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Martinez et al.

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(54) **SEEDLESS TABLE GRAPE (GRAPEVINE)**
NAMED ‘ITUMEIGHT’

(50) Latin Name: *Vitis vinifera*
Varietal Denomination: **ITUMEIGHT**

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patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

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A01H 5/08 (2018.01)
A01H 6/88 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./205**
CPC **A01H 6/88** (2018.05)

(58) **Field of Classification Search**

USPC Plt./205, 206, 207
CPC A01H 5/0812
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

PLUTO UPOVROM 20200209 Citation for ‘Itumeight’ as per QZ
PBR 20130780; Jun. 16, 2013; 1 page.*

* cited by examiner

Primary Examiner — Kent L Bell

(57) **ABSTRACT**

A new distinct variety of grapevine named ‘Itumeight’ abundantly forms attractive dark red violet skinned seedless berries with a cylindrical narrow ellipsoid shape, neutral with a semi acid twist flavor and a very crunchy and firm berry flesh texture. Being a mid-season variety, the fruit commonly is ready for harvesting in summer from late July to early September in Blanca, Murcia, Spain and displays good eating qualities as a table grape. The fruit meatiness and firmness render the fruit amenable for handling, shipping, and storage.

4 Drawing Sheets

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Latin name of the genus and species: *Vitis vinifera*.
Variety denomination: ‘ITUMEIGHT’.

BACKGROUND OF THE INVENTION

A breeding program was initiated during 2003 at a research nursery in Blanca, Murcia, Spain. During the development of this breeding program, a new variety of *Vitis vinifera* was created by deliberate cross breeding of two parent plants by emasculation of the pollen bearing organ of the female and introducing pollen from a different male variety. The female parent of the new variety is ‘Autumn Royal’, U.S. Plant Pat. No. 2,906. The male parent (i.e. the pollen parent) of the new variety is ‘Princess’, unpatented.

‘Itumeight’ was identified as a potentially interesting selection during 2008 at the same location in Murcia, Spain. After identifying the new variety as a potentially interesting selection, first propagation of ‘ITUMEIGHT’ by vegetative cuttings was undertaken during 2009, at the research nursery in Murcia, Spain. Controlled testing and propagation of the new variety continued, to assess stability of the unique characteristics of this variety. Subsequently, several generations have been reproduced and have shown that the unique features of this cultivar are stable and reproduced true to type. No publications have been issued on the plant breeding invention. Date of first sale was Sep. 2, 2019, occurring in Europe. This sale was made directly by the inventor or one who obtained the claimed invention directly or indirectly from the inventor. This sale and all public disclosures made

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between Sep. 2, 2019 and the filing of this application fall within the exception allowed under 102(b)(1).

SUMMARY OF THE INVENTION

The cultivar ‘ITUMEIGHT’ has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, day length, and light intensity, without, however, any variance in genotype. The new variety ‘Itumeight’ is a dark red-violet seedless table grape with medium production and a medium fertility index “1”. In addition to the before mentioned characteristics, the following traits have been repeatedly observed and are determined to be the unique characteristics of ‘Itumeight’. These characteristics in combination distinguish ‘Itumeight’ as a new and distinct *Vitis* cultivar:

1. Unique dark red-violet skin coloration.
2. Medium to large clusters.
3. Mid-Season variety, commonly bears fruit for harvesting from late July to early September in the region of Murcia, Spain.
4. Very firm berry, crunchy texture.
5. Absence of seeds.
6. Cylindrical, narrow ellipsoid berry shape
7. Interesting flavor: neutral with a semi-acid twist.
8. Fruit has been found to be suitable for handling and shipping.
9. Observed tolerance of water shortage.

10. Observed tolerance for temperatures up to 41° C.
11. Neutral flavor profile.
12. Resistance to cracking.
13. Foliage distinctively produces half open lobes at the 5
petiole sinus.

COMPARISON TO PARENT VARIETIES

TABLE 1

Characteristic	‘Itumeight’	Parental A (fem) ‘Autumn Royal’
Berry Skin Color	Dark Red-Violet	Purple to Black
Formation of Seeds	Seedless	Rudimentary
Berry Texture	Very crunchy	Crunchy
Berry Shape	Cylindrical narrow ellipsoid	Ovoid

Characteristic	‘Itumeight’	Parental B (masc.) ‘Princess’
Berry Shape:	Cylindrical narrow ellipsoid	Round to cylindrical
Formation of Seeds	Seedless	Rudimentary
Berry Skin Color	Dark Red-Violet	Light Green

COMMERCIAL COMPARISON

TABLE 2

Characteristic	‘Itumeight’	‘Crimson Cabernet’ (U.S. Plant Pat. No. 20,913)
Mature leaf: arrangement of lobes of petiole sinus	Half open	Slightly overlapped
Berry color	Dark Red-Violet	Black

Characteristic	‘Itumeight’	‘Blagarone’ (unpatented)
Berry Shape	Cylindrical narrow ellipsoid	Obtuse ellipsoid
Mature leaf: proportion of main veins upperside of blade with anthocyanin coloration	Absent	High
Time of berry ripening	Early to Mid-season	Very early
Berry Size	Large	Medium

Characteristic	‘Itumeight’	‘Itumnine’ (U.S. Application No. 16/983,933)
Berry Texture	Very firm, approximately 32 newtons	Very firm, approximately 25 newtons
Berry Shape	Cylindrical narrow ellipsoid	Cylindrical

TABLE 2-continued

Maturity Date	Mid-season from August. until Mid-September	Late-season; from Mid-September until October
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BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographic illustrations show typical samples of vegetative growth of 9 year old specimens of the new variety, in color as nearly true as it is reasonably possible to make in a color illustration of this character. Plants were grown in Murcia, Spain. Colors in the photograph may differ from the color values cited in the detailed botanical description below, which accurately describes the colors of the new Grapevine.

FIG. 1 illustrates a fruit cluster of ‘Itumeight’.

FIG. 2 shows a close up view of the trunk of ‘Itumeight’.

FIG. 3 illustrates in close up perspective typical foliage of the new variety, both front and back of the leaf.

FIG. 4 illustrates the plant canopy of ‘Itumeight’, including fruits, branches and foliage.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart 2015 except where general terms of ordinary dictionary significance are used. Some descriptors, when useful have been incorporated from *UPOV Grape Descriptor Guidelines*. The description is based on the observation of plants growing on ‘1103 Paulsen’ (unpatented) rootstock in clay stony soil conditions in the fields near Blanca, Murcia, Spain. The age of plant described is of 9 years, with an average height of 200 cm, a high canopy density, a 300 cm plant spread, a one-year growth rate to reach two meters high and 20 to 30 days to initiate roots at approx. 20° C. At observation location temperature ranged between 15° C. to 35° C. during the day, and between 5° C. to 20° C. during the night.

Botanical classification: *Vitis vinifera* ‘Itumeight’.

CANES

Characteristics of mature canes:

Diameter.—1.2 to 1.4 cm.

Length.—60-70 cm.

Color.—Near RHS Greyed-Orange 164C.

Cross section shape.—Circle.

Strength.—Medium.

Texture.—Non-pubescent, rough.

Lenticels:

Diameter <0.5 mm.

Density.—Few to-moderate.

Color.—Near RHS Greyed-Orange 164C.

Internode:

Length.—9-11 cm; midpoint 10 cm.

Pigmentation at internode, dorsal.—Near RHS Greyed-Orange 164C.

Pigmentation at internode, ventral.—Near RHS Greyed-Orange 164C.

Tendrils: (Counting nodes/buds from the base of the branch to its end, when a tendril is present, a 1 is marked, no tendril, a 0 is marked) pattern on show: 0,0,0,0,0,1,0.

Tendrils forked.—Yes.

Tendril texture.—Glabrous.

Tendril length.—11 cm.

Bud:

Width.—1.1 cm.

Bud length.—0.4 cm.

Bud shape.—Triangular.

Bud color.—Near RHS Greyed-Yellow 161D and 162D both colors present individually.

Young shoot:

Openness of tip.—Open. Anthocyanin not present in Shoot pigmentation.

Texture.—Smooth.

Diameter.—0.8 cm to 1.2 cm.

Longitudinal Length.—2.2 m to 4.0 m; midpoint 2.5 m.

Color.—Near RHS Greyed-Orange 164D, streaked 165D.

Cross section.—Circular.

Strength.—Very strong.

Attitude.—Semi-erect.

Bark texture.—Shaggy.

Bark color.—Near RHS Greyed-Red 178A streaked 180A.

FOLIAGE

Leaf:

Arrangement.—Alternate.

Quantity.—Approximately 17 per cane.

Average length.—22 cm.

Average width.—20 cm.

Overall shape of blade.—Broad-deltate.

Apex.—Acute.

Base.—Cordate.

Margin.—Nearly entire, infrequent shallow dentations.

Texture of top surface.—Smooth.

Texture of bottom surface.—Smooth.

Pubescence.—None.

Aspect.—Slightly undulate.

Sinuses:

Shape of petiolar sinus.—Low widened.

Shape of base petiolar sinus.—Low widened.

Depth of petiolar sinus.—2 to 4 cm.

Width of petiolar sinus.—8 cm.

Shape of upper sinuses.—Low widened.

Color:

Immature foliage upper side.—Near RHS Yellow-Green 154D streaked 150D.

Immature foliage under side.—Near RHS Yellow-Green 154D streaked 150D.

Mature foliage upper side.—Near RHS Green 137A.

Mature foliage under side.—Near RHS Yellow-Green 144A.

Venation:

Type.—Pinnate.

Venation color upper side.—Near RHS Yellow-Green 154C.

Venation color under side.—Near RHS Yellow-Green 154C.

Petiole:

Length.—16 cm.

Diameter.—0.3 cm.

Color.—Near RHS Yellow-Green 144A with very weak anthocyanin presence on top surface near Red 36C.

Texture.—Glabrous.

FLOWER

Flowering period begins around May 9 to 15 in Murcia, Spain.

Observed flowers per flowering stem.—Average 440.

Inflorescence when in bud:

Length.—12 cm.

Diameter.—6 cm.

Bud color.—Near RHS Green 140B.

Bud shape.—Conical.

Bud size.—About 1 to 2 mm by 1 to 2 mm.

Individual flower:

Main time of flowering.—6 days.

Size of entire flower (to end of stamens).—0.7 cm.

Calyx shape.—Funnel.

Calyx size.—15 mm.

Calyx color.—Near RHS Green 140A.

Calyx apex.—Rounded.

Calyx base.—Rounded.

Calyx texture.—Glabrous all surfaces.

Diameter.—15 mm.

Days lasting on plant.—6 days.

Petals:

Quantity.—5.

Arrangement.—Symmetrical rotate.

Length.—0.18 cm.

Width.—<0.1 cm.

Shape.—Obovate.

Apex.—Ovate.

Base.—Ovate.

Texture.—Upper and lower surfaces soft.

Color.—At opening upper surface: Near RHS Green 140B. At opening lower surface: Near RHS Green 140B. Fully opened upper Surface: Near RHS Green 140B. Fully opened lower Surface: Near RHS Green 140B.

Peduncles:

Fruit peduncle length.—55 mm.

Fruit peduncle width.—6 mm.

Angle.—About 70° to the lateral branch.

Fruit peduncle strength.—Very strong.

Fruit peduncle texture.—Softly pubescent.

Color.—Near RHS Green 142D.

Pedicels:

Length.—0.7 cm.

Diameter.—0.05 cm.

Angle.—About 80° to center of flower cluster.

Strength.—Medium.

Texture.—Softly pubescent.

Color.—Near RHS Green 141C.

Fragrance: Absent.

REPRODUCTIVE ORGANS

Number of stamens: 5.

Anthers:

Shape.—Oblong.

Length.—Approximately 0.1 cm.

Color.—Near Yellow 9C.

Pollen.—Color: Near Yellow 8A.

Quantity: Abundant.
Pistil quantity: 1.
 Length.—0.3 cm.
Style:
 Length.—<0.1 cm.
 Color.—Near RHS Green 143B.
Stigma:
 Shape.—Round.
 Color.—Near RHS Yellow-Green 144D.
 Ovary color.—Near RHS Yellow-Green 144D.

FRUIT

Cluster:
 Average length.—26 cm.
 Average diameter.—19 cm.
 Average weight.—750 grams.
 Fertility index.—Number of clusters per sprouted buds:
 1.
Fruit:
 Average length.—2.9 cm.
 Average diameter.—2.3 cm.
 Shape.—Cylindrical narrow ellipsoid.
 Cross-section.—Circular.
 Color of berry skin.—Near RHS Purple 77A, blushed
 Purple N79C.

Color of berry flesh.—Translucent, near White 155B.
 Brix at harvest.—20.
 Ease of detachment from pedicel.—Difficult, well
 hooked and difficult detachment.
 Thickness of skin.—Thin.
 Firmness of flesh.—Very crunchy and very firm.
 Particular flavor.—Neutral with a semi-acid twist.
 Formation of seeds.—None. Seeds are absent in this
 variety.
 Average weight of an individual berry.—8.2 grams.
 Storage characteristics.—Typically and observed 90
 days at 1° C.

OTHER CHARACTERISTICS

15 Disease and pest resistance: Not observed to be susceptible
 nor resistant to normal diseases and pests of *Vitis vinifera*.
Temperature tolerance: Observed growing between 6° C. to
 41° C.
20 Drought tolerance: Observed to tolerate water shortages
 during the dry Summer months of Murcia, Spain without
 detriment.
 What is claimed is:
 1. A new and distinct cultivar of *Vitis* grapevine named
25 ‘ITUMEIGHT’ as herein illustrated and described.

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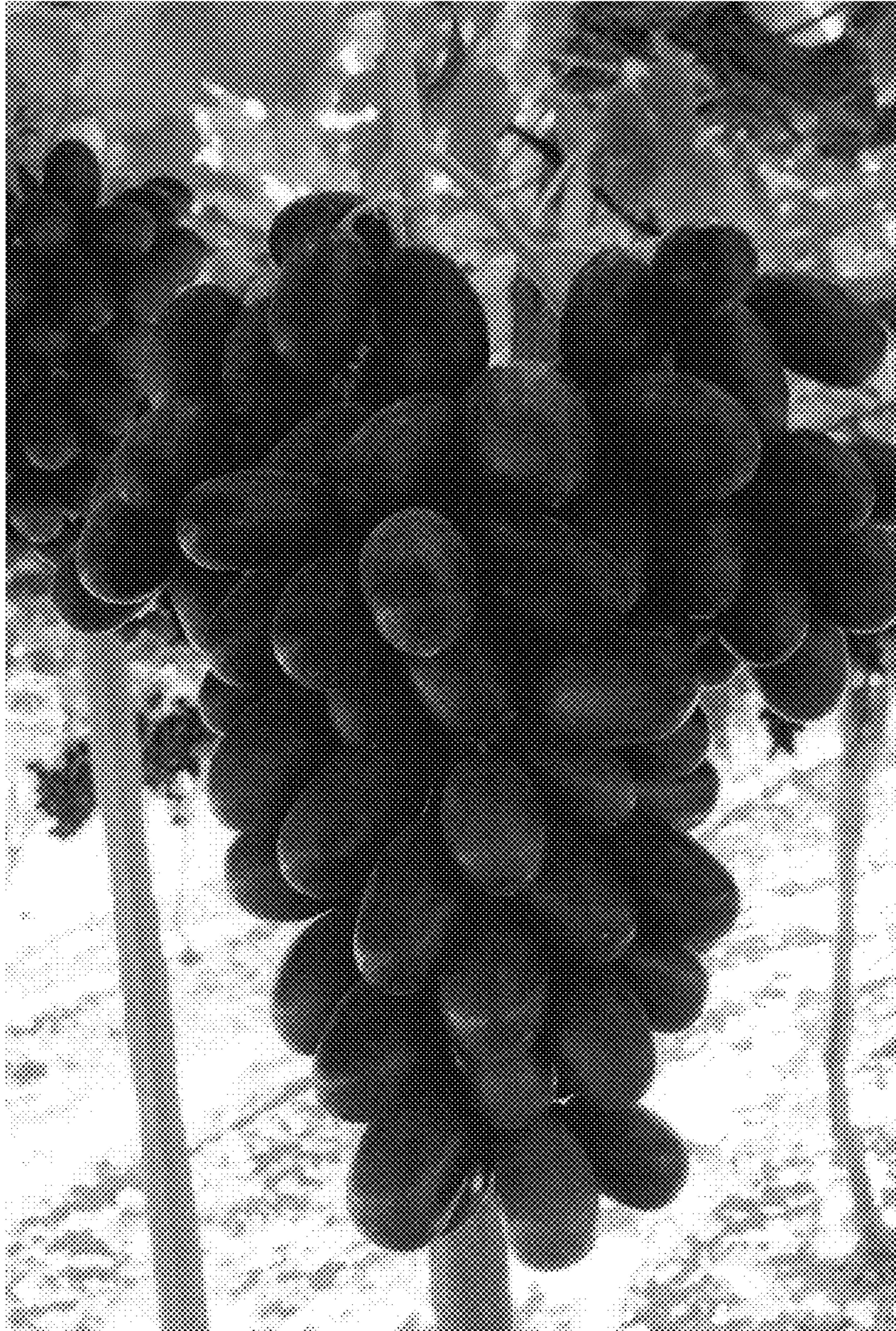


FIG. 1



FIG. 2

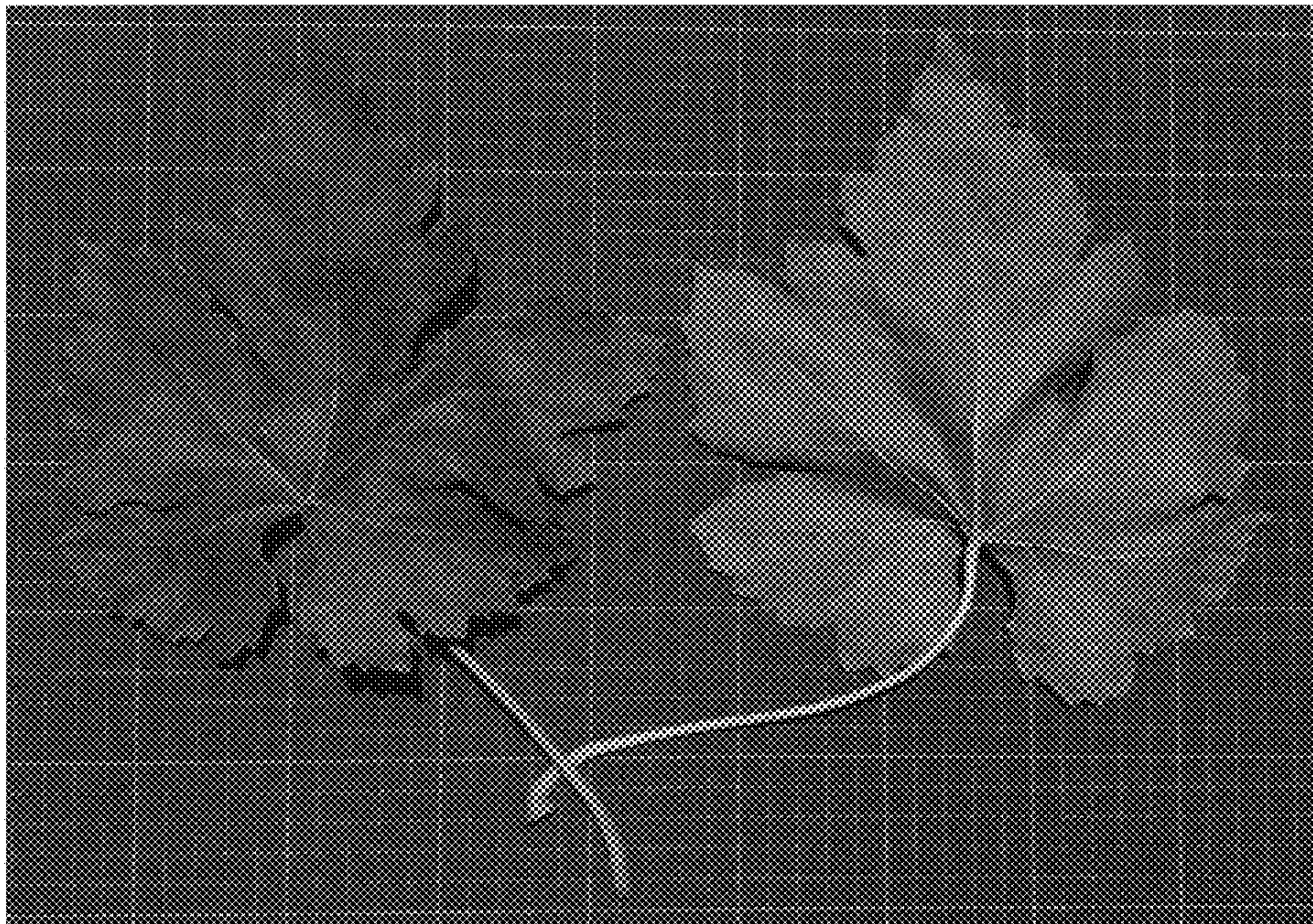


FIG 3



FIG. 4