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

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(54) **STRAWBERRY PLANT NAMED 'HOB-R490'**

(50) Latin Name: ***Fragaria* x *ananassa* Duchesne ex Rozier**
Varietal Denomination: **HOB-R490**

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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.

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A01H 5/08 (2018.01)
A01H 6/74 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./209**
CPC ***A01H 6/7409*** (2018.05)

(58) **Field of Classification Search**
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CPC A01H 5/08; A01H 5/00; A01H 6/7409; A01H 6/74
See application file for complete search history.

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(57) **ABSTRACT**

A new variety of strawberry plant named 'HOB-R490' that has high hardness of fruit body, with the fruit having a medium size and a light red core.

3 Drawing Sheets

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Common name: Strawberry.
Botanical classification: *Fragaria* x *ananassa* Duchesne ex Rozier.
Variety denomination: 'HOB-R490'.

CROSS-REFERENCE TO PRIOR APPLICATION

This application follows Japanese plant variety rights application No. 37438 filed May 24, 2024, the entire content of which is incorporated by reference herein.

BACKGROUND OF THE NEW VARIETY

The present invention relates to a new and distinct variety of strawberry, *Fragaria* x *ananassa* Duchesne ex Rozier, which has been given the variety denomination 'HOB-R490'.

The variety is distinguished by its high hardness of fruit body, with the fruit having achenes positioned deep below the surface and a light red core, that distinguish it notably from its female parent 'Pechika Pure' (fruit having achenes positioned shallow below the surface and a yellowish pink (RHS 33C) core).

ORIGIN OF THE VARIETY

The parent varieties are 'R392-43' (male parent) (not patented in the U.S.) and 'Pechika pure' (female parent) (not patented in the U.S.).

The variety was asexually reproduced by runners in Higashikagura-cho, Kamikawa-gun, Hokkaido, Japan.

In March 2021, the male variety 'R392-43' and female variety 'Pechika pure' were crossed in a greenhouse in Higashikagura-cho, Kamikawa-gun, Hokkaido, Japan.

In 2021, the resulting seedlings were sown and raised.

In 2022, the raised seedlings were planted and grown in a test field located in Higashikagura-cho, Kamikawa-gun, Hokkaido, Japan, and two individuals with superior characteristics were selected.

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In 2023, the test was carried out again, and 'HOB-R490' was selected for its high hardness of fruit body and its taste.

On May 24, 2024, an application for plant variety rights No. 37438 was filed for the present variety in the Japanese Plant Variety Protection Office of the Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan.

Cultivation of the variety does not require special conditions or treatments.

Proper planting time is from the end of March to the beginning of April.

Flowering time is from the middle of May.

Harvesting time is from the end of June to the end of November.

The variety is currently mainly intended for fruit production.

SUMMARY OF THE VARIETY

The variety is distinguished by its high hardness of fruit body and rich taste with strong sweetness and acidity, with the fruit having a light red (RHS 40C) core, that distinguish it notably from its female parent 'Pechika Pure' (fruit having a yellowish pink (RHS 33C) core). The variety is also distinguished by its upright plant growth habit and cylindrical fruit shape, which distinguish it notably from its male parent 'R392-43' (semi-upright plant growth habit and conical fruit shape).

A comparison table with the male parent 'R392-43' is as follows (evaluation based on averages).

TABLE 1

	HOB-R490	R392-43
Plant: growth habit	upright	semi-upright
Fruit: shape	rhombic	conical

A comparison table with the female parent 'Pechika Pure' is as follows (evaluation based on averages).

TABLE 2

	HOB-R490	Pechika Pure
Color of core	Light red (RHS 40C)	yellowish red (RHS 33C)

A comparison table with comparative variety '378-104' is as follows (evaluation based on averages).

TABLE 3

	HOB-R490	378-104
Plant: growth habit	upright	semi-upright
Fruit: cavity	absent or small	medium

BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings, which are as nearly true as is reasonable possible to make in a color illustration of this type:

FIG. **1** is a color photograph showing the whole fruit of 'HOB-R490' at the top and a cross-section of the fruit of 'HOB-R490' at the bottom;

FIG. **2** is a color photograph showing cross-sections of the fruit of 'Pechika Pure' at the top and the whole fruit of 'HOB-R490' at the bottom;

FIG. **3** is a color photograph showing the plant, leaves, and fruit of 'HOB-R490';

FIG. **4** is a color photograph showing the plant, leaves, and fruit of 'HOB-R490';

FIG. **5** is a color photograph showing the flower of 'HOB-R490';

FIG. **6** is a color photograph showing the leaf of 'HOB-R490'.

Due to chemical and/or digital development, processing and printing, the plants or portions of plants depicted in the photographs may or may not be precisely accurate, when compared to the actual botanical specimens.

DETAILED DESCRIPTION OF THE INVENTION

The botanical description and the photographs are of the 'HOB-R490' plants evaluated in 2023, including for the comparison with the female parent 'Pechika Pure'. Values as provided are averages.

The plants shown on the photographs were grown in Higashikagura-cho, Kamikawa-gun, Hokkaido, Japan. The plant is a 5-year grown plant.

Colors are given according to the RHS (Royal Horticultural Society) Colour Chart (Fourth Ed., 2001).

BOTANICAL DESCRIPTION

TABLE 4

	Characteristics	States/Values
1	Plant	
1.1	Plant growth habit	upright
1.2	Density of foliage	medium to dense
1.3	Vigor	medium to strong
1.4	Number of axillary bud	few
1.5	Position of inflorescence in relation to foliage	same level
1.6	Number of stolons	medium to few
1.7	Stolon average length	25 cm
1.8	Stolon surface texture	rough
1.9	Stolon color	strong yellow green (RHS 142A)
2	Leaf	
2.1	Leaf size	medium to large (length: 31.3 cm^2 (length 25 cm, width 31 cm)
2.2	Color of upper side	dark green (RHS146A)
2.3	Color of lower side	brilliant yellowish green (RHS 134C)
2.4	Glossiness	weak
2.5	Blistering	strong
2.6	Variegation	absent
2.7	Terminal leaflet: size	large (223 cm^2) (length 17 cm, width 14 cm)
2.8	Shape of base	acute
2.9	Margin	serrate to crenate
2.10	Shape in cross section	concave
3	Stem	
3.1	Petiole length	medium to short (20.3 cm)
3.2	Petiole color	strong yellowish green (RHS 134B)
3.3	Attitude of hairs	slightly outwards
3.4	Anthocyanin coloration	absent or very weak
3.5	Peduncle: length	short (9.0 cm)
3.6	Peduncle: color	strong yellowish green (RHS 134B)
3.7	Pedicel: attitude of hairs	horizontal
3.8	Stipule: length	2.0 cm
4	Flower	
4.1	Flower diameter	medium to large (3.5 cm)
4.2	Number of petals	7 per flower
4.3	Arrangement of petals	free
4.4	Stamen	present
4.5	Petal: color of upper side	white (RHS N155D)
4.6	Petal: color of lower side	white (RHS NN155D)
4.7	Petal: shape	rounded
5	Fruit	
5.1	Fruit size	medium (31.8 g) (height 5.0 cm, diameter 4.0 cm)
5.2	Shape	rhombic
5.3	Shape at apex end	acute or flattened
5.4	Shape at calyx end	flattened
5.5	Color	red (RHS 41A)
5.6	Color of achenes	vivid purplish red (RHS N57A)
5.7	Evenness of color	even or very slightly
5.8	Evenness of surface	slightly uneven
5.9	Neck	absent
5.10	Position of calyx attachment	level with fruit
5.11	Calyx: diameter	6.0 cm
5.12	Calyx: sepal number	13
5.13	Calyx: color designation	dark yellowish green (RHS N134A)
5.14	Attitude of sepals	upwards
5.15	Firmness	firm
5.16	Color of flesh	light red (RHS N34B)
5.17	Color of core	light red (RHS 40C)
5.18	Cavity	absent or small
6	Fruit ripening	
6.1	Time of beginning of flowering	medium to late (May 30)
6.2	Time of beginning of fruit ripening	June 19
6.3	Type of bearing	day neutral
6.4	Soluble solids content	medium to high (Brix = 9)
6.5	Acidity	high (0.79%)

Other features of the plant are as follows:

Plant hardiness zone of the plant: adapted to summer in cooler areas of Japan; has excellent heat resistance but poor cold resistance. In cold weather, the plants are dwarfed and the progress of fruit coloration is slow.

Pest and disease resistance: Normal resistance was observed for pests and diseases in Higashikagura-cho, Kamikawa-gun, Hokkaido, Japan.

We claim:

1. A new and distinct variety of strawberry plant named 'HOB-R490', substantially as described and illustrated herein.

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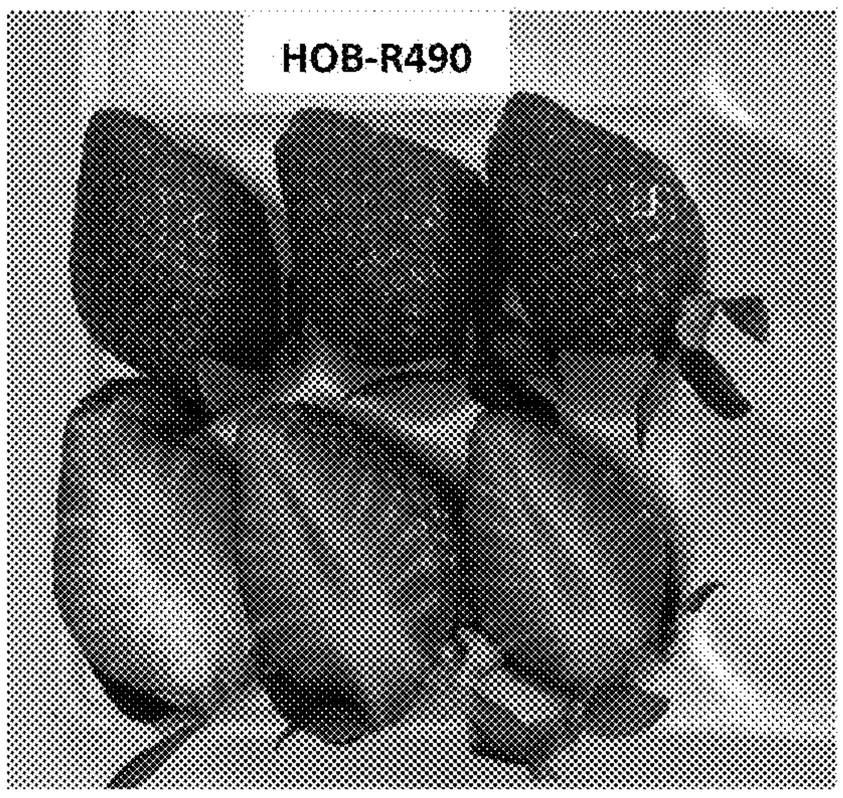

FIG. 1

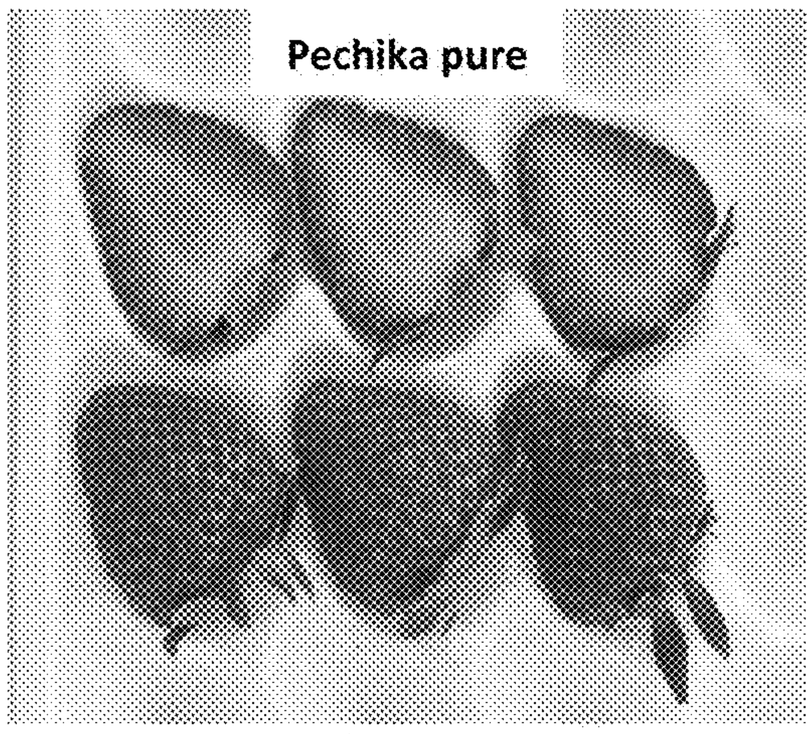

FIG. 2

FIG. 3

FIG. 4

FIG. 5

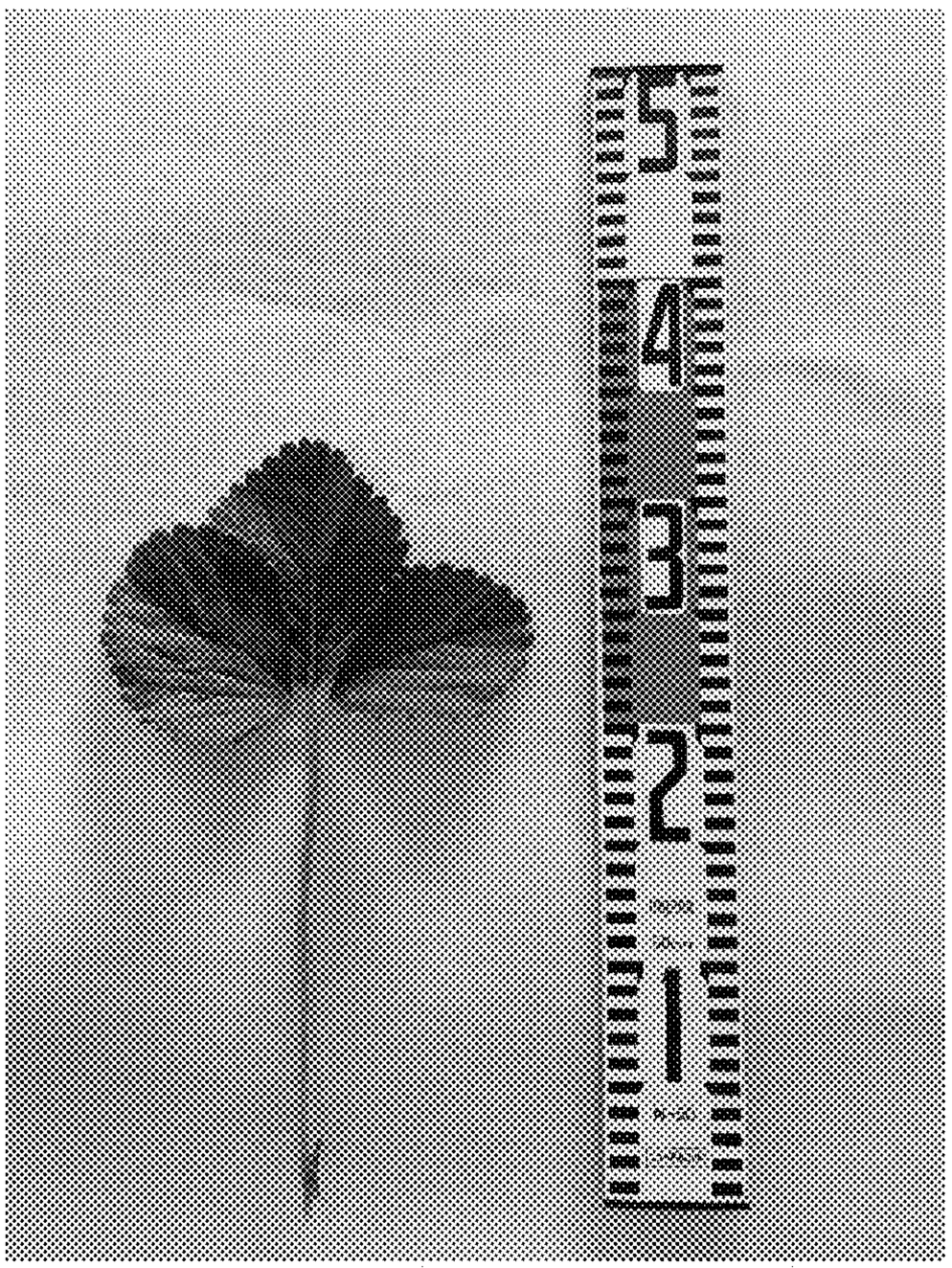

FIG. 6