



(12) **United States Plant Patent**
Martinez et al.

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

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

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

(52) **U.S. Cl.**
USPC **Plt./207**
CPC **A01H 6/88** (2018.05)

(58) **Field of Classification Search**
USPC Plt./207, 206, 205
CPC A01H 5/0812
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

PLUTO UPOVROM Plant Variety Database 20210209 Citation for ‘ITUMTHIRTEEN’ as per QZ PBR 20152928; 1 page.*

* cited by examiner

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(57) **ABSTRACT**

A new distinct variety of grapevine named ‘Itumthirteen’ as herein described. The new variety abundantly forms attractive yellow to light green seedless berries with a narrow ellipsoid berry shape, a light Muscat flavor and a crunchy and firm berry flesh texture. Being a mid-season variety, the fruit commonly is ready for harvesting from 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.

3 Drawing Sheets

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

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 the unpatented, proprietary variety referred to as ‘Itum 02-12-15’. The male parent (i.e. the pollen parent) of the new variety is ‘Princess’, unpatented.

‘Itumthirteen’ was identified as a potentially interesting selection during 2010 at the same location in Murcia, Spain. After identifying the new variety as a potentially interesting selection, first propagation of ‘ITUMTHIRTEEN’ by vegetative cuttings was undertaken during 2011, 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

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from the inventor. This sale and all public disclosures made 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 ‘ITUMTHIRTEEN’ 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 ‘Itumthirteen’ is a yellow to light green seedless table grape with medium production and an above average fertility index “1, 1”. In addition to the before mentioned characteristics, the following traits have been repeatedly observed and are determined to be the unique characteristics of ‘Itumthirteen’. These characteristics in combination distinguish ‘Itumthirteen’ as a new and distinct *Vitis* cultivar:

1. Yellow to light green skin coloration.
2. Medium to large clusters.
3. Mid-season variety, commonly bears fruit for harvesting from July to early September in the region of Murcia, Spain.
4. Firm berry texture, crunchy.
5. Absence of seeds.
6. Narrow ellipsoid berry shape
7. Medium to large berry size.
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. Light muscat flavor.
12. Resistance to cracking.

COMPARISON TO PARENT VARIETIES

TABLE 1

Characteristic	'Itumthirteen'	Parental A (fern) 'Itum-02-12-15'
Berry Skin Color	Yellow to light green	Red
Formation of Seeds	Seedless	Lignified
Berry Flavor	Light muscat	Neutral

Characteristic	'Itumthirteen'	Parental B (masc.) 'Princess'
Berry Shape:	Narrow ellipsoid	Ovoid
Berry Skin Color	Yellow to light green	Light Green
Formation of Seeds	Seedless	Lignified

COMMERCIAL COMPARISON

TABLE 2

Characteristic	Itumthirteen'	Itumtwo' (unpatented)
Berry Size	Medium to large	Large to very large
Time of Ripening	Mid-Season	Early
Mature leaf sinuses	Moderate	Very deep

Characteristic	'Itumthirteen'	'Superior' (unpatented)
Berry Flavor	Light muscat	Neutral

Characteristic	'Itumthirteen'	'Italia' (unpatented)
Formation of Seeds	Seedless	Complete seeds formed

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographic illustrations show typical samples of vegetative growth of 12 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 close up view of fruit of 'Itumthirteen'.

FIG. 2 shows a close up view of the trunk of 'Itumthirteen'.

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

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* 'Itumthirteen'.

CANES

Characteristics of mature canes:
Diameter.—1.3 to 2.1 cm.
Length.—50 -60 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.—10-12 cm; midpoint 11 cm.
Pigmentation at internode, dorsal.—Near RHS Greyed-Orange 164C.
Pigmentation at internode, ventral.—Near RHS Greyed-Orange 164C.
Tendril:
Pattern (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) observed.—0,0,0,0,1,0 or 0,0,0,0,0,0,1.
Tendrils forked.—Yes.
Tendril texture.—Glabrous.
Tendril length.—10 to 12 cm.

Bud
Width.—1.2 cm to 1.3 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.—1.0 to 4.0 m; midpoint 1.2 m.
Color.—Near RHS Greyed-Orange 164D, streaked 165D.
Cross section.—Circular.
Strength.—Low to medium.
Attitude.—Horizontal.
Bark texture.—Shaggy.
Bark color.—Near RHS Greyed-Red 178A streaked 180A.

FOLIAGE

Leaf:
Arrangement.—Alternate.
Quantity.—Approximately 15 per cane.
Average length.—21 cm.
Average width.—19 cm.

Overall shape of blade.—Broad ovate.
Apex.—Acute.
Base.—Rounded.
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.—High widened.
Shape of base petiolar sinus.—High widened.
Depth of petiolar sinus.—2.5 cm.
Width of petiolar sinus.—1.7 cm.
Shape of upper sinuses.—High 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.—11 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 6 to 10 in Murcia, Spain.
 Observed flowers per flowering stem: Average 400.
 Inflorescence when in bud:
Length.—12 cm.
Diameter.—5 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.—8 days.
Size of entire flower (to end of stamens).—0.7 cm.
Calyx shape.—Funnel.
Calyx size.—1.5 cm.
Calyx color.—Near RHS Green 140A.
Calyx apex.—Rounded.
Calyx base.—Rounded.
Calyx texture.—Glabrous all surfaces.
Diameter.—1.5 cm.
Days lasting on plant.—8 days.

Petals:
Quantity.—5.
Arrangement.—Symmetrical rotate.
Length.—0.2 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:
Length.—70 mm.
Width.—6 mm.
Angle.—About 80° to the lateral branch.
Strength.—Very strong.
Texture.—Softly pubescent.
Color.—Near RHS Green 142D.

Flower pedicels:
Length.—0.5 cm.
Diameter.—0.05 cm.
Angle.—About 75° 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.—Yellow 10A.

Pollen:
Color.—Near Yellow 8D.
 Quantity: Abundant.
 Pistil quantity: 1.
Length.—0.25 cm.

Style:
Length.—<0.1 cm.
Color.—Near RHS Green 143B.

Stigma:
Shape.—Round.
Color.—Near RHS Yellow-Green 144C.

Ovary color: Near RHS Yellow-Green 144D.

FRUIT

Cluster:
Average length.—25 cm.
Average diameter.—16 cm.
Average weight.—600 grams.
Fertility index.—Number of clusters per sprouted buds 1,1.

Fruit:
Average length.—2.7 cm.
Average diameter.—2.2 cm.
Shape.—Narrow ellipsoid.
Cross-section.—Circular.
Color of berry skin.—Near RHS Yellow-Green 154D.
Color of berry flesh.—Translucent, near White 155B.
Brix at harvest.—19.
Ease of detachment from pedicel.—Difficult, well hooked and difficult detachment.
Thickness of skin.—Thin.
Firmness of flesh.—Crunchy and firm.
Particular flavor.—Light muscat.
Fruit peduncle length.—6.5 mm.
Fruit peduncle width.—6 mm.

Fruit peduncle texture.—Firm, hard.
Fruit peduncle color.—Near Green 143C.
Formation of seeds.—None. Seeds are absent in this variety.
Average weight of an individual berry.—7.5 grams.
Storage characteristics.—Typically and observed 90 days at 1° C.

OTHER CHARACTERISTICS

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.
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 ‘ITUMTHIRTEEN’ as herein illustrated and described.

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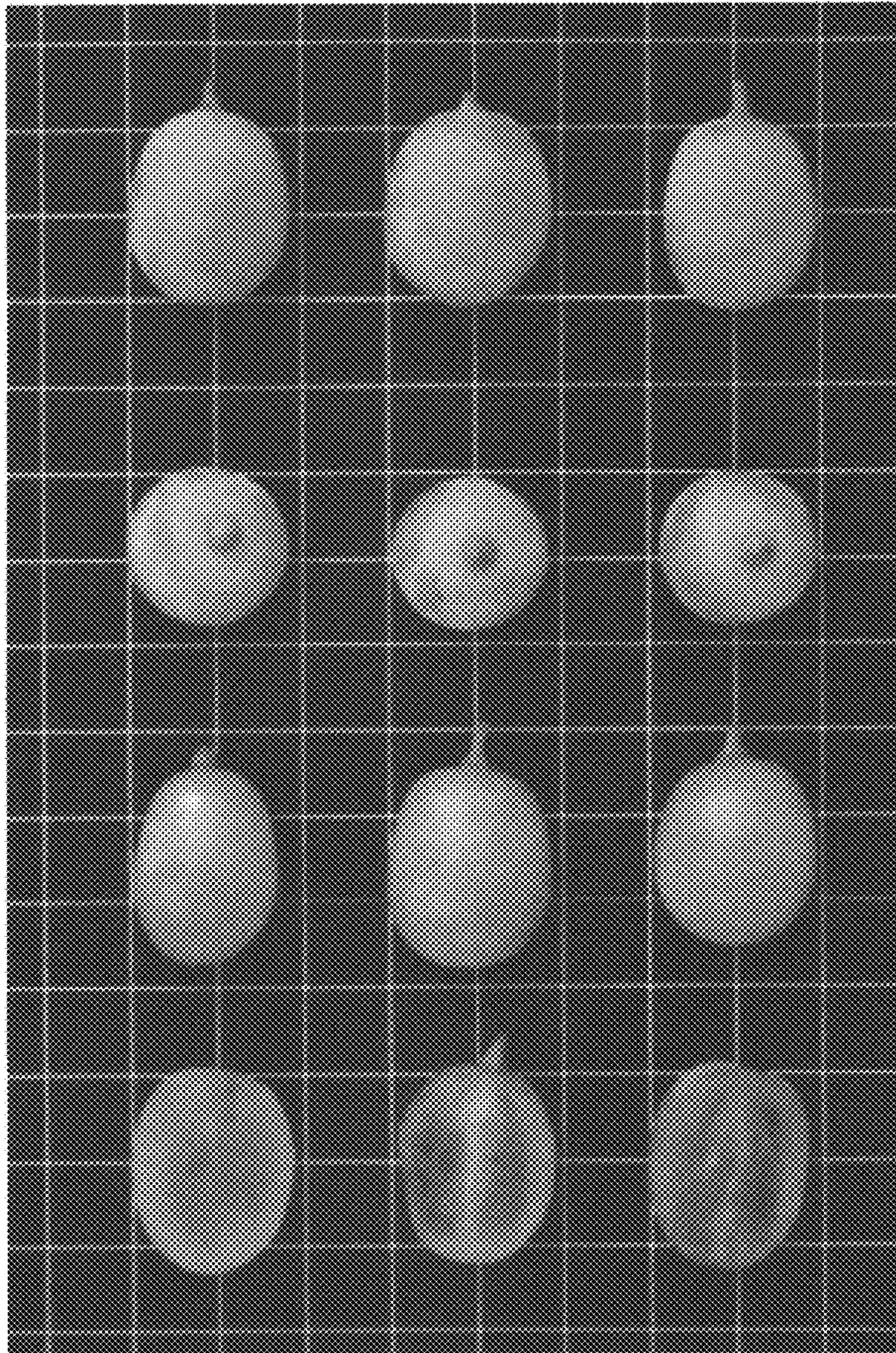


FIG. 1

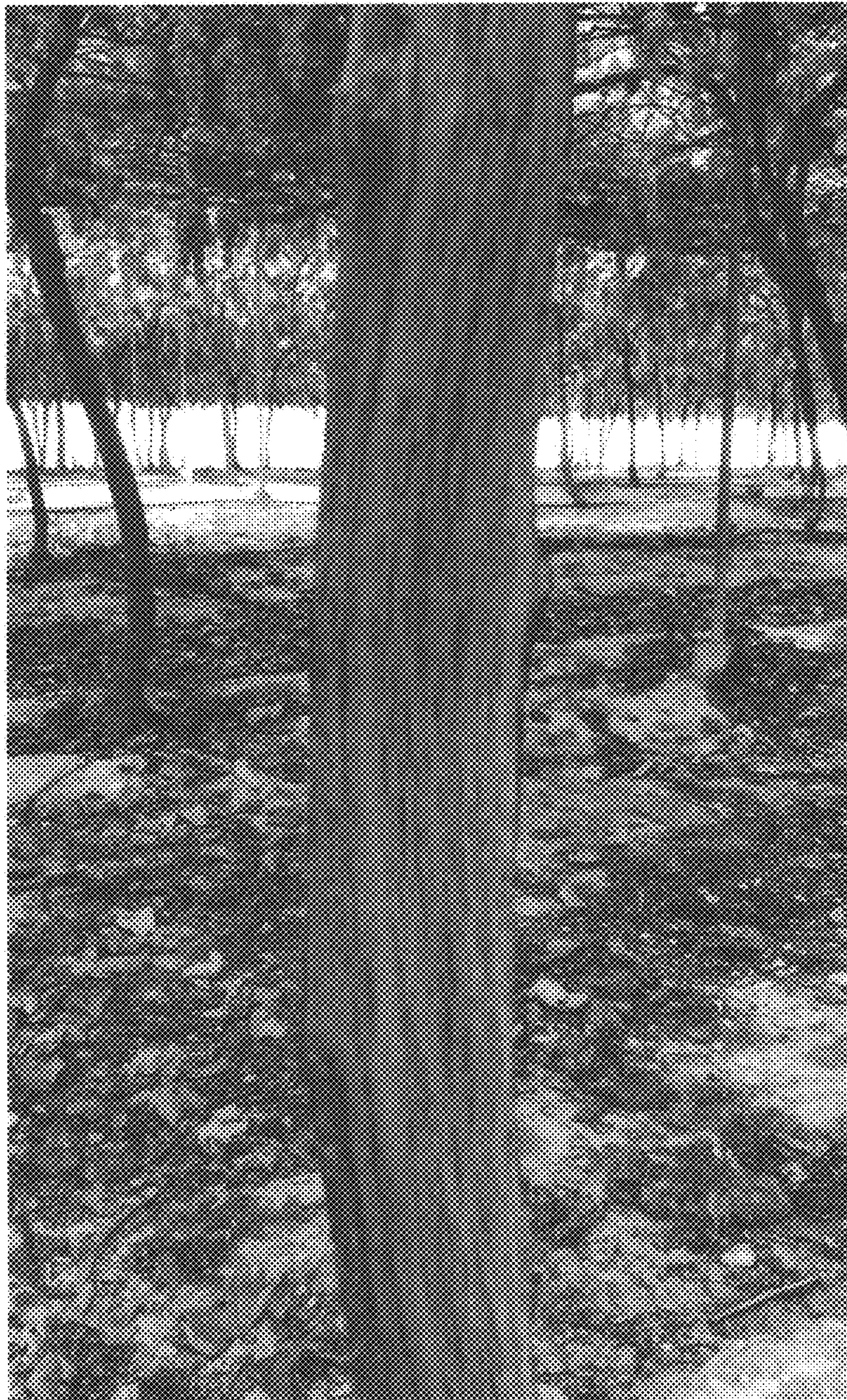


FIG. 2



FIG. 3