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BLUEBERRY PLANT NAMED ‘C15-268’

(50)

Latin Name: *Vaccinium corymbosum*

Varietal Denomination: C15-268

(71)

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ABSTRACT

The new blueberry plant variety ‘C15-268’ is provided.

‘C15-268’ is a commercial variety intended for the fresh

market. The variety is produced from a cross of ‘FL12-082’

(unpatented seed parent) and ‘FL12-069’ (unpatented pollen

parent).

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Drawing Sheets

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Latin name of the family, genus, and species: Family—Ericaceae. Genus—*Vaccinium*. Species—*corymbosum* hybrid.

Variety denomination: The new blueberry plant claimed is of the variety denominated ‘C15-268’.

BACKGROUND OF THE INVENTION

The new variety ‘C15-268’ was selected from a population of seedlings derived from crossing the blueberry varieties known as ‘FL12-082’ (unpatented seed parent) and the variety known as ‘FL12-069’ (unpatented pollen parent). The cross was made in 2012 in Florida, USA and the seed was sown and grown in Corindi Beach, New South Wales, Australia. The new variety was selected in 2015 from among plants located on land at Corindi Beach and assigned the breeding code ‘C15-268’. Plants of ‘C15-268’ were propagated by cuttings for further evaluation and resulted to be uniform and stable. The new variety showed distinctive traits such as evergreen, with fruit of good flavor, large fruit size, and firmness.

SUMMARY OF THE INVENTION

The new variety ‘C15-268’ was originated from a cross of ‘FL12-082’ (unpatented seed parent) and the variety known as ‘FL12-069’ (unpatented pollen parent) in 2012 in Florida, USA.

The new blueberry variety resulted from seedlings produced in a controlled breeding programme. The cross was made in 2012 in Florida, USA and the seed was sown and grown in Corindi Beach, New South Wales, Australia.

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The new variety was selected in 2015 from among plants located on land at Corindi Beach and has since been named ‘C15-268’. Since then plants of ‘C15-268’ were propagated by cuttings for further evaluation and confirmed to be uniform and stable. Asexual reproduction of the new variety ‘C15-268’ by cutting propagation since 2015 at Corindi Beach, New South Wales, Australia has demonstrated that the new variety reproduces true to type plants.

The new variety was selected in 2015 as a single plant within a population of seedlings resulting from controlled cross of *Vaccinium* varieties. The seedling population was planted in an experimental block in the field at Corindi Beach, New South Wales, Australia and the selection of the new variety took place in the same block. Selection criteria were a combination of mid to late cropping season, low chilling requirement, strong plant vigour, non-deciduous type of plant (evergreen), large fruit size, good fruit flavor, and very firm fruit. The new variety was subsequently evaluated for five years at the commercial farm at Corindi Beach, New South Wales, Australia.

The following characteristics of the new variety have been repeatedly observed and can be used to distinguish ‘C15-268’ as a new and distinct variety of *Vaccinium corymbosum* hybrid:

1.

Non-deciduous (Evergreen)

2.

Medium to late season crop

3.

Strong vigour

4.

High yields

5.

Low chilling requirement

6.

Excellent fruit firmness

7.

Low acidity content in the fruit and good flavor



The new blueberry variety 'C15-268' has maintained its distinguished characteristics throughout successive asexual propagation. The variety has been repeatedly asexually reproduced through softwood cuttings in New South Wales, Australia and the clones are phenotypically identical to the original plant.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying photographic illustration shows typical specimens in full color of the foliage and fruit of the new variety 'C15-268'. The colors are as nearly true as is reasonably possible in a color representation of this type.

FIG. 1 is a photograph of three-year-old plants of the new variety 'C15-268'.

FIG. 2 is a photograph of the typical fruit cluster of the new variety 'C15-268'.

FIG. 3 is a photograph of the botanical parts (ripe fruit, green fruit, flowers and leaves) of the new variety 'C15-268'.

The colors in the photographs are as close as possible with the photographic and printing technology utilized. The color values cited in the detailed botanical description accurately describe the colors of the new blueberry variety.

#### DETAILED BOTANICAL DESCRIPTION

The following detailed description sets forth the distinctive characteristics of 'C15-268'. The data which defines these characteristics was collected from asexual reproductions of the original selection. Dimensions, sizes, colors, and other characteristics are approximations and averages set forth as accurately as possible. For all traits data was collected from 3 plant parts across 6 randomly selected plants. For the traits relating to fruits (e.g., fruit weight, firmness, brix, acidity) the data is an average across twenty fruits collected randomly. The plant history was taken on plants approximately 3 years of age, and the descriptions relate to plants grown in the field in Corindi Beach, New South Wales, 2456 Australia. Descriptions of fruit characteristics were made on fruit grown in Corindi Beach, New South Wales, 2456 Australia. Color designations are from The 2007 edition of The Royal Horticultural Society ("RHS"). 'C15-268' has not been observed under all possible environments. The phenotype may vary slightly with different growing environments such as temperature, light, fertility, soil pH, moisture and maturity levels, but without any change in the genotype.

##### Classification:

- a. Family.—Ericaceae.
- b. Genus.—*Vaccinium*.
- c. Species.—*Corymbosum* hybrid.
- d. Common Name.—Blueberry.

Parentage: Female Parent—unpatented selection 'FL12-082'. Male Parent—unpatented selection 'FL12-069'.  
Market Class: Fresh market.

#### PLANT

##### General:

- Parentage.—FL12-082 x FL12-069.
- Plant height.—1.5 m.
- Plant width.—1.12 m.
- Growth habit.—Semi-upright.
- Growth.—Strong vigour.
- Mature cane length.—0.60 m.

Mature cane width.—14.1 mm.

Mature cane color.—Grey-brown group, similar to N199C, with streak of grey-brown group similar to 199C.

Bark texture.—Medium (texture between rough and smooth).

Fall color on new shoots.—The base color is green group, similar to 138A and with no noticeable over color.

Surface texture of new wood.—Smooth, similar to that of 'Snowchaser'.

Internode length on strong, new shoots.—36 mm.

Fruiting wood in length.—42 cm.

Productivity.—Medium to high yield. Average of 5 Kg per plant (estimated equivalent production of 11 pounds per plant) from 3 year old plants when growing in 17 L pots at Corindi Beach, NSW. The plants are spaced at 0.7 m apart along the row and 2.5 m between the rows, which gives an estimated plant density of 5700 plants per hectare.

Cold hardiness.—Low chill (USDA plant hardiness Zone 4).

Cold tolerance.—Low.

Chilling requirement.—Low, estimated between 150 and 300 hours.

Resistance to disease.—The variety is susceptible to blueberry leaf rust (*Thekopsora minima*).

Heat tolerance.—Moderately resistant to heat.

Leafing.—Overall strong and plant retains leaves during the winter.

Twigginess.—Low.

#### FOLIAGE

##### General:

Leaf color (top side).—Green group, similar to 137A and 137B.

Leaf color (under side).—Green group, similar to N138C.

Leaf arrangement.—Alternate.

Leaf shape.—Elliptic.

Leaf margins.—Entire.

Leaf venation.—Reticulate.

Leaf length.—Short, average 54.2 mm.

Leaf width.—Narrow to medium, average 28.8 mm.

Leaf length/width ratio.—1.9.

Shape of the leaf apex.—Acute.

Shape of the leaf base.—Cuneate.

Leaf nectaries.—Absent.

Pubescence of upper side.—Absent.

Pubescence of lower side.—Absent.

Cross sectional profile.—Flat.

Longitudinal profile.—Straight.

Attitude.—Horizontal.

##### Petioles:

Length.—Average 4.4 mm.

Width.—Average 1.7 mm.

Color.—Yellow green group, similar to 145B.

Texture.—Smooth.

#### FLOWERS

##### General:

Time beginning of flowering.—Medium to late (50% of anthesis estimated to be on the 15th of July, on 3 year old plants, cultivated at Corindi Beach, NSW).



*Flower shape*.—Urceolate.  
*Flower fragrance*.—None perceptible.

Corolla:

*Shape*.—Urceolate.  
*Color*.—White group, similar to NN155B. 5  
*Length*.—8.2 mm.  
*Width of widest region*.—9.2 mm.  
*Aperture width*.—3.9 mm.  
*Anthocyanin coloration of corolla*.—Absent to very 10  
weak.  
*Corolla ridges*.—Present.  
*Petal width (ridge to ridge)*.—5.53 mm.  
*Protrusion of stigma*.—Present.  
*Corolla/petal texture*.—Smooth. 15

Inflorescence:

*Inflorescence length (excluding peduncle)*.—Long,  
average 20.89 mm.  
*Inflorescence width*.—20 mm.  
*Flower length (excluding pedicel)*.—10.27 mm. 20  
*Flower diameter*.—8.83 mm.  
*Flower length/width ratio*.—1.16.  
*Surface texture of peduncle*.—Medium (texture  
between rough and smooth).  
*Color of peduncle*.—Yellow-green group, similar to 25  
145B and 145C, with greyed-red group, similar to  
182A on top.  
*Length of pedicel*.—11.7 mm.  
*Surface texture of pedicel*.—Smooth. 30  
*Color of pedicel*.—Yellow green group, similar to 145A  
and 146C.  
*Number of flowers per cluster*.—7 on average.  
*Flower cluster density*.—Dense.  
*Flowering interval on one-year old shoot*.—July to 35  
August.  
*Flowering interval on current year shoot*.—June to  
August.

Calyx (with sepals):

*Diameter*.—6.3 mm.  
*Number of sepals per flower*.—6.  
*Sepal shape*.—Deltoid.  
*Sepal shape of the apex*.—Acute.  
*Margin of sepals*.—Entire.  
*Texture of sepal's lower and upper side*.—Smooth. 45  
*Color of sepal's lower side*.—Yellow green group  
144B.  
*Color of sepal's upper side*.—Yellow green group  
144A.

Stamen: 50

*Length*.—7.6 mm.  
*Number per flower*.—10.  
*Filament color*.—Yellow-green group, similar to 145D.

Pistil:

*Length (including ovary)*.—11.3 mm. 55  
*Style: length (including stigma)*.—9.6 mm.  
*Color*.—Yellow-green group, similar to N144B.

Anther:

*Length*.—4.5 mm.  
*Number per flower*.—10.  
*Color*.—Greyed-orange group, similar to 165B.

Pollen:

*Self compatibility*.—Yes (the variety shows a high  
degree of self-compatibility).  
*Abundance*.—Abundant.  
*Color*.—Yellow group, similar to 11A. 65

FRUIT

General:

*Time of fruit ripening*.—Medium to late, estimated 50%  
of the fruit ripe on the 15<sup>th</sup> September, on 3 year old  
plants, growing at Corindi Beach, NSW.  
*Cluster density*.—Dense, average 7 and range between  
6 to 9.  
*Unripe fruit color*.—Light green, yellow green group,  
similar to 145A.  
*Ripe berry color*.—Blue group 103A.  
*Berry surface wax abundance*.—Very strong.  
*Berry weight*.—Large berry, on average 3.2 g.  
*Berry height from calyx to scar*.—14.48 mm.  
*Berry diameter*.—19.4 mm.  
*Berry shape*.—Oblate.  
*Fruit diameter of calyx basin*.—Medium (5.9 mm).  
*Fruit depth of calyx basin*.—Deep.  
*Fruit stem scar*.—Small and dry.  
*Sweetness when ripe*.—Medium to high (13 Brix).  
*Firmness when ripe*.—Very firm, 240 g/mm, measured  
with FirmTech.  
*Acidity when ripe*.—Low to medium (0.3%).  
*Fruit flesh color*.—Yellow-green 145C.  
*Storage quality*.—Medium to long storage, average 25  
days.  
*Suitability for mechanical harvesting*.—Not tested.  
*Self-fruitfulness*.—Yes.  
*Uses*.—Fruit to be hand harvested for fresh market.

SEED

General:

*Seed abundance in fruit*.—Abundant, on average 36  
seeds per fruit.  
*Seed color*.—Greyed orange group 167A.  
*Seed length*.—1.9 mm.

COMPARISON WITH SIMILAR CULTIVARS

Table 1 below provides a comparison between ‘C15-268’  
and similar cultivars: 40

TABLE 1

Comparison of ‘C15-268’ with similar varieties				
Characteristics	‘C15-268’	‘C99-042’ (U.S. Plant Pat. No. 20,695P2)	‘Snowchaser’ (U.S. Plant Pat. No. 19,503P3)	
Plant vigour	Strong	Weak to medium	Medium	
Plant growth habit	Semi-upright	Semi-upright to intermediate	Semi-upright	
One year old shoot length of internodes	Medium	Very short to short	Short	50
Leaf length	Short	Short	Long	
Leaf length (mm)	54.2 ± 1.4	53.10 ± 0.8	61.50 ± 0.9	
Leaf width	Narrow to medium	Very narrow to narrow	Broad	
Leaf width (mm)	28.8 ± 2.2	22.9 ± 1.3	34.3 ± 1.5	55
Flower size of corolla	Small to medium	Medium	Medium	
Flower corolla length (mm)	8.2 ± 0.4	9.7 ± 0.3	9.5 ± 0.3	
Fruit cluster density	Dense	Sparse	Medium	
Fruit size	Large	Small to medium	Small to medium	60
Fruit weight (g)	3.2 ± 0.5	1.9 ± 0.39	1.7 ± 0.21	
Fruit diameter (mm)	19.4 ± 1.2	15.6 ± 0.96	15.10 ± 0.97	
Fruit depth of calyx basin	Deep	Medium	Shallow	
Fruit intensity of bloom	Very Strong	Weak to medium	Weak to medium	65

TABLE 1-continued

Comparison of ‘C15-268’ with similar varieties			
Characteristics	‘C15-268’	‘C99-042’ (U.S. Plant Pat. No. 20,695P2)	‘Snowchaser’ (U.S. Plant Pat. No. 19,503P3)
Fruit firmness	Very firm 241 (g/mm)	Firm 203 (g/mm)	Soft 177 (g/mm)
Soluble solid content (%)	13.0	13.1	14.3
Titrateable acidity (%)	0.3	0.3	0.5
Time of vegetative bud burst	Late	early	early
Time of beginning of flowering	Medium to late	Early to medium	Very early to early
Time of beginning of fruit ripening	Medium to late	Early to medium	Very early to early

Table 2 below provides a comparison between ‘C15-268’ and ‘C15-270’:

TABLE 2

Comparison of ‘C15-268’ with ‘C15-270’		
Characteristics	‘C15-268’	‘C15-270’ (U.S. Plant patent application No. 17/803,047)
Mature cane width (mm)	14.1	15.8
Fall color on new shoots	Green group, similar to 138A, and with no noticeable over color	The base color is green group, similar to 137C and with over color, red-purple group 59A

TABLE 2-continued

Comparison of ‘C15-268’ with ‘C15-270’		
Characteristics	‘C15-268’	‘C15-270’ (U.S. Plant patent application No. 17/803,047)
Internode length on strong, new shoots (mm)	36.0	33.3
Leaf width	Narrow to medium	Broad
Fruiting wood (cm) in length	42.0	39.0
Fruit weight (g)	3.2 ± 0.5	3 ± 0.3
Fruit diameter (mm)	19.4 ± 1.2	18.9 ± 1.3
Fruit intensity of bloom	Very Strong	Medium
Fruit stem scar	Small and dry	Large in size and wet
Disease resistance	Susceptible to blueberry leaf rust ( <i>Thekopsora minima</i> )	resistant to blueberry leaf rust ( <i>Thekopsora minima</i> )
Titrateable acidity (%)	0.3	0.4
Time of beginning of flowering	Medium to late	Late
Time of beginning of fruit ripening	Medium to late	Late
Time of beginning of flowering	Early to medium	Late
Fruit storage quality (days)	medium to long storage, average 25 days	Low, average of 17 days

The invention claimed is:  
1. A new and distinct variety of blueberry plant named ‘C15-268’, substantially as illustrated and described herein.

\* \* \* \* \*



FIG. 1



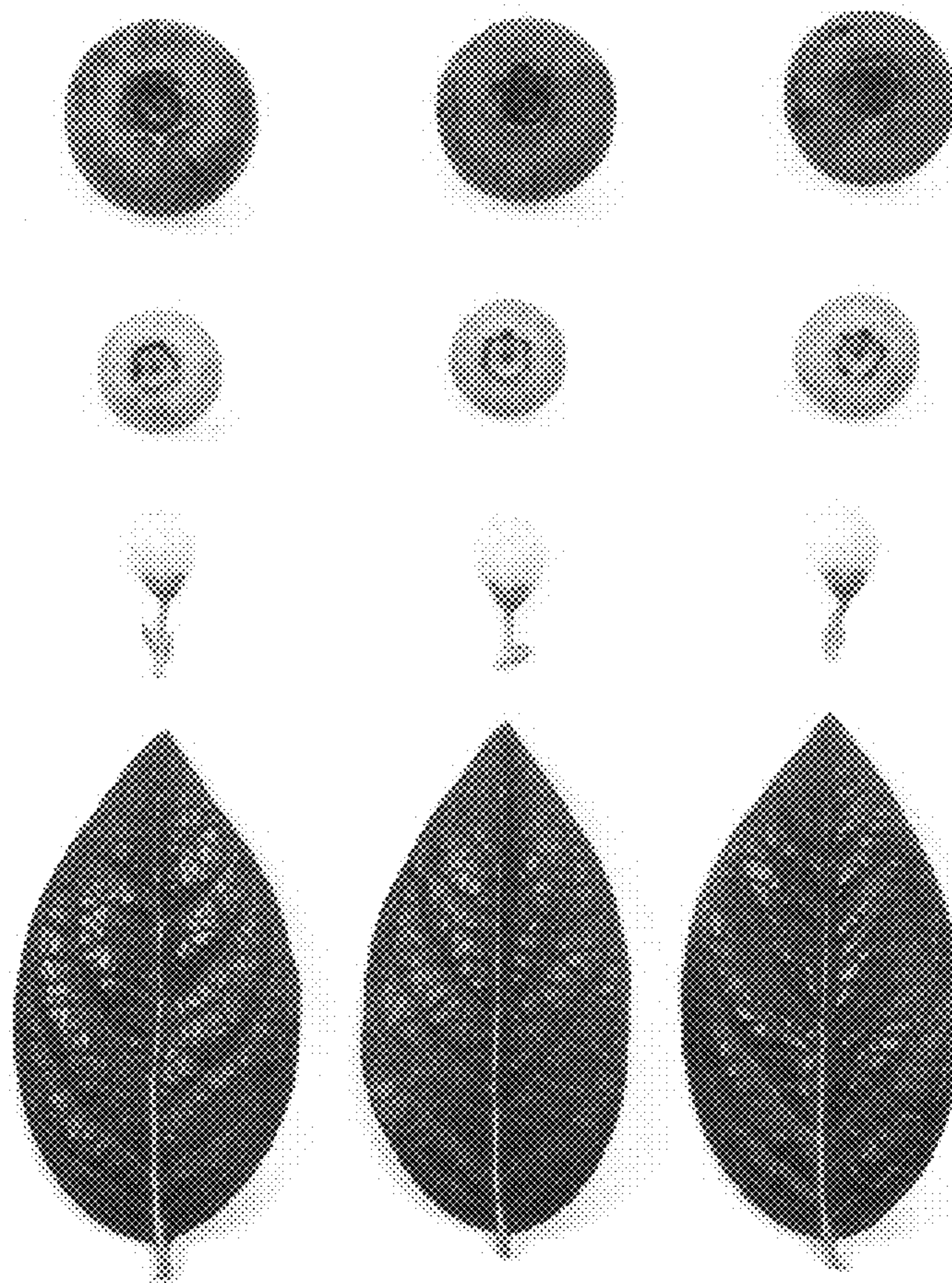


FIG. 2





FIG. 3



C15-268