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Thompson

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(54) **JAPANESE HASKAP PLANT NAMED 'KUCHI'**

(50) Latin Name: ***Lonicera caerulea* ssp. *emphyllocalyx***
Varietal Denomination: **Kuchi**

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(52) **U.S. Cl.**
USPC **Plt./156**

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

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(57) **ABSTRACT**

A new cultivar of Japanese haskap plant, 'Kuchi', that is characterized by its upright plant habit, its vigorous growth habit, its high fruit yields, its fruits that are large in size and cylindrical in shape, its fruit that maintains its appearance, firmness and taste for at least 4 weeks in cold storage at 33° F. to 35° F., and its attachment to the stem that is strong enough to prevent pre-harvest drop and loose enough to permit easy picking without tearing the fruit flesh.

2 Drawing Sheets

Botanical classification: *Lonicera caerulea* ssp. *emphyllocalyx*.

Variety denomination: 'Kuchi'.

CROSS REFERENCE TO RELATED APPLICATIONS

This application is co-pending with U.S. Plant Patent Applications filed for plants derived from the same breeding program that are entitled Japanese haskap Plant Named 'Kapu' (U.S. Plant Pat. No. 26,820) and Japanese haskap Plant Named 'Keiko' (U.S. Plant Pat. No. 26,642).

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Lonicera caerulea* ssp. *emphyllocalyx* and will be referred to hereafter by its cultivar name, 'Kuchi'. 'Kuchi' is a new cultivar of Japanese blue honeysuckle berry, also known as Japanese haskap, a plant grown for its fruit that is marketed as fresh fruit, frozen fruit and high quality processed food products.

The new Invention arose from an ongoing controlled breeding program in Corvallis, Oreg. that commenced with the planting of seeds collected in 2000 from several berry farms in Hokkaido, Japan. The objectives of the breeding program are to develop superior cultivars of this berry plant that could be grown in moderate to colder climates combined with an upright spreading plant habit and fruit that were large in size, firm, easy to pick, good tasting, with a high yield rate and a harvest season that exhibits a range of fruit maturity.

This new Japanese haskap cultivar, 'Kuchi', arose from seed collected from open pollination of an unnamed Japanese haskap plant designated as "selection #8" that was growing on a farm near Bibai, Japan. 'Kuchi' was selected in Corvallis, Oreg. as a single unique plant in 2004 from the population of resulting seedlings.

Asexual propagation of the new cultivar was first accomplished by the Inventor by hardwood stem cuttings in 2004 in Corvallis, Oreg. Asexual propagation by hardwood and softwood cuttings has determined that the characteristics of the new cultivar are stable and are reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The following traits have been repeatedly observed and represent the characteristics of the new cultivar as grown outdoors in a trial plot in Corvallis, Oreg. These attributes in combination distinguish 'Kuchi' as a unique cultivar of Japanese haskap.

1. 'Kuchi' exhibits an upright plant habit.
2. 'Kuchi' exhibits a vigorous growth habit.
3. 'Kuchi' exhibits high fruit yields.
4. 'Kuchi' exhibits fruit that is large in size and cylindrical in shape.
5. 'Kuchi' exhibits fruit that maintains its appearance, firmness and taste for at least 4 weeks in cold storage at 33° F. to 35° F.
6. 'Kuchi' exhibits a fruit attachment that is strong enough to prevent pre-harvest drop and loose enough to permit easy picking without tearing the fruit flesh.

The Inventor has no records on the characteristics of the female parent, selection #8, as data was not recorded at that time. 'Kuchi' can be most closely compared to Japanese haskap cultivars 'Kapu' and 'Keiko'. 'Kapu' differs from 'Kuchi' in having fruit that is oval-ovate in shape, firmer in texture and that have a higher BRIX (14°). 'Keiko' differs from 'Kuchi' in having fruit that is oval in shape and matures one week later and in having a more spreading plant habit.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying colored photographs illustrate the overall appearance and distinct characteristics of 10 year-old plants of the new Japanese haskap as grown in a trial garden in Corvallis, Oreg.

The photograph in FIG. **1** provides a view of the plant habit of 'Kuchi'.

The photograph in FIG. **2** provides a close-up view of the flowers of 'Kuchi'.

The photograph in FIG. **3** provides a close-up view of the leaves of 'Kuchi'.

The photograph in FIG. **4** provides a view of the berries of 'Kuchi'.

The colors in the photographs may differ slightly from the color values cited in the detailed botanical description, which accurately describe the colors of the new Japanese haskap.

DETAILED BOTANICAL DESCRIPTION

The following is a detailed description of 10 year-old plants of the new Japanese haskap as field grown at the Inventor's farm in Corvallis, Oreg. under irrigation. The phenotype of the new cultivar may vary with variations in environmental, climatic, and cultural conditions, as it has not been tested under all possible environmental conditions. The color determination is in accordance with The 1995 R.H.S. Colour Chart of The Royal Horticultural Society, London, England, except where general color terms of ordinary dictionary significance are used.

General description:

Plant type.—Deciduous shrub, fruit bearing.

Plant habit.—Very upright.

Plant size.—Reaches an average of 2 m in height and 1.4 m in width.

Hardiness.—Adapted well in Zone 8b, expected to be hardy to U.S.D.A. Zone 4 but they have not been tested to date.

Diseases and pests.—No significant disease or pest problems have been observed to date.

Root description.—Fibrous.

Propagation.—Softwood and hardwood stem cuttings.

Growth rate.—Very vigorous.

Root development.—10 days to initiate roots in summer at 26° C., and 35 days to produce a fully rooted cutting or a young rooted plant in a liner at 26° C.

Dormant shoots:

Density.—Medium.

New growth.—145A in color, and glabrous surface.

One year-old shoots.—Average of 60 cm in length and 5 mm in diameter, surface is smooth and glabrous, lenticels absent, 164A in color, adventitious bud development; medium, dormant without pruning, average of 2 per node, up to 3 mm in length and 2 mm in width, ovate in shape, 164B in color.

Three year-old stems.—Average of 1.3 m in length and 1.4 cm in diameter, surface exfoliating, inner bark 177D in color, outer bark 197A in color.

Bud break.—Early March in Corvallis, Oreg.

Foliage description:

Leaf shape.—Oval.

Leaf division.—Simple.

Leaf base.—Rounded.

Leaf apex.—Obtuse.

Leaf venation.—Pinnate, color primarily matches leaf color on both surfaces.

Leaf margins.—Entire.

Leaf arrangement.—Opposite.

Leaf attachment.—Petiolate.

Leaf surface.—Glabrous on upper and lower surfaces.

Leaf internode length.—An average of 6.2 cm.

Leaf size.—Average of 7.4 cm in length and 4.3 cm in width.

Leaf color.—Young leaves; upper surface 138A, lower surface 138B, mature leaves; upper surface 138A, lower surface 138B.

Petioles.—Up to 3 mm in length and 1 mm in width, 145C in color, glabrous surface.

Stipules.—Up to 2 mm in length, round in shape, glabrous surface, 138A in color.

Inflorescence description:

Blooming period.—An average of 20 days, typically between March 29th and April 18th with mid bloom around April 8th in Corvallis, Oreg.

Inflorescence type.—Small 2-flowered cymule born in leaf axils of lowest 1 to 3 nodes on current years' growth.

Inflorescence size.—An average of 2 cm in length and 1.5 cm diameter.

Flower buds.—Mixed buds, flower buds are not visible as they are enclosed within the leaves.

Flower fragrance.—None.

Lastingness of inflorescence.—4 to 6 days.

Flower quantity.—2 to 6 per shoot.

Flower type.—Epigynous.

Corolla form.—Funnel form, narrow at the base and widening towards apex, 5-lobed.

Flower size.—Base of ovary to stigma 2.3 cm in length, 6 mm in width at base.

Peduncles.—Up to 6 mm in length, 1 mm in diameter, 132C in color, glabrous surface.

Pedicels.—Inconspicuous.

Bracts.—2, present at the base of the ovaries, lanceolate in shape, upper surface color is 135B, lower surface color is 135C, margins are ciliate, upper and lower surfaces are glabrous, cuspidate apex, cuneate base, 5 mm in width and 2 cm in length.

Sepals.—Fused with hypanthium, 5.5 mm in length.

Petals.—5, fused into tube with apex of each free, 5 forming lobes, 1.5 cm in length, 2 mm in diameter near base, near apex 5 mm, free portion length is 5 mm and 3 mm in width, obtuse in shape, color of inside and outside of tube is 18A, inner and outer surface of tube is pilose.

Reproductive organs:

Gynoecium.—1 pistil, an average of 2.3 cm in length, style is 1.8 cm in length and 18B in color, stigma is 1 mm in diameter and 18B in color, ovary is inferior, oval in shape, 3 mm in diameter, 5 mm in length and 132C in color.

Androcoecium.—5 stamens, adnate to inner corolla tube, filaments are 18D in color and about 1 cm in length, anthers are 18B in color, pollen is abundant in quantity and 8A in color with 99% acetocarmine stain.

Compatibility.—Self-incompatible.

Fruit description:

Fruit development.—64 days from mid-bloom to harvest.

Harvest date.—Average of June 11th in Corvallis, Oreg.

Fruit type.—True berry, consists of 2 ovaries enclosed in the hypanthium.

Fruit shape.—Cylindrical.

Fruit size.—An average of 2.3 cm in length and 1.6 cm in width.

Fruit surface.—Smooth with bloom.
Fruit apex.—Apex.
Fruit skin color.—93A with bloom removed, 188B with bloom.
Fruit flesh color.—145A.
Fruit firmness.—Medium firm.
Fruit brix.—12°.
Fruit juiciness.—Small amount.
Fruit weight.—An average of 2.0 g.
Peduncle-berry scar.—Very small, dry, up to 1.6 cm in length.
Fruit attachment strength.—Medium; strong enough to avoid pre-harvest drop and loose enough to pick without tearing berry flesh.
Pre-harvest drop.—Insignificant.
Post-harvest.—Berries maintain their appearance, firmness and taste for at least 3 weeks in cold storage at 33° F. to 35° F.
Fruit yield.—Average of 3.5 kg per 10 year-old bush.
Market uses.—Fresh and frozen fruit, especially for high value processed products.
Seed.—Average of 9 seeds per fruit, lenticular in shape, dry weight size is 158 mg/100 seeds, 174B in color.

It is claimed:

1. A new and distinct cultivar of Japanese haskap plant named 'Kuchi' as herein illustrated and described.

* * * * *

FIG. 1

FIG. 2

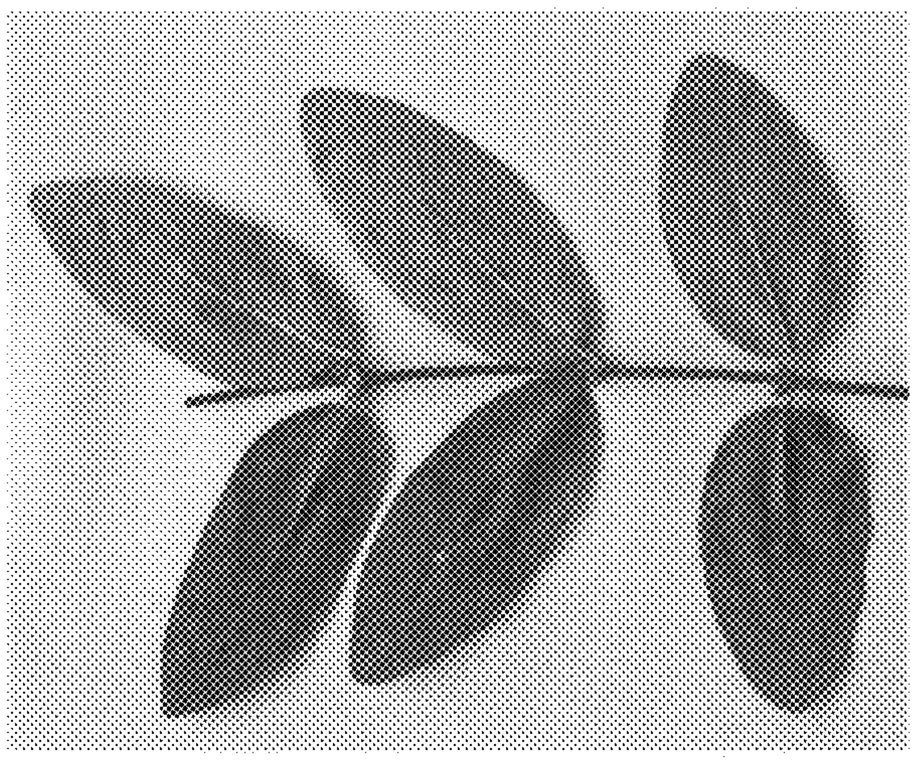

FIG. 3

FIG. 4