

# SWEET POTATO, ORNAMENTAL

# **SWEET POTATO, ORNAMENTAL**

(Ipomoea batatas)

Proposed denomination: 'Kyuikukan 2'
Trade name: Desana Maple
Application number: 07-5828
Application date: 2007/03/30

**Applicant:** Suntory Flowers Ltd. and National Agriculture and Food Research Organization, Tokyo, Japan

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

**Breeder:** Yasuhiro Takahata, Suntory Flowers Ltd., Miyazaki, Japan

Masaru Yoshinaga, Suntory Flowers Ltd., Miyazaki, Japan Hiroki Nakayama, Suntory Flowers Ltd., Miyazaki, Japan Masaru Tanaka, Suntory Flowers Ltd., Miyazaki, Japan Yoshinori Nakazawa, Suntory Flowers Ltd., Kumamoto, Japan

Toru Kumagai, Suntory Flowers Ltd., Ibaraki, Japan Yumi Kai, Suntory Flowers Ltd., Miyazaki, Japan Kenji Katayama, Suntory Flowers Ltd., Miyazaki, Japan Tetsufumi Sakai, Suntory Flowers Ltd., Miyazaki, Japan Kazunari Iwaki, Suntory Flowers Limited, Shiga, Japan Yasuyuki Murakami, Suntory Flowers Limited, Shiga, Japan

Variety used for comparison: 'Sweet Caroline Purple'

**Summary:** The stems and lower side of the leaf blades of 'Kyuikukan 2' have denser pubescence than those of 'Sweet Caroline Purple'. 'Kyuikukan 2' has larger leaves with broader terminal lobes than 'Sweet Caroline Purple'.

# **Description:**

PLANT: vegetatively propagated, annual, upright-bushy growth habit, moderate degree of branching STEM: purple, very strong anthocyanin colouration, moderate pubescence, medium thickness, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: palmate shape, acuminate apex, cordate-like base, lobed, medium to deep incisions between lobes, moderate pubescence on upper side, sparse pubescence on lower side, no variegation, upper side is dark green (RHS 144A) with purple tones changing to greyed purple black (RHS N186A) with green tones at maturity, lower side is brown green (RHS 146B) changing to dark violet (greyer than N79A) at maturity

MIDRIB: upper side is dark violet (RHS N79A), lower side is dark violet (RHS N79B)

PETIOLE: upper side has strong brown purple (RHS N77A) anthocyanin colouration, lower side has strong dark violet (N79B) anthocyanin colouration

Origin and Breeding: 'Kyuikukan 2' originated from a cross between the female parent designated '99US-OR' and the male parent made up of a mix of pollen from proprietary selections of Ipomoea batatas identified as 'KOP99205-1', 'KOP99210-1', 'Kyuikukan 1 gou', 'KOP99211-3', 'KOP99211-4' and 'KOP97286-5'. The cross was conducted in June 2001 at the Miyakonojo Upland Farming Research Station National Agricultural Reseach Center for Kyushu Okinawa Region in Miyakonojo-shi, Miyazaki, Japan. The resultant seedlings were grown in pots in a glasshouse and evaluated. One seedling was selected based on its leaf colour and growth habit, propagated by cutting and planted in pots to be trialed in Miyakonojo-shi in Miyazaki, Japan and at the Omi R&D Center of Suntory Flowers Ltd. located in Higashiomi-shi, Shiga-ken, Japan during 2002. The botanical characteristics of this seedling were examined and compared to similar varieties 'Sweet Caroline Purple' and 'Sweet Caroline Bronze'. It was concluded that this Ipomoea plant named 'Kyuikukan 2' is distinguishable from any other varieties, and uniform and stable in its characteristics.

**Tests and Trials:** The trial of 'Kyuikukan 2' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm



pots on June 30, 2009. Most observations and measurements were taken from 10 plants or parts of plants of each variety on August 6, 2009. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Kyuikukan 2'

	'Kyuikukan 2'	'Sweet Caroline Purple'
Leaf blade length (d	cm)	
mean	18.3	15.2
std. deviation	1.02	1.21
Leaf blade width (c.	m)	
mean	19.3	14.2
std. deviation	1.08	1.76
Width of terminal lo	be of leaf blade (cm)	
mean	6.0 `´´	4.3
std. deviation	0.44	0.44



Sweet Potato, Ornamental: 'Kyuikukan 2' (left) with reference variety 'Sweet Caroline Purple' (right)



Sweet Potato, Ornamental: 'Kyuikukan 2' (left) with reference variety 'Sweet Caroline Purple' (right)



Sweet Potato, Ornamental: 'Kyuikukan 2' (left) with reference variety 'Sweet Caroline Purple' (right)

## APPLICATIONS UNDER EXAMINATION

Proposed denomination: 'Kyuikukan 3'
Trade name: Desana Lime
Application number: 07-5829
Application date: 2007/03/30

**Applicant:** Suntory Flowers Ltd. and National Agriculture and Food Research Organization, Tokyo, Japan

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

**Breeder:** Yasuhiro Takahata, Suntory Flowers Ltd., Miyazaki, Japan

Masaru Yoshinaga, Suntory Flowers Ltd., Miyazaki, Japan Hiroki Nakayama, Suntory Flowers Ltd., Miyazaki, Japan Masaru Tanaka, Suntory Flowers Ltd., Miyazaki, Japan Yoshinori Nakazawa, Suntory Flowers Ltd., Kumamoto, Japan

Toru Kumagai, Suntory Flowers Ltd., Ibaraki, Japan Yumi Kai, Suntory Flowers Ltd., Miyazaki, Japan Kenji Katayama, Suntory Flowers Ltd., Miyazaki, Japan Tetsufumi Sakai, Suntory Flowers Ltd., Miyazaki, Japan Kazunari Iwaki, Suntory Flowers Limited, Shiga, Japan Yasuyuki Murakami, Suntory Flowers Limited, Shiga, Japan

Varieties used for comparison: 'Sweet Caroline Sweetheart Light Green' and 'Seki Lim' (Sidekick Lime)

Summary: The plant growth habit of 'Kyuikukan 3' is spreading/trailing while it is upright bushy to spreading/trailing for 'Sweet Caroline Sweetheart Light Green' and compact bushy to spreading for 'Seki Lim'. 'Kyuikukan 3' has broader plants with longer internodes and broader leaf blades than both reference varieties. The leaf blades of 'Kyuikukan 3' are longer than those of 'Sweet Caroline Sweetheart Light Green'. The shape of the base of the leaf blade of 'Kyuikukan 3' is cordate or weakly hastate while it is cordate for 'Sweet Caroline Sweetheart Light Green' and cordate or weakly auriculate for 'Seki Lim'. The leaf blades of 'Kyuikukan 3' are lobed while those of 'Sweet Caroline Sweetheart Light Green' are not. The lower side of the midrib and petiole of 'Kyuikukan 3' have no anthocyanin colouration whereas those of 'Seki Lim' have strong anthocyanin.

# **Description:**

PLANT: vegetatively propagated, annual, spreading/trailing growth habit

STEM: light green, absent to weak anthocyanin colouration, sparse pubescence, medium thickness, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: cordate shape, acuminate apex, cordate or weakly hastate base, lobed, shallow to medium deep incisions between mostly pointed lobes, very fine inconspicuous hairs of moderate density on upper and lower sides, no variegation, upper side is light green (RHS 144B) changing to darker green (RHS145A) at maturity, lower side is brown green (RHS 146D) at maturity

MIDRIB: upper side has no anthocyanin colouration initially but develops colouration of moderate intensity at maturity, no anthocyanin colouration on lower side

PETIOLE: weak anthocyanin colouration on upper side, no anthocyanin colouration on lower side

Origin and Breeding: 'Kyuikukan 3' originated from a cross between the female parent variety 'Sweet Garden' and the male parent variety 'Sweet Line'. The cross was conducted in June 2001 at the Miyakonojo Upland Farming Research Station National Agricultural Reseach Center for Kyushu Okinawa Region in Miyakonojo-shi, Miyazaki, Japan. The resultant seedlings were grown in pots in a glasshouse and evaluated. One seedling was selected based on its leaf colour and growth habit, propagated by cutting and planted in pots to be trialed in Miyakonojo-shi in Miyazaki, Japan and at the Omi R&D Center of Suntory Flowers Ltd. located in Higashiomi-shi, Shiga-ken, Japan during 2002. The botanical characteristics of this seedling were examined and compared to similar varieties 'Sweet Caroline Light Green' and 'Sweet Caroline Bronze'. It was concluded that this Ipomoea plant named 'Kyuikukan 3' is distinguishable from any other varieties, and uniform and stable in its characteristics.

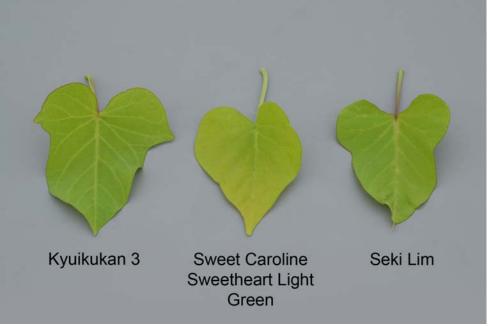
**Tests and Trials:** The trial of 'Kyuikukan 3' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on August 21, 2009. Most observations and measurements were taken from 10 plants or parts of plants of each variety on October 6, 2009. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Kyuikukan 3'

	'Kyuikukan 3'	'Sweet Caroline Sweetheart Light Green'*	'Seki Lim'*
Plant width (cm)			
mean	53.7	32.1	33.1
std. deviation	7.87	2.03	2.26
Internode length (cm)			
mean	3.2	1.1	1.3
std. deviation	0.99	0.29	0.34
Leaf blade length (cm)			
mean	9.6	7.5	8.8
std. deviation	0.75	0.71	0.77
Leaf blade width (cm)			
mean	8.9	7.0	6.9
std. deviation	0.68	0.51	0.30



Sweet Potato, Ornamental: 'Kyuikukan 3' (left) with reference varieties 'Sweet Caroline Sweetheart Light Green' (centre) and 'Seki Lim' (right)



Sweet Potato, Ornamental: 'Kyuikukan 3' (left) with reference varieties 'Sweet Caroline Sweetheart Light Green' (centre) and 'Seki Lim' (right)



Sweet Potato, Ornamental: 'Kyuikukan 3' (left) with reference varieties 'Sweet Caroline Sweetheart Light Green' (centre) and 'Seki Lim' (right)

## APPLICATIONS UNDER EXAMINATION

Proposed denomination: 'Kyuikukan 4'
Trade name: Desana Compact Red

**Application number:** 07-5830 **Application date:** 2007/03/30

Applicant: Suntory Flowers Ltd. and National Agriculture and Food Research Organization, Tokyo, Japan

Agent in Canada: BioFlora Inc., St. Thomas, Ontario

**Breeder:** Yasuhiro Takahata, Suntory Flowers Ltd., Miyazaki, Japan

Masaru Yoshinaga, Suntory Flowers Ltd., Miyazaki, Japan Hiroki Nakayama, Suntory Flowers Ltd., Miyazaki, Japan Masaru Tanaka, Suntory Flowers Ltd., Miyazaki, Japan Yoshinori Nakazawa, Suntory Flowers Ltd., Kumamoto, Japan

Toru Kumagai, Suntory Flowers Ltd., Ibaraki, Japan Yumi Kai, Suntory Flowers Ltd., Miyazaki, Japan Kenji Katayama, Suntory Flowers Ltd., Miyazaki, Japan Tetsufumi Sakai, Suntory Flowers Ltd., Miyazaki, Japan Kazunari Iwaki, Suntory Flowers Limited, Shiga, Japan Yasuyuki Murakami, Suntory Flowers Limited, Shiga, Japan

Varieties used for comparison: 'Sweet Caroline Bronze' and 'Sweet Caroline Light Green'

Summary: The plants of 'Kyuikukan 4' are broader than those of 'Sweet Caroline Bronze' and 'Sweet Caroline Light Green'. The stems of 'Kyuikukan 4' are dark purple with very strong anthocyanin colouration while those of 'Sweet Caroline Bronze' are reddish purple with strong anthocyanin and those of 'Sweet Caroline Light Green' are light green with absent or very weak anthocyanin. 'Kyuikukan 4' has longer internodes than both reference varieties. The upper side of the fully developed leaf blade of 'Kyuikukan 4' is brown green (RHS 137B-C) while it is dark purplish brown (more purple than RHS 200C) blended with dark brown (RHS 199B) and undertones of brown green (RHS 146C) for 'Sweet Caroline Bronze' and light green (RHS 144B) for 'Sweet Caroline Light Green'. The lower side of the fully developed leaf blade of 'Kyuikukan 4' is brown green (RHS 148C) while for 'Sweet Caroline Bronze' it is violet to dark violet (RHS N77B-C) and for 'Sweet Caroline Light Green' it is light green (darker than RHS 144D). Anthocyanin colouration of the upper side of the midrib is weak to medium for 'Kyuikukan 4' while it is strong for 'Sweet Caroline Bronze' and absent for 'Sweet Caroline Light Green'.

#### **Description:**

PLANT: vegetatively propagated, annual, spreading/trailing growth habit, strong degree of branching STEM: dark purple, very strong anthocyanin colouration, sparse pubescence, medium to thick, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: close to palmate shape, acuminate apex, ranging from cordate to truncate base, lobed, deep incisions between lobes, absent or very sparse pubescence on upper and lower sides, no variegation, upper side is brown green (RHS 137B-C) with greyed purple (more green than RHS N187A) margins changing to brown green (RHS 137B-C) at maturity, lower side is brown green (RHS 138B) with dark violet (RHS N77C) changing to brown green (RHS 148C) at maturity

MIDRIB: weak to medium anthocyanin colouration on upper and lower sides

PETIOLE: upper side has medium to strong dark brown (RHS N186C) anthocyanin colouration, lower side has medium intensity dark brown (close to RHS N186C) anthocyanin colouration

FLOWER: very sparse density

COROLLA: upper side is white (RHS NN155C) with violet (RHS N78A-B) in area of transition to corolla tube, lower side is white (RHS NN155C) with light blue violet (RHS 76A)

**Origin and Breeding:** 'Kyuikukan 4' originated from an open pollination of a proprietary Ipomoea batabas designated 'KOP98211-2' conducted in September 2000 at the Miyakonojo Upland Farming Research Station National Agricultural Research Center for Kyushu Okinawa Region in Miyakonojo-shi, Miyazaki, Japan. The resultant seedlings were grown in pots in a glasshouse and evaluated. One seedling was selected based on its leaf colour and flowering habit, propagated by cuttings and planted in pots to be trialed in Miyakonojo-shi, Miyazaki, Japan and at the Omi R&D Center of Suntory Flowers Ltd. located in Higashiomi-shi, Shiga-ken, Japan during 2002. The botanical characteristics of this seedling were examined and compared to similar varieties 'Sweet Caroline Bronze' and 'Sweet Caroline Light Green'. It was concluded that this Ipomoea plant named 'Kyuikukan 4' is distinguishable from any other varieties, and uniform and stable in its characteristics.

**Tests and Trials:** The trial of 'Kyuikukan 4' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on June 30, 2009. Observations and measurements were taken from 10 plants or parts of plants of each variety on August 6, 2009. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Kyuikukan 4'

•	'Kyuikukan 4'	'Sweet Caroline Bronze'*	'Sweet Caroline Light Green'*
Plant width (cm)			
mean	77.0	48.3	47.4
std. deviation	8.76	4.06	5.01
Internode length	(cm)		
mean	5.1	3.1	1.5
std. deviation	0.63	0.61	0.19
Colour of fully de	veloped leaf blade (RHS)		
upper side	137B-C	more purple than 200C blended with N199B and underlying tones of 146C	144B
lower side	148C	N77B-C	darker than 144D
*reference varieti	es		



Sweet Potato, Ornamental: 'Kyuikukan 4' (left) with reference varieties 'Sweet Caroline Bronze' (centre) and 'Sweet Caroline Light Green' (right)



Sweet Potato, Ornamental: 'Kyuikukan 4' (left) with reference varieties 'Sweet Caroline Bronze' (centre) and 'Sweet Caroline Light Green' (right)



Sweet Potato, Ornamental: 'Kyuikukan 4' (left) with reference varieties 'Sweet Caroline Bronze' (centre) and 'Sweet Caroline Light Green' (right)

## APPLICATIONS UNDER EXAMINATION

Proposed denomination: 'Kyuikukan 5'
Trade name: Desana Bronze
Application number: 08-6183
Application date: 2008/02/21

Applicant: Suntory Flowers Ltd. and National Agriculture and Food Research Organization, Tokyo, Japan

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

**Breeder:** Yasuhiro Takahata, Suntory Flowers Ltd., Miyazaki, Japan

Masaru Yoshinaga, Suntory Flowers Ltd., Miyazaki, Japan Hiroki Nakayama, Suntory Flowers Ltd., Miyazaki, Japan Masaru Tanaka, Suntory Flowers Ltd., Miyazaki, Japan Yoshinori Nakazawa, Suntory Flowers Ltd., Kumamoto, Japan

Toru Kumagai, Suntory Flowers Ltd., Ibaraki, Japan Yumi Kai, Suntory Flowers Ltd., Miyazaki, Japan Kenji Katayama, Suntory Flowers Ltd., Miyazaki, Japan Tetsufumi Sakai, Suntory Flowers Ltd., Miyazaki, Japan Kazunari Iwaki, Suntory Flowers Limited, Shiga, Japan Yasuyuki Murakami, Suntory Flowers Limited, Shiga, Japan

Varieties used for comparison: 'Sweet Caroline Sweetheart Purple' and 'Sweet Caroline Sweetheart Red'

**Summary:** The plants of 'Kyuikukan 5' are narrower with an upright bushy growth habit while those of 'Sweet Caroline Sweetheart Purple' have an upright bushy to spreading/trailing growth habit. The stems of 'Kyuikukan 5' have denser pubescence and longer internodes than those of the reference varieties. 'Kyuikukan 5' has thicker stems and broader leaf blades than the reference varieties. The upper side of the fully developed leaf blade of 'Kyuikukan 5' is greyed purple black (RHS N186A) while it is dark brown (more red than RHS 200B-C) for 'Sweet Caroline Sweetheart Red'. The lower side of the fully developed leaf blade of 'Kyuikukan 5' is brown purple (RHS N77A) whereas for 'Sweet Caroline Sweetheart Red' it is dark violet (RHS N79B). Anthocyanin colouration of the upper side of the petiole is strong dark purple red (RHS 187B) for 'Kyuikukan 5' while it is medium blue pink (RHS 186C) for 'Sweet Caroline Sweetheart Red'.

# **Description:**

PLANT: vegetatively propagated, annual, upright bushy growth habit

STEM: dark purple, very strong anthocyanin colouration, moderate pubescence, medium to thick, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: cordate shape, acuminate apex with rounded tip, cordate base, entire margin, sparse pubescence on upper side, absent or very sparse pubescence on lower side, no variegation, upper side is brown green (RHS 146A) with purple tones changing to greyed purple black (RHS N186A) at maturity, lower side is brown green (RHS 146B) changing to brown purple (RHS N77A) at maturity

PETIOLE: upper and lower sides have strong dark purple red (RHS 187B) anthocyanin colouration

Origin and Breeding: 'Kyuikukan 5' originated from a cross between the female parent designated 'KOP99205-1' and the male parent made up of a mix of pollen from proprietary selections of Ipomoea batatas identified as '99US-OR', 'KOP99210-1', 'Kyuikukan 1 gou', 'KOP99211-3', 'KOP99211-4' and 'KOP97286-5'. The cross was conducted in June 2001 at the Miyakonojo Upland Farming Research Station National Agricultural Reseach Center for Kyushu Okinawa Region in Miyakonojo-shi, Miyazaki, Japan. The resultant seedlings were grown in pots in a glasshouse and evaluated. One seedling was selected based on its leaf colour and growth habit, propagated by cutting and planted in pots to be trialed in Miyakonojo-shi in Miyazaki, Japan and at the Omi R&D Center of Suntory Flowers Ltd. located in Higashiomi-shi, Shigaken, Japan from 2002 to September 2007. The botanical characteristics of this seedling were examined and compared to similar varieties 'Sweet Caroline Purple' and 'Sweet Caroline Bronze'. It was concluded that this Ipomoea plant named 'Kyuikukan 5' is distinguishable from any other varieties, and uniform and stable in its characteristics.

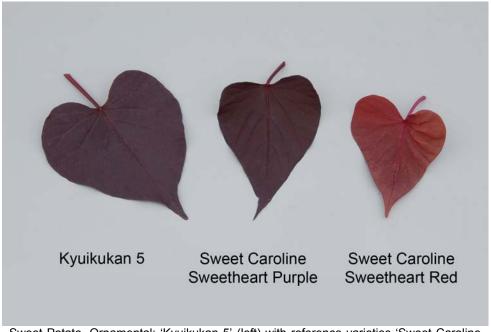
**Tests and Trials:** The trial of 'Kyuikukan 5' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on June 30, 2009. Most observations and measurements were taken from 10 plants or parts of plants of each variety on August 6, 2009. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Kyuikukan 5'

-	'Kyuikukan 5'	'Sweet Caroline Sweetheart	'Sweet Caroline
	<u>-</u>	Purple'*	Sweetheart Red'*
Plant width (cm)			
mean	52.5	78.1	50.9
std. deviation	4.37	4.65	9.52
Internode length (cm)			
mean	2.9	1.9	1.6
std. deviation	0.24	0.18	0.23
Leaf blade width (cm)			
mean	12.0	8.6	10.3
std. deviation	0.49	0.36	0.73
Colour of fully developed leaf b	lade (RHS)		
upper side	N186Á	N186A	more red than 200B-C
lower side	N77A	N77A	lighter than N79B
upper and lower sides of	187B	187B	186C
petiole	107 D	107 10	1000



Sweet Potato, Ornamental: 'Kyuikukan 5' (left) with reference varieties 'Sweet Caroline Sweetheart Purple' (centre) and 'Sweet Caroline Sweetheart Red' (right)



Sweet Potato, Ornamental: 'Kyuikukan 5' (left) with reference varieties 'Sweet Caroline Sweetheart Purple' (centre) and 'Sweet Caroline Sweetheart Red' (right)



Sweet Potato, Ornamental: 'Kyuikukan 5' (left) with reference varieties 'Sweet Caroline Sweetheart Purple' (centre) and 'Sweet Caroline Sweetheart Red' (right)

Proposed denomination: 'Seki Blahrt'
Trade name: Sidekick Black Heart

**Application number:** 07-6089 **Application date:** 2007/12/24

**Applicant:** Goldsmith Seeds, Inc., Gilroy, California, United States of America

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

Breeder: Jason Jandrew, Goldsmith Seed Inc., Mountain View, California, United States of America

Variety used for comparison: 'Sweet Caroline Sweetheart Purple'

**Summary:** The plants of 'Seki Blahrt' are shorter with shorter leaf blades than those of 'Sweet Caroline Sweetheart Purple'. The acuminate apex of the leaf blades of 'Seki Blahrt' are blunt tipped while those of 'Sweet Caroline Sweetheart Purple' are pointed. The base of the leaf blades of 'Seki Blahrt' range from closed to open whereas those of 'Sweet Caroline Sweetheart Purple' range from open to wide open. The upper side of a fully developed leaf blade of 'Seki Blahrt' is greyed purple black (closest to RHS N186A) while it is greyed purple black (RHS N186A) with dark greenish brown (RHS 200A) tones for 'Sweet Caroline Sweetheart Purple'.

# **Description:**

PLANT: vegetatively propagated, annual, bushy to spreading/trailing growth habit, weak degree of branching STEM: purple, strong anthocyanin colouration, very sparse pubescence, medium thickness, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: cordate shape, acuminate apex with blunt tip, cordate base, base ranges from closed to open, entire margin, sparse pubescence on edge of upper and lower sides only, no variegation, upper side is greyed purple black (closest to RHS N186A) at maturity, lower side is dark violet (more purple than N92A) at maturity

PETIOLE: strong brown purple (RHS N77A) anthocyanin colouration

**Origin and Breeding:** 'Seki Blahrt' was developed by the breeder, Jason Jandrew, an employee of Goldsmith Seeds, Inc., in Gilroy, California, U.S.A. as part of a planned breeding program. It originated from a hybrid cross conducted in October 2006 between the female parent variety 'Sweet Caroline Purple' and the male parent variety 'Sweet Caroline Sweetheart Purple'. The resultant seed was sown in a greenhouse in December 2006. In March 2007, a single plant from the progeny was selected by the breeder based on its foliage quality, foliage colour and plant growth habit.

**Tests and Trials:** The trial of 'Seki Blahrt' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on May 28, 2009. Most observations and measurements were taken from 10 plants or parts of plants of each variety on July 3, 2009. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Seki Blahrt'

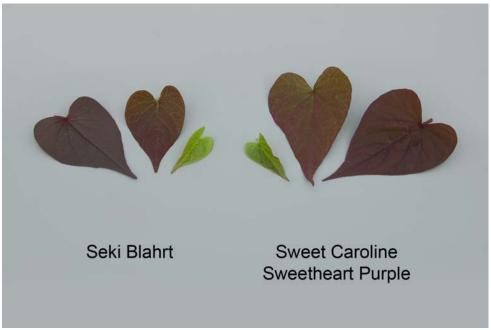
	'Seki Blahrt'	'Sweet Caroline Sweetheart Purple'*
Plant height (cm)		
mean	16.6	21.9
std. deviation	1.89	2.34
Leaf blade length (cm)		
mean	9.4	10.8
std. deviation	0.37	0.77
Colour of fully develop	ed leaf blade (RHS)	
upper side	closest to N186A	N186A with greener than 200A tones



Sweet Potato, Ornamental: 'Seki Blahrt' (left) with reference variety 'Sweet Caroline Sweetheart Purple' (right)



Sweet Potato, Ornamental: 'Seki Blahrt' (left) with reference variety 'Sweet Caroline Sweetheart Purple' (right)



Sweet Potato, Ornamental: 'Seki Blahrt' (left) with reference variety 'Sweet Caroline

Sweetheart Purple' (right)

Proposed denomination: 'Seki Blapalm'

Previously proposed

denomination 'Seki Blak'
Trade name: Sidekick Black
Application number: 07-6088
Application date: 2007/12/24

**Applicant:** Goldsmith Seeds, Inc., Gilroy, California, United States of America

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

Breeder: Jason Jandrew, Goldsmith Seed Inc., Mountain View, California, United States of America

Variety used for comparison: 'Sweet Caroline Purple'

**Summary:** The upper side of the fully developed leaf blade of 'Seki Blapalm' is greyed purple black (RHS N186A) while for 'Sweet Caroline Purple' it is similar in colour but more green. 'Seki Blapalm' has longer petioles and smaller flowers than 'Sweet Caroline Purple'.

## **Description:**

PLANT: vegetatively propagated, annual, upright-bushy to spreading growth habit, moderate degree of branching STEM: purple, strong anthocyanin colouration, very sparse pubescence, thin, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: palmate shape, acuminate apex, cordate base, lobed, deep incisions between lobes, upper and lower sides have sparse pubescence on edge only, no variegation, upper side is dark green (RHS 144A) changing to greyed purple black (RHS N186A) at maturity, lower side is brown green (closest to RHS 147C) and developing purple tones while changing to dark violet (N79A) at maturity

MIDRIB: upper side is dark violet (RHS N79A), lower side is dark violet (RHS N79B)

PETIOLE: upper side has strong brown purple (RHS N77A) anthocyanin colouration, lower side has strong dark violet (RHS N79B) anthocyanin colouration

FLOWER: sparse density

COROLLA: upper side is white to light blue violet (RHS 69D) with blue pink (RHS N74D) margin and violet (RHS N80A) at area of transition to corolla tube, lower side is light blue violet (RHS 76C)

**Origin and Breeding:** 'Seki Blapalm' was developed by the breeder, Jason Jandrew, an employee of Goldsmith Seeds, Inc., in Gilroy, California, U.S.A. as part of a planned breeding program. It originated from an open-pollinated cross conducted in July 2006 between the female parent variety 'Sweet Caroline Purple' and an unknown male parent. The resultant seed was sown in a greenhouse in December 2006. In March 2007, a single plant from the progeny was selected by the breeder based on its foliage quality, foliage colour and plant growth habit.

**Tests and Trials:** The trial of 'Seki Blapalm' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on May 28, 2009. Most observations and measurements were taken from 10 plants or parts of plants of each variety on July 3, 2009. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Seki Blapalm'

	'Seki Blapalm'	'Sweet Caroline Purple'*
Colour of fully devel	oped leaf blade (RHS)	
upper side lower side	closest to N186A with mottled green intermediate leaves N79A	more green than N186A N79A
Petiole length (cm)		
mean	10.6	6.9
std. deviation	1.95	1.99
Flower length (mm)		
mean	33.8	40.0
std. deviation	4.73	2.21
Flower width (mm)		
mean	35.5	45.2
std. deviation	5.54	4.02



Sweet Potato, Ornamental: 'Seki Blapalm' (left) with reference variety 'Sweet Caroline Purple' (right)



Sweet Potato, Ornamental: 'Seki Blapalm' (left) with reference variety 'Sweet Caroline Purple' (right)



Sweet Potato, Ornamental: 'Seki Blapalm' (left) with reference variety 'Sweet Caroline Purple' (right)

Proposed denomination: 'Seki Lim'
Trade name: Sidekick Lime
Application number: 07-6090
Application date: 2007/12/24

**Applicant:** Goldsmith Seeds, Inc., Gilroy, California, United States of America

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

Breeder: Jason Jandrew, Goldsmith Seed Inc., Mountain View, California, United States of America

Variety used for comparison: 'Sweet Caroline Sweetheart Light Green'

Summary: The leaf blade of 'Seki Lim' is lobed with shallow to medium deep sinuses between the lobes whereas that of 'Sweet Caroline Sweetheart Light Green' is entire. The upper side of the fully developed leaf blade of 'Seki Lim' is light green (closest to RHS 144B) with lighter yellow green (RHS N144A) tones while it is light yellow green (RHS N144A) with darker green (RHS 144B) tones for 'Sweet Caroline Sweetheart Light Green'. The lower side of a fully developed leaf blade of 'Seki Lim' is darker green than that of 'Sweet Caroline Sweetheart Light Green'. The midrib and petiole of 'Seki Lim' have anthocyanin colouration ranging from weak to strong whereas those of 'Sweet Caroline Sweetheart Light Green' have no anthocyanin colouration.

# **Description:**

PLANT: vegetatively propagated, annual, compact bushy to spreading growth habit, weak degree of branching STEM: light green, weak to moderate anthocyanin colouration, sparse pubescence, thin to medium thickness, smooth

LEAF: alternate arrangement along stem, simple

LEAF BLADE: cordate shape, acuminate apex, cordate or weakly auriculate base, lobed, shallow to medium deep sinuses between lobes, very fine inconspicuous pubescence of moderate density on upper and lower sides, no variegation, upper side is light green (closest to RHS 144B) with light yellow green (RHS N144A) tones at maturity, lower side is light green (RHS 145A-B) at maturity

MIDRIB (basal part): weak to moderate anthocyanin colouration on upper side, moderate to strong anthocyanin colouration on lower side

PETIOLE: moderate anthocyanin colouration on upper side

**Origin and Breeding:** 'Seki Lim' was developed by the breeder, Jason Jandrew, an employee of Goldsmith Seeds, Inc., in Gilroy, California, U.S.A. as part of a planned breeding program. It originated from a hybrid cross conducted in October 2006 between the female parent variety 'Sweet Caroline Light Green' and the male parent variety 'Margarita'. The resultant seed was sown in a greenhouse in December 2006. In March 2007, a single plant from the progeny was selected by the breeder based on its foliage quality, foliage colour and plant growth habit.

**Tests and Trials:** The trial of 'Seki Lim' was conducted in a polyhouse during the summer of 2009 at BioFlora Inc. in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on May 28, 2009. Most observations and measurements were taken from 10 plants or parts of plants of each variety on July 3, 2009. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison	table for	'Seki Lim'
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	'Seki Lim'	'Sweet Caroline Sweetheart Light Green'*
Colour of fully de	veloped leaf blade (RHS)	
upper side	closest to 144B with N144A tones	N144A with 144B tones
upper side		



Sweet Potato, Ornamental: 'Seki Lim' (left) with reference variety 'Sweet Caroline Sweetheart Light Green' (right)



Sweet Potato, Ornamental: 'Seki Lim' (left) with reference variety 'Sweet Caroline Sweetheart Light Green' (right)



Sweet Potato, Ornamental: 'Seki Lim' (left) with reference variety 'Sweet Caroline Sweetheart Light Green' (right)