



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

(10) **Patent No.:** **US PP33,782 P2**
(45) **Date of Patent:** **Dec. 28, 2021**

(54) **SOUTHERN Highbush blueberry**
Plant named ‘TH-1872’

(50) Latin Name: *Vaccinium corymbosum*
Varietal Denomination: **TH-1872**

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(*) 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.: **17/216,948**

(22) Filed: **Mar. 30, 2021**

(51) **Int. Cl.**
A01H 6/36 (2018.01)
A01H 5/08 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./157**

(58) **Field of Classification Search**
USPC Plt./157
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Vaccinium* plant named
‘TH-1872’, characterized by a combination of early season
flowering and ripening, large berries with good flavor and
firmness, high quality fruit production in conventional pro-
duction areas, and a low chilling requirement of about
150-200 hours below about 45° F.

6 Drawing Sheets

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Botanical designation: *Vaccinium corymbosum*.
Cultivar denomination: ‘TH-1872’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of southern highbush blueberry plant, botanically know as
Vaccinium corymbosum, and hereinafter referred to by the
cultivar name ‘TH-1872’.

The new *Vaccinium corymbosum* ‘TH-1872’ was first
identified in 2013 in Griffin, Ga. The new variety ‘TH-1872’
is early season, begins flowering and ripening about 7-10
days before early varieties ‘Suziblue’ and ‘Rebel’ in South
Georgia, has large berries with good flavor and firmness, and
a chilling requirement of about 150-200 hours below about
45° F.

‘TH-1872’ originated from seeds collected from open-
pollinated fruit of ‘Sweetcrisp’ (U.S. Plant Pat. No. 20,027).
The open-pollinated fruit were harvested from selection trial
plots in Griffin, Ga. in 2010 by D. Scott NeSmith. The new
blueberry plant variety ‘TH-1872’ has been tested in asexu-
ally propagated (by vegetative cuttings) plantings in
Alapaha, Ga. since 2013 where it was established for testing
and comparing to industry standards. Observations of the
resulting ‘TH-1872’ progeny have shown that the unique
features of this new *Vaccinium corymbosum* ‘TH-1872’ are
stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The new *Vaccinium* cultivar ‘TH-1872’ has not been
observed under all possible environmental conditions. The
phenotype may vary somewhat with variations in environ-
ment and cultural practices such as temperature, water and
fertility levels, soil types, and light intensity without, how-
ever, any variance in genotype.

The following traits have been repeatedly observed and
are determined to be the unique and distinguishing charac-

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teristics of the new *Vaccinium corymbosum* cultivar named
‘TH-1872’. In combination, these traits set ‘TH-1872’ apart
from all other existing varieties of southern highbush blue-
berry known to the inventors:

1. early flowering and ripening about 7-10 days before
early varieties ‘Suziblue’ and ‘Rebel’ in South Georgia;
2. large fruit with very good flavor and firmness as
compared to ‘Suziblue’ and ‘Rebel’;
3. high quality fruit production in conventional produc-
tion areas with frost protection;
4. chilling requirement of about 150-200 hours below
about 45° F. (based on comparison of flowering dates
with those of known standard cultivars).

Comparison: Plants of the new *Vaccinium corymbosum*
can be compared to other early season southern highbush
blueberry cultivars ‘Suziblue’ (U.S. Plant Pat. No. 21,167)
and ‘Rebel’ (U.S. Plant Pat. No. 18,138). The selection
‘TH-1872’ begins flowering and ripening about 7-10 days
earlier than early varieties ‘Suziblue’ and ‘Rebel’ in South
Georgia and ripens before ‘Suziblue’ and near the time of
‘Rebel’. ‘TH-1872’ has large berries with very flavor and
firmness as compared to ‘Suziblue’ and ‘Rebel’ at Alapaha
(Table 1). No notable diseases or other pest problems have
been observed for the new variety that are not also common
for other varieties. The new variety is estimated to have a
chilling requirement of about 150-200 hours, more or less,
below about 45° F. (based on comparison of flowering dates
with those of known standard cultivars) when produced
under typical low to mid chill production regions. Studies
suggest that ‘TH-1872’ produces high quality fruit when
grown in conventional production areas, with frost protec-
tion advised for achieving acceptable yields due to its early
flowering. Additional comparison data of ‘TH-1872’ with
‘Suziblue’ and ‘Rebel’ are presented in the table below.

TABLE 1

Plant and fruit ratings for 'TH-1872' and standards grown in Alapaha, GA. Data represents and average of data from 3 years (2016, 2019, and 2020).

	'Suziblue'	'Rebel'	'TH-1872'
Berry size	8.0	7.6	8.2
Berry scar	7.0	7.2	7.8
Berry color	7.0	7.0	7.2
Berry firmness	7.3	7.2	8.3
Berry flavor	7.0	6.3	8.0
Cropping	8.5	7.0	4.0
Plant vigor	8.0	8.2	8.2
Date of 50% flowering	Feb. 28	Feb. 26	Feb. 17
Date of 50% ripening	May 7	Apr. 27	Apr. 25
Fruit development period (days)	69	61	68

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying colored photographic illustrations show the overall appearance and distinct characteristics of the new cultivar of *Vaccinium corymbosum* 'TH-1872' showing the colors as true as possible. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description, which accurately describes the colors of the new *Vaccinium corymbosum* 'TH-1872'. Unless indicated otherwise, the photographs were taken of plants grown outdoors in Alapaha, Ga. taken in 2019 and 2020.

The photograph labeled FIG. 1 depicts typical three-year old 'TH1872' plants during flowering, taken in February 2020.

The photograph labeled FIG. 2 depicts a close-up view of flowering branches of a 'TH-1872' plant.

The photograph labeled FIG. 3 depicts typical two-year old plants of 'TH1872' during fruit ripening, taken in April 2019.

The photograph labeled FIG. 4 depicts close-up view of maturing fruit of 'TH1872', taken in April 2019.

The photographs labeled FIG. 5A and FIG. 5B are close-up views of ripe fruit of 'TH1872', with FIG. 5B depicting two sliced berries to reveal the inside of the fruit. Photos taken April 2020.

The photograph labeled FIG. 6 is another close-up view of ripe fruit of 'TH1872', in a human hand, illustrating the relative size of the fruit. Photo taken April 2020.

DETAILED BOTANICAL DESCRIPTION

The following traits have been consistently observed in the original plant of this new variety and in asexually propagated progeny grown in Alapaha, Ga., and, to the best knowledge of the inventors, their combination forms the unique characteristics of the new variety *Vaccinium corymbosum* 'TH-1872'.

Throughout this specification, color names beginning with a small letter signify that the name of that color, as used in common speech, is aptly descriptive. Color names beginning with a capital letter designate values based upon The R.H.S. Colour Chart, 5th edition published by The Royal Horticultural Society, London, England in 2007, except where general terms of ordinary dictionary significance are used.

The aforementioned photographs and following observations, measurements, and values describe plants of the

Vaccinium corymbosum cultivar named 'TH-1872'. Data were collected between the years of 2016-2020 from a horticulture farm and nursery in Alapaha, Ga. from 2 to 4-year-old plants (planted in the field with supplemental irrigation). The average low temperature for the year ranges from about 54° F. to 58° F., and the average high temperature for the year ranges from about 78° F. to 82° F.

Botanical classification: *Vaccinium corymbosum* 'TH-1872'.

Commercial classification.—Fruit-bearing shrub.

Parentage.—Open pollination of 'Sweetcrisp' (U.S. Plant Pat. No. 20,027).

Growth and propagation:

Propagation type.—Vegetative by softwood cuttings.

Growth rate.—Moderately vigorous.

Root description.—Fibrous.

Plant description:

Growth habit.—Plant is compact and mostly spreading, with about 3 to 5 main canes arising from the original crown, and multiple branching of shoots from those canes about 5 to 10 cm above ground.

Usage.—Commercial and private fruit production.

Productivity.—Medium to high yielding. Yields of about 5 to 9 lbs fruit per plant each year on plants around 4 years old or older grown under well fertilized and irrigated field conditions. Frost protection may be useful to reach yield potential due to early flowering.

Size of plant.—Plant is about 1.1 to 1.5 m tall by about 3 to 4 years. Plants grown under highly productive soil and fertility conditions may exceed about 1.5 m tall in 4 years. The plant crown, or base, is typically about 15-20 cm in diameter. Upper portion of plant canopy reaches about 1.2 to 1.5 m in diameter by about 3 to 4 years.

Cold hardiness.—Similar to other early ripening southern highbush varieties such as 'Suziblue' (U.S. Plant Pat. No. 21,167) and 'Rebel' (U.S. Plant Pat. No. 18,138).

Disease resistance.—No notable disease resistance or susceptibility observed. Estimated to be similar to other early season southern highbush such as 'Suziblue' and 'Rebel'.

Chilling requirement.—Plants are low chill, requiring only about 150 to 200 hours, more or less, of temperatures at or below about 45° F. (7° C.) to induce normal leafing and flowering during the spring under conventional dormant production systems. The chill requirement is slightly less than the female parent 'Sweetcrisp' (200 to 300 hours of chilling required), male parent unknown.

Leafing.—Plants tend to break sufficient leaf buds simultaneously with, or shortly after, anthesis.

Canes.—Main cane base diameter about 20 to 30 mm, color most near Grey 201B; two year old cane diameter about 10 to 15 mm, color transitioning from Greyed Orange 166C to Grey 201B; current season wood diameter about 5 to 10 mm, color Yellow Green 145C.

Fruiting wood.—Moderate number of twigs (about 5 to 10 common) of about 10 to 15 cm in length, with internode lengths of about 10 to 15 mm common.

Foliage:

Leaf color.—Healthy mature leaves: top side of leaf color is Green 137B, under side of leaf color is Green 138B.

Leaf arrangement.—Alternate, simple.

Leaf shape.—Elliptic.

Leaf margins.—Nearly entire, some edges slightly crenate to undulate.

Leaf venation.—Pinnate with slight netting.

Leaf apices.—Acute.

Leaf bases.—Acute.

Leaf dimensions.—Length: about 40 to 45 mm; width: about 23 to 28 mm.

Petioles.—Small, about 5.0 to 7.0 mm long, about 1.2 to 1.8 mm wide; Color: Yellow Green 145C.

Texture.—Both upper and lower leaf surfaces, glaucous.

Flowers:

Date of 50% anthesis.—3-year average around February 17 in southeast Georgia.

Flower shape.—Urceolate.

Flower bud number.—High to very high, averaging about 4 to 7 buds per fruiting shoot.

Flowers per cluster.—About 4 to 6 common.

Flower fragrance.—None detected.

Corolla color.—White NN 155C.

Corolla length.—About 8.5 to 9.5 mm.

Corolla width.—About 8.0 to 9.0 mm.

Corolla aperture width.—About 5.5 to 6.5 mm.

Flower peduncle.—Length about 10.0 to 20.0 mm; Color: Green 138B.

Flower pedicel.—Length about 5.0 to 7.0 mm; Color: Green 138B.

Calyx (with sepals).—Diameter: about 6.0 to 7.0 mm; Color: sepals Green 138C; calyx center Green 138B.

Stamen.—Length: about 6.0 to 7.5 mm; number per flower: about 10; filament color: Green White 157C.

Style.—Length: about 9.0 to 10.5 mm; Color: Yellow Green 145A.

Pistil.—Length: about 11.0 to 12.5 mm; ovary color: Green 138C.

Anther.—Length: about 3.8 to 4.3 mm; number: about 10; Color: Greyed Orange 165B.

Pollen.—Abundance: low to medium; Color: White NN 155A.

Compatibility.—The cultivar has a moderate degree of self-compatibility.

Fruit:

Date of 50% maturity.—3-year average around April 25 in southeast Georgia.

Fruit development period.—About 68 days in southeast Georgia.

Berry color.—With wax Violet Blue 98C to 98D; with wax removed Black 203A.

Berry flesh color.—White 155C.

Berry surface wax abundance.—Medium to high.

Berry weight.—1st harvest: about 3.7 to 4.2 g; 2nd harvest: about 2.4 to 2.8 g.

Berry size.—Height from calyx to scar: about 13 to 16 mm; diameter: about 17 to 20 mm.

Berry shape.—Semi-spherical to semi-disk shape.

Fruit stem scar.—Small, dry, with no tearing upon harvest.

Calyx.—Depth very shallow, less than about 1.0 mm, almost flat; width medium, about 7.0 to 10.0 mm; sepals nearly always absent.

Berry firmness.—Very firm.

Berry flavor and texture.—Mild to strong sweetness, mildly acidic flavor; crisp texture.

Storage quality.—Very good.

Suitability for mechanical harvesting.—Likely suitable.

Uses.—Primarily to be used as fresh fruit for shipping and processing markets.

Seed:

Seed abundance in fruit.—Low to medium, with about 5 to 10 fully developed seeds per berry.

Seed color.—Greyed Orange 165B.

Seed dry weight.—About 47.4 mg per 100 seed.

Seed size.—About 1.6 to 2.0 mm long.

It is claimed:

1. A new and distinct cultivar of the *Vaccinium* plant named 'TH-1872' as illustrated and described herein.

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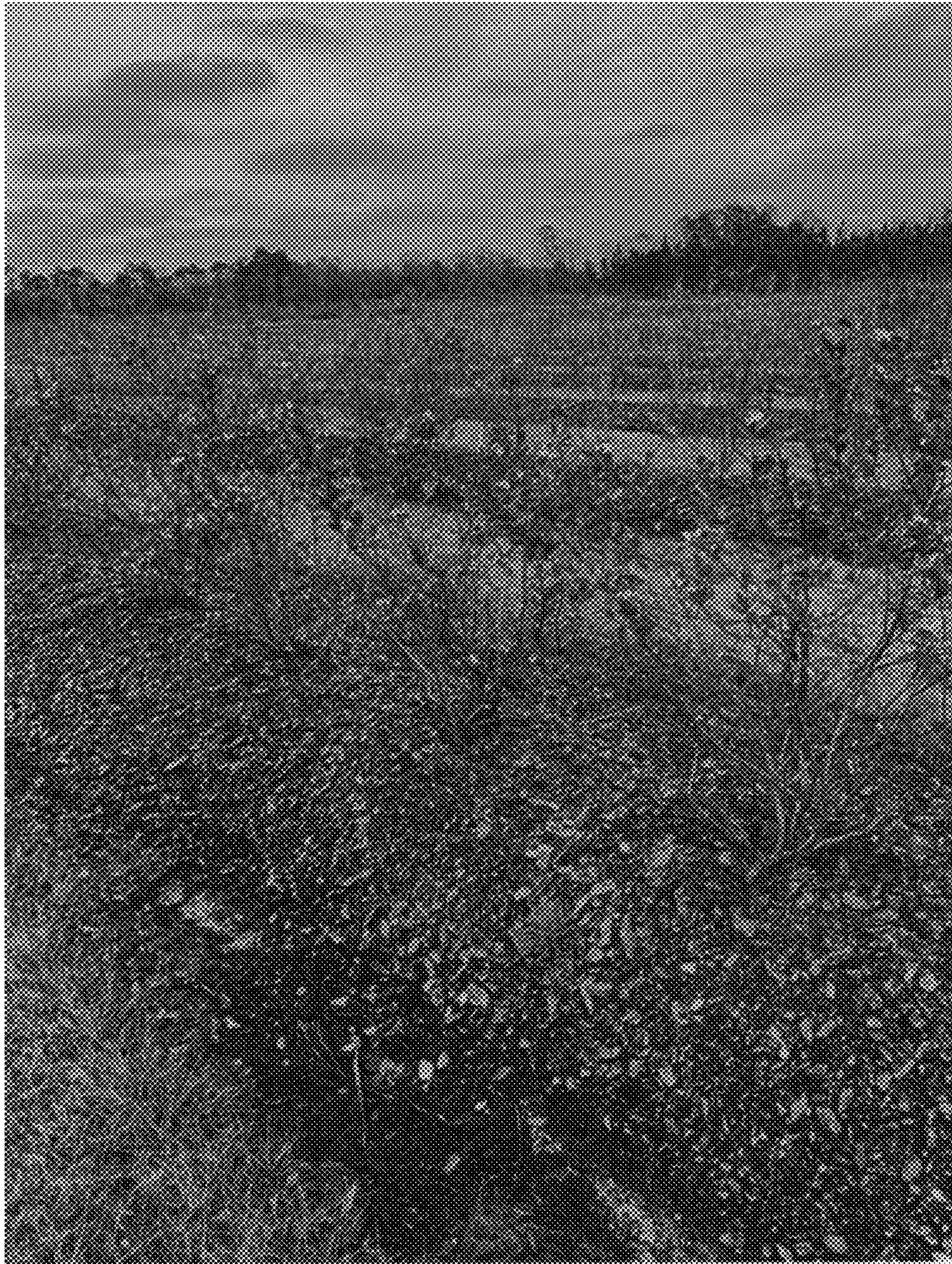


FIG. 1

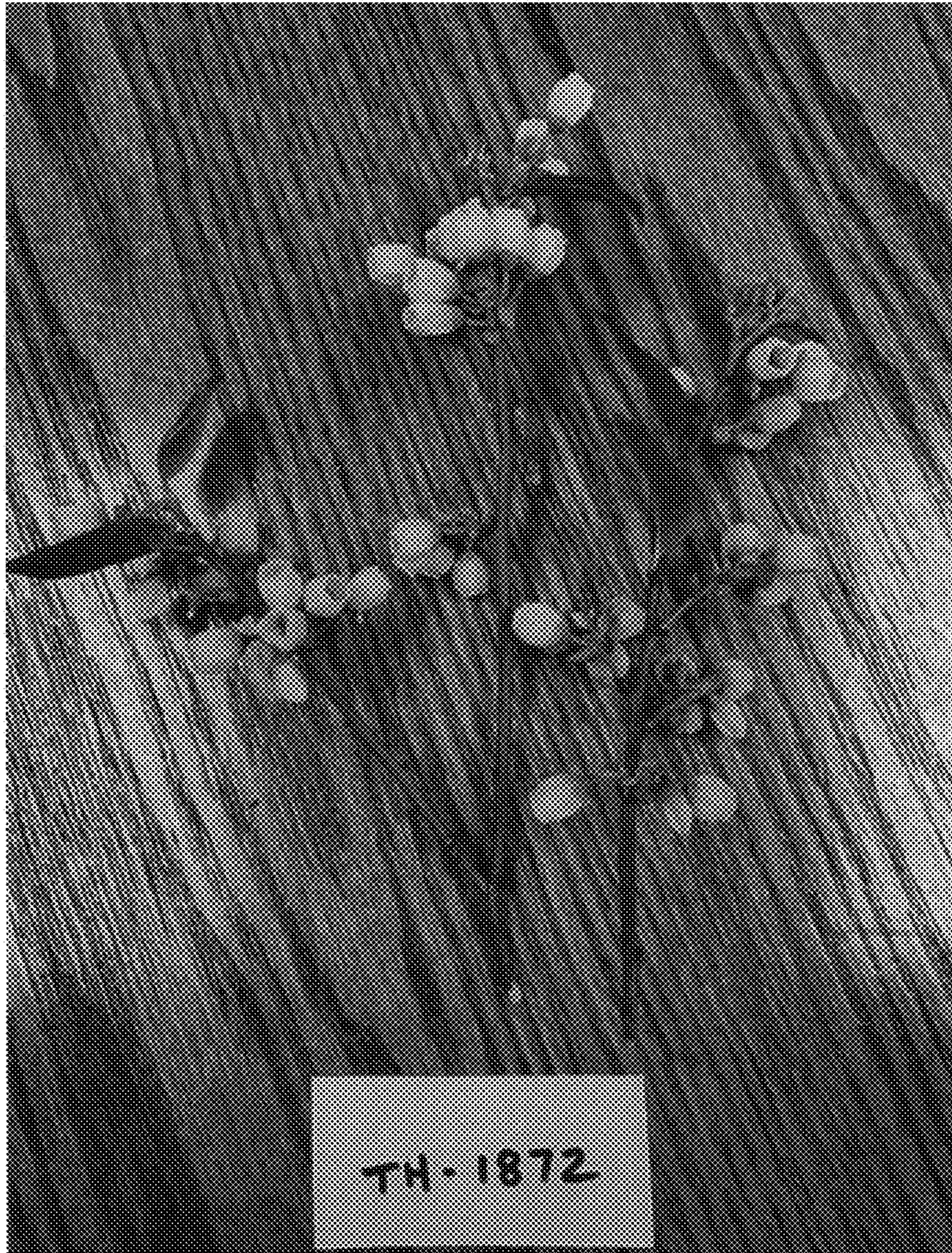


FIG. 2



FIG. 3



FIG. 4

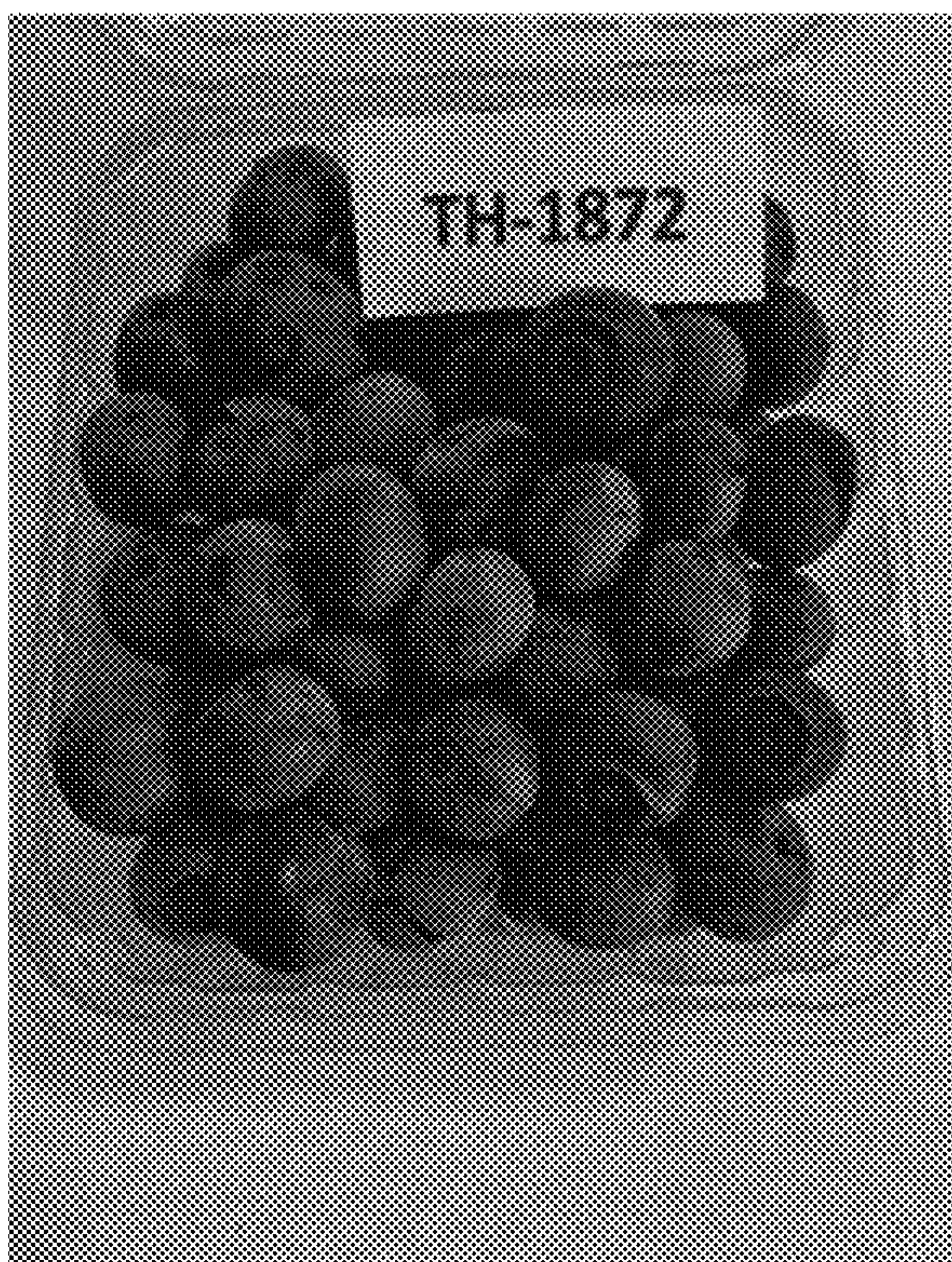


FIG. 5A

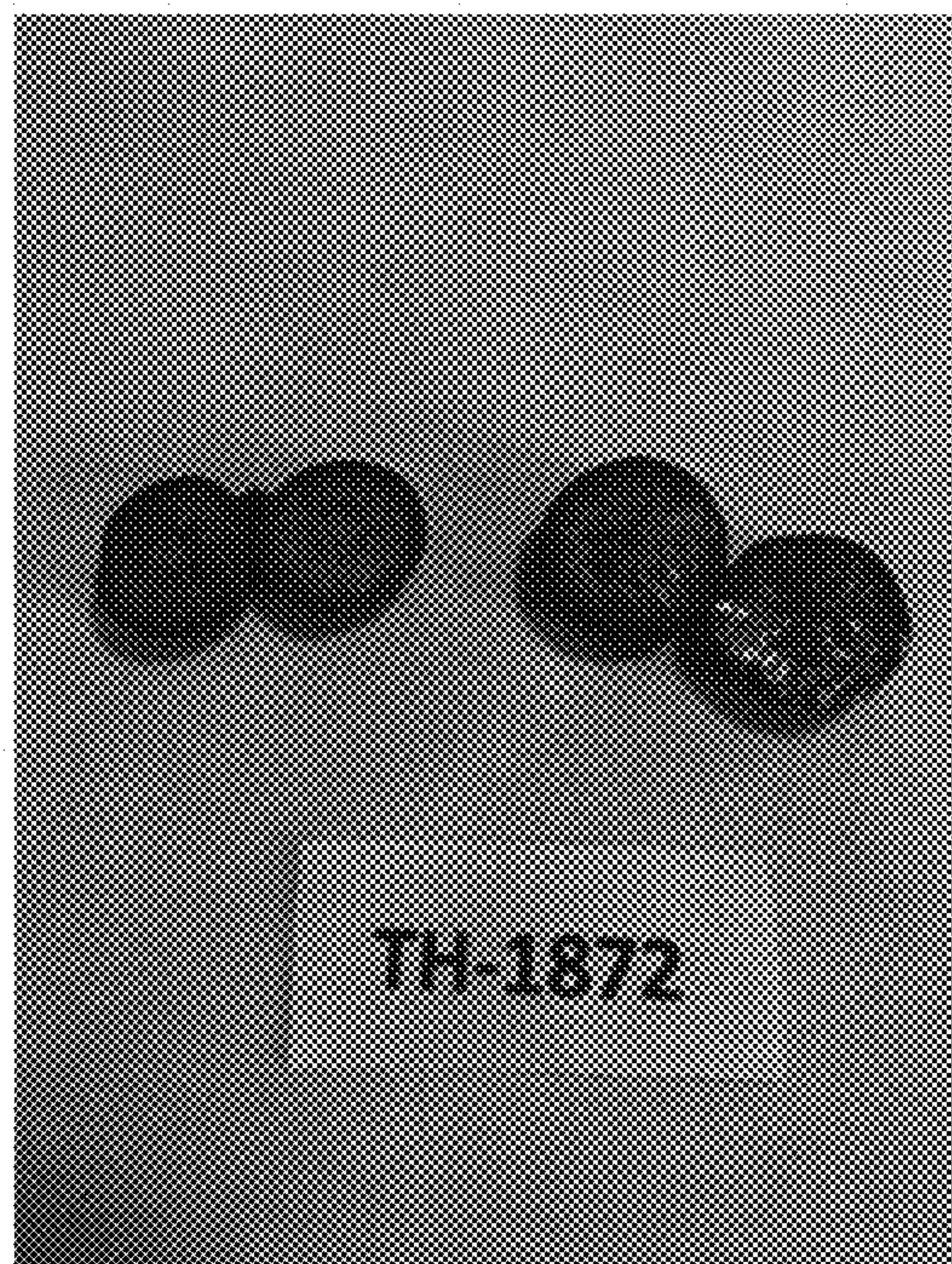


FIG. 5B



FIG. 6