Very high.

Stolon characteristics:
Color.—RHS N145A (yellow-green group).
Anthocyanin coloration.—RHS 173B (greyed-orange group). 15
Anthocyanin intensity.—Medium.
Pubescence.—Dense.
Attitude of hairs.—Upwards.
Average quantity in nursery (per square foot).—13.8 (medium). 20
Average diameter at the bract (mm).—2.4 (medium).
Average length (cm).—39.6.

Terminal leaflet characteristics:
Color of upper surface.—RHS 139A (green group). 25
Color of underside.—RHS 137C (green group).
Average length (cm) —7.7.
Average width (cm).—6.7.
Average area terminal (cm²).—51.6.
Average length/width ratio.—1.1 (slightly longer than broad). 30
Shape of base.—Obtuse.
Margins (shape of teeth).—Serrate to crenate.
Average serrations per leaf.—17.8.

Foliage characteristics: 35
Color of upper surface.—RHS 139A (green group).
Color of underside.—RHS 137C (green group).
Number of leaflets.—3.
Leaflet shape.—Ovate.
Leaf size.—Medium.
Average length (cm).—11.3.
Average width (cm).—13.4.
Average area foliage (cm²).—151.4.
Shape in cross section.—Concave.
Texture/interveinal blistering.—Medium. 45
Leaf glossiness.—Medium.
Leaf variegation.—Absent.
Venation pattern.—Pinnate.
Apex descriptor.—Obtuse.

Petiole characteristics: 50
Petiole color.—RHS 144C (yellow-green group).
Average length (cm).—18.1.
Average diameter (mm).—2.9.
Petiolule color.—RHS 144C (yellow-green group).
Petiolule average length (mm).—14.1. 55
Average petiolule diameter (mm).—1.6.
Attitude of hairs.—Strongly outward.
Texture.—Smooth.
Frequency of bract leaflets.—Ranges from 0 to 2 (40% occurrence). 60
Size of bract leaflets.—Small.
Pubescence.—Light.

Stipule characteristics:
Color.—RHS 145C (yellow-green group).
Anthocyanin coloration.—RHS 182C (greyed-red group). 65

Anthocyanin intensity.—Mild.
Average length (mm).—40.3.
Average width (mm).—9.5.
Base descriptor.—Truncate.
Apex descriptor.—Obtuse.
Shape.—Triangular.
Margin.—Smooth.
Texture.—Smooth.

Fruiting truss characteristics:
Anthocyanin coloration.—N/A.
Anthocyanin intensity.—N/A.
Pubescence.—Heavy.
Attitude at first pick.—Prostrate.
Position relative to foliage.—Ranges from level with to below.
Flower quantity (average per plant season long).—52.2 (high).
Average fruits per truss.—13.3.
Pedicel attitude of hairs.—Slightly outward.
Average pedicel length (cm).—18.0.
Average pedicel diameter (mm).—2.3.
Pedicel texture.—Moderate.
Pedicel color.—RHS N145A (yellow-green group).
Average peduncle length (cm).—1.3.
Average peduncle diameter (mm).—4.2.
Peduncle texture.—Smooth.
Peduncle color.—145C (yellow-green group).

Flower characteristics:
Flower bud shape.—Pyriform.
Average flower bud length (mm).—18.6.
Average flower bud diameter (mm).—6.5.
Flower bud color.—RHS 145A (yellow-green group).
Flower depth (mm).—5.7.
Corolla (flower) average diameter (mm).—31.0 (ranges from medium to large).
Upper petal color.—RHS NN155D (white group).
Lower petal color.—RHS NN155D (white group).
Petal shape.—Orbicular.
Petal apex descriptor.—Rounded.
Petal margin.—Smooth.
Petal base.—Decurrent.
Petal texture.—Smooth.
Petal average length (mm).—12.8.
Petal average width (mm).—12.7.
Petal average length/width ratio.—1.0 (as long as broad).
Average petals per flower.—6.2.
Relative position of petals (flowers with 5 or 6 petals).—Overlapping.
Upper sepal color.—RHS 139A (green group).
Lower sepal color.—RHS 138A (green group).
Sepal shape.—Cuneate.
Sepal apex descriptor.—Obtuse.
Sepal margin.—Serrate.
Sepal texture.—Smooth.
Sepal average length (mm).—13.9.
Sepal average width (mm).—5.9.
Sepal average length/width ratio.—2.4.
Average sepals per flower.—12.8.
Calyx average diameter (mm).—34.9.
Size of calyx relative to corolla.—Larger.
Size of inner calyx relative to outer calyx.—Same.

Reproductive organs:
Receptacle color.—RHS 145A (yellow-green group).
Pollen color.—RHS 17A (yellow-orange group).

Stamen.—Present.
Average filament length (mm).—2.3.
Filament color.—RHS 142D (green group).
Average anther length (mm).—1.5.
Anther shape.—Ovoid.
Anther color.—RHS 17A (yellow orange color).
Average pistils per flower.—215.
Pistil length (mm).—1 to 2.
Style length (mm).—0.5 to 1 mm.
Style color.—RHS 154D (yellow-green group).
Stigma diameter (mm).—<0.1.
Stigma shape.—Simple.
Ovary color.—RHS N144A (yellow-green group).
Pollen amount.—Abundant.

Disease and pest reactions:
Colletotrichum crown rot (Colletotrichum gloeosporioides).—Susceptible.
Fusarium wilt (Fusarium oxysporum).—Resistant.
5 *Pestalotia leaf spot and fruit rot (Neopestalotiopsis sp.)*.—Moderately Susceptible.
Phytophthora crown rot (Phytophthora cactorum).—Moderately Susceptible.

10 I claim:
1. A new and distinct strawberry plant named ‘SB_14_223-007’, as herein described and illustrated by the characteristics set forth above.

* * * * *

FIG. 1



FIG. 2



FIG. 3



FIG. 4

