



APPLICATIONS UNDER EXAMINATION

SWEET POTATO, ORNAMENTAL

SWEET POTATO, ORNAMENTAL
(Ipomoea batatas)

Proposed denomination: 'Iposgbro'
Application number: 10-6957
Application date: 2010/05/03
Applicant: Floranova Service Corp., Lompoc, California, United States of America
Agent in Canada: Variety Rights Management, Oxford Station, Ontario
Breeder: Paul Talmadge, Floranova Service Corp., Lompoc, California, United States of America

Variety used for comparison: 'Sweet Caroline Bronze'

Summary: *The plants of 'Iposgbro' have a compact bushy-rounded growth habit while the plants of 'Sweet Caroline Bronze' have a mounded-spreading growth habit. The plants of 'Iposgbro' are narrower than the plants of 'Sweet Caroline Bronze'. The leaf blade of 'Iposgbro' has mainly three lobes while the leaf blade of 'Sweet Caroline Bronze' has mainly five lobes. The upper side of the leaf blade is dark brown and brown for 'Iposgbro' while the leaf blade of 'Sweet Caroline Bronze' is dark brown and brown purple.*

Description:

PLANT: compact bushy-rounded growth habit, medium to dense branching

STEM: purple, strong anthocyanin colouration, absent or very weak glaucosity, absent or very sparse pubescence, medium thickness, smooth shape

LEAF: alternate arrangement, simple, ovate to palmate shape, acute apex, acute base, lobed margin, absent or very sparse pubescence on upper and lower side, absent or very weak glaucosity on upper side, dark brown (RHS 200C) and brown (RHS 200D) on upper surface, brown purple (RHS 184B-C) on lower surface, no variegation

PETIOLE: strong to very strong anthocyanin colouration.

Origin and Breeding: The variety 'Iposgbro' originated from a cross made in Lompoc, California, USA in 2006. The cross was between the varieties 'Sweet Caroline Sweetheart Light Green' and 'Sweet Caroline Purple'. The F1 population was viewed in the spring of 2007 and mass pollinated in the fall of 2007 to produce the F2 population. The variety 'Iposgbro' was selected from this population in April 2008 and underwent further vegetative trials throughout the summer of 2008. The initial selection criteria and objectives of the breeding program were to improve the light green and red colouration in the palmate leaf forms. Plant habit and branching ability were also used as selection criteria.

Tests and Trials: Trials for 'Iposgbro' were conducted during the summer of 2010 in Oxford Station, Ontario. Twenty plants of each variety were grown in 15 cm pots in a polyhouse. Plants were spaced approximately 40 cm apart. Observations and measurements were taken on 10 plants of each variety. Colours were determined using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Iposgbro'

	'Iposgbro'	'Sweet Caroline Bronze'*
<i>Plant width (cm)</i>		
mean	19.43	34.71
std. deviation	1.99	3.15
<i>Colour of leaf blade (RHS)</i>		
upper side	200C and 200D	200B and N199B-178B

*reference variety



Sweet Potato, Ornamental: 'Iposgbro' (left) with reference variety 'Sweet Caroline Bronze' (right)



Sweet Potato, Ornamental: 'Iposgbro' (left) with reference variety 'Sweet Caroline Bronze' (right)

Proposed denomination: 'Iposgdeepur'
Application number: 10-6958
Application date: 2010/05/03
Applicant: Floranova Service Corp., Lompoc, California, United States of America
Agent in Canada: Variety Rights Management, Oxford Station, Ontario
Breeder: Paul Talmadge, Floranova Service Corp., Lompoc, California, United States of America

Variety used for comparison: 'Sweet Caroline Purple'

Summary: *The plants of 'Iposgdeepur' have a compact bushy-rounded growth habit while the plants of 'Sweet Caroline Purple' have a mounded-spreading growth habit. The leaf blade of 'Iposgdeepur' is smaller than the leaf blade of 'Sweet Caroline Purple'.*

Description:

PLANT: compact bushy-rounded growth habit, medium to dense branching

STEM: purple, very strong anthocyanin colouration, absent or very weak glaucosity, absent or very sparse pubescence, medium thickness, smooth shape

LEAF: alternate arrangement, simple, palmately lobed, acute apex, acute base, lobed margin, absent or very sparse pubescence on upper and lower side, absent or very weak glaucosity on upper side, dark brown (RHS 200A - N186C) on upper surface, dark brown (RHS N186C) on lower surface, no variegation

PETIOLE: strong to very strong anthocyanin colouration.

Origin and Breeding: The variety 'Iposgdeepur' originated from a cross made in Lompoc, California, USA in 2006. The cross was between the varieties 'Sweet Caroline Purple' and 'Sweet Caroline Sweetheart Light Green'. The F1 population was viewed in the spring of 2007 and mass pollinated in the fall of 2007 to produce the F2 population. The variety 'Iposgdeepur' was selected from this population in April 2008 and underwent further vegetative trials throughout the summer of 2008. The initial selection criteria and objectives of the breeding program were to transfer the growth habit in the male parent to other leaf colours and shapes. Plant habit and branching ability were also used as selection criteria.

Tests and Trials: Trials for 'Iposgdeepur' were conducted during the summer of 2010 in Oxford Station, Ontario. Twenty plants of each variety were grown in 15 cm pots in a polyhouse. Plants were spaced approximately 40 cm apart. Observations and measurements were taken on 10 plants of each variety. Colours were determined using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Iposgdeepur'

	'Iposgdeepur'	'Sweet Caroline Purple'*
<i>Plant width (cm)</i>		
mean	22.38	29.29
std. deviation	2.39	2.29
<i>Leaf blade length (cm)</i>		
mean	7.25	9.01
std. deviation	0.52	0.90
<i>Leaf blade width (cm)</i>		
mean	6.79	9.24
std. deviation	0.57	1.03

*reference variety



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

Proposed denomination:	'Iposghlgre'
Application number:	10-6959
Application date:	2010/05/03
Applicant:	Floranova Service Corp., Lompoc, California, United States of America
Agent in Canada:	Variety Rights Management, Oxford Station, Ontario
Breeder:	Paul Talmadge, Floranova Service Corp., Lompoc, California, United States of America

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

Summary: *The plants of 'Iposghlgre' have a bushy-rounded growth habit while the plants of 'Sweet Caroline Sweetheart Light Green' have a mounded-spreading growth habit. The stems of 'Iposghlgre' are light green and purple while the stems of 'Sweet Caroline Sweetheart Light Green' are light green. The leaf blade of 'Iposghlgre' is light green with a purplish tinge on some leaves while the leaf blade of 'Sweet Caroline Sweetheart Light Green' is light green. The petiole of 'Iposghlgre' has weak anthocyanin colouration while the petiole of 'Sweet Caroline Sweetheart Light Green' has absent or very weak anthocyanin.*

Description:

PLANT: bushy-rounded growth habit, medium degree of branching

STEM: light green and purple, weak anthocyanin colouration, absent or very weak glaucosity, absent or very sparse pubescence, medium to thick, smooth shape

LEAF: alternate arrangement, simple, cordate shape, acute to acuminate apex, cordate base, entire margin, absent or very sparse pubescence on upper and lower side, absent or very weak glaucosity on upper side, light green (RHS N144A-B) with a slight purplish tinge on upper side of some leaves, green brown (RHS 151A) on lower side, no variegation

PETIOLE: weak anthocyanin colouration.

Origin and Breeding: The variety 'Iposghlgre' originated from a cross made in Lompoc, California, USA in 2006. The cross was between the varieties 'Sweet Caroline Purple' and 'Sweet Caroline Sweetheart Light Green'. The F1 population was viewed in the spring of 2007 and mass pollinated in the fall of 2007 to produce the F2 population. The variety 'Iposghlgre' was selected from this population in April 2008 and underwent further vegetative trials throughout the summer

of 2008. The initial selection criteria and objectives of the breeding program were to transfer the growth habit in the male parent to other leaf colours and shapes. Plant habit and branching ability were also used as selection criteria.

Tests and Trials: Trials for 'Iposghlgre' were conducted during the summer of 2010 in Oxford Station, Ontario. Eleven plants of the candidate variety and fifteen plants of the reference variety were grown in 15 cm pots in a polyhouse. Plants were spaced approximately 40 cm apart. Observations and measurements were taken on 10 plants of each variety. Colours were determined using the 2001 Royal Horticultural Society (RHS) Colour Chart.



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

Proposed denomination: 'Iposghpur'
Application number: 10-6955
Application date: 2010/05/03
Applicant: Floranova Service Corp., Lompoc, California, United States of America
Agent in Canada: Variety Rights Management, Oxford Station, Ontario
Breeder: Paul Talmadge, Floranova Service Corp., Lompoc, California, United States of America

Variety used for comparison: 'Sweet Caroline Sweetheart Purple'

Summary: *The plants of 'Iposghpur' have a bushy-rounded growth habit while the plants of 'Sweet Caroline Sweetheart Purple' have a mounded-spreading growth habit. The plants of 'Iposghpur' are narrower than the plants of 'Sweet Caroline Sweetheart Purple'. The leaf blade and petiole of 'Iposghpur' are shorter than the leaf blade and petiole of 'Sweet Caroline Sweetheart Purple'.*

Description:

PLANT: bushy-rounded growth habit, medium degree of branching

STEM: purple, very strong anthocyanin colouration, absent or very weak glaucosity, absent or very sparse pubescence, medium thickness, smooth shape

LEAF: alternate arrangement, simple, cordate shape, acute to acuminate apex, cordate base, entire margin, absent or very sparse pubescence on upper and lower side, absent or very weak glaucosity on upper side, black (RHS N186A-B) on upper surface, brown purple (RHS 187A) on lower surface, no variegation

PETIOLE: very strong anthocyanin colouration.

Origin and Breeding: The variety ‘Iposghpur’ originated from a cross made in Lompoc, California, USA in 2006. The cross was between the varieties ‘Sweet Caroline Purple’ and ‘Sweet Caroline Sweetheart Light Green’. The F1 population was viewed in the spring of 2007 and mass pollinated in the fall of 2007 to produce the F2 population. The variety ‘Iposghpur’ was selected from this population in April 2008 and underwent further vegetative trials throughout the summer of 2008. The initial selection criteria and objectives of the breeding program were to transfer the plant habit of the male parent to other leaf colours and shapes. Plant habit and branching ability were also used as selection criteria.

Tests and Trials: Trials for ‘Iposghpur’ were conducted during the summer of 2010 in Oxford Station, Ontario. Twenty plants of each variety were grown in 15 cm pots in a polyhouse. Plants were spaced approximately 40 cm apart. Observations and measurements were taken on 10 plants of each variety. Colours were determined using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for ‘Iposghpur’

	‘Iposghpur’	‘Sweet Caroline Sweetheart Purple’*
<i>Plant width (cm)</i>		
mean	28.33	41.17
std. deviation	1.97	3.50
<i>Leaf blade length (cm)</i>		
mean	7.00	9.13
std. deviation	0.65	0.44
<i>Petiole length (cm)</i>		
mean	4.13	8.86
std. deviation	0.44	0.75
<i>Colour of leaf blade (RHS)</i>		
upper surface	N186A-B	N200A-200A

*reference variety



Sweet Potato, Ornamental: ‘Iposghpur’ (left) with reference variety ‘Sweet Caroline Sweetheart Purple’ (right)

Proposed denomination: 'Iposghred'
Application number: 10-6956
Application date: 2010/05/03
Applicant: Floranova Service Corp., Lompoc, California, United States of America
Agent in Canada: Variety Rights Management, Oxford Station, Ontario
Breeder: Paul Talmadge, Floranova Service Corp., Lompoc, California, United States of America

Variety used for comparison: 'Sweet Caroline Sweetheart Red'

Summary: *The plants of 'Iposghred' have a bushy-rounded growth habit while the plants of 'Sweet Caroline Sweetheart Red' have a mounded-spreading growth habit. The plants of 'Iposghred' are narrower than the plants of 'Sweet Caroline Sweetheart Red'. The plants of 'Iposghred' have dense branching while the plants of 'Sweet Caroline Sweetheart Red' have sparse branching. The leaf blades of 'Iposghred' have no lobing while the leaf blades of 'Sweet Caroline Sweetheart Red' have weak lobing. The petiole of 'Iposghred' is longer than the petiole of 'Sweet Caroline Sweetheart Red'.*

Description:

PLANT: bushy-rounded growth habit, dense branching

STEM: red-brown to purple, very strong anthocyanin colouration, absent or very weak glaucosity, absent or very sparse pubescence, medium to thick, smooth shape

LEAF: alternate arrangement, simple, cordate shape, acute to acuminate apex, cordate base, entire margin, absent or very sparse pubescence on upper and lower side, absent or very weak glaucosity on upper side, dark brown (RHS N186C) to brown purple (RHS 187A) on upper surface, brown purple (RHS 184A) on lower surface, no variegation

PETIOLE: very strong anthocyanin colouration.

Origin and Breeding: The variety 'Iposghred' originated from a cross made in Lompoc, California, USA in 2006. The cross was between the varieties 'Sweet Caroline Purple' and 'Sweet Caroline Red'. The F1 population was viewed in the spring of 2007 and mass pollinated in the fall of 2007 to produce the F2 population. The variety 'Iposghred' was selected from this population in April 2008 and underwent further vegetative trials throughout the summer of 2008. The initial selection criteria and objectives of the breeding program were to improve the horticultural performance of the red foliage types. Plant habit and branching ability were also used as selection criteria.

Tests and Trials: Trials for 'Iposghred' were conducted during the summer of 2010 in Oxford Station, Ontario. Twenty plants of each variety were grown in 15 cm pots in a polyhouse. Plants were spaced approximately 40 cm apart. Observations and measurements were taken on 10 plants of each variety. Colours were determined using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Iposghred'

	'Iposghred'	'Sweet Caroline Sweetheart Red'*
<i>Plant width (cm)</i>		
mean	22.83	31.50
std. deviation	2.40	2.87
<i>Petiole length (cm)</i>		
mean	6.86	4.50
std. deviation	0.48	0.79
<i>Colour of leaf blade (RHS)</i>		
upper side	N186C - 187A	187A-B

*reference variety



Sweet Potato, Ornamental: 'Iposghred' (left) with reference variety 'Sweet Caroline Sweetheart Red' (right)

Proposed denomination:	'NCORNSP-011MNLC'
Trade name:	Illusion Midnight
Application number:	09-6755
Application date:	2009/10/26
Applicant:	North Carolina State University, Raleigh, North Carolina, United States of America
Agent in Canada:	BioFlora Inc., St. Thomas, Ontario
Breeder:	Kenneth Pecota, North Carolina State University, Raleigh, North Carolina, United States of America G. Craig Yencho, North Carolina State University, Raleigh, North Carolina, United States of America

Varieties used for comparison: 'Sweet Caroline Purple' and 'Seki Blapalm' (Chillin Blackberry Star)

Summary: *The plants of 'NCORNSP-011MNLC' are wider than the plants of 'Seki Blapalm'. The leaf blade of 'NCORNSP-011MNLC' is wider than the leaf blades of the reference varieties. The terminal leaf lobe is longer for 'NCORNSP-011MNLC' than for the reference varieties. The leaf blade of 'NCORNSP-011MNLC' has very deep lobes while the leaf blades of the reference varieties have deep lobes.*

Description:

PLANT: upright bushy growth habit becoming trailing with age, medium degree of branching, medium to dense foliage

STEM: young shoots medium green, mature stems with strong red-purple anthocyanin, very sparse to sparse pubescence, medium to thick, smooth shape

LEAF: alternate arrangement, simple, palmately lobed, acuminate apex, cordate base, lobes very deep, absent or very sparse pubescence on upper and lower side, no variegation, upper side greenish black (greener than RHS N186A), lower side purple black (closest to RHS N187A), mid-vein dark violet (RHS N79A-B)

PETIOLE: strong anthocyanin colouration.

Origin and Breeding: The variety ‘NCORNSP-011MNLC’ originated from an open pollinated cross made at North Carolina State University, Raleigh, North Carolina, USA. The female parent was a breeding clone designated ‘NC1650-009N’ and the male parent was unknown. The resultant seed was harvested between September 2003 and April 2004 and sown in a greenhouse during the last week of January 2005. The first cycle of selection was conducted on this seedling population for visual characteristics 4-6 weeks after germination. The selections were transferred to pots in a greenhouse to serve as virus-free source plants for future plantings. Two to three node cuttings of each source plant were taken in late April 2005 and transferred to rooting flats. These cuttings were planted in field trials during June and July of 2005 at the Horticultural Crops Research Station in Clinton, North Carolina. The new variety, ‘NCORNSP-011MNLC’ was selected as a single plant on September 1, 2005, based on a combination of characteristics including plant growth habit and vigour, and foliage colour and shape.

Tests and Trials: The trial of ‘NCORNSP-011MNLC’ was conducted in a polyhouse during the spring of 2010 in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on April 30, 2010. Observations and measurements were taken from 10 plants or parts of plants of each variety on June 3, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

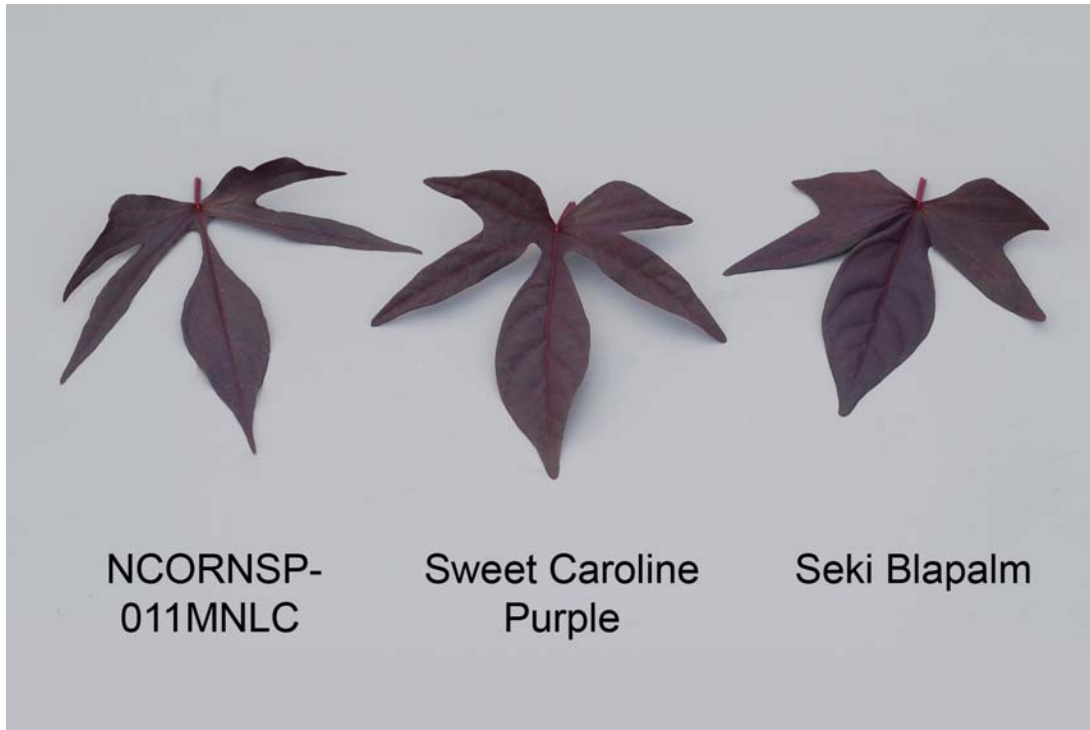
Comparison table for ‘NCORNSP-011MNLC’

	‘NCORNSP-011MNLC’	‘Sweet Caroline Purple’*	‘Seki Blapalm’*
<i>Plant width (cm)</i>			
mean	43.3	40.7	33.9
std. deviation	2.50	3.67	2.87
<i>Leaf blade width (cm)</i>			
mean	16.8	10.8	10.5
std. deviation	1.47	1.20	1.03
<i>Length of terminal leaf lobe (cm)</i>			
mean	11.8	9.1	7.9
std. deviation	0.81	0.75	1.10

*reference varieties



Sweet Potato, Ornamental: ‘NCORNSP-011MNLC’ (left) with reference varieties ‘Sweet Caroline Purple’ (centre) and ‘Seki Blapalm’ (right)



Sweet Potato, Ornamental: 'NCORNSP-011MNLC' (left) with reference varieties 'Sweet Caroline Purple' (centre) and 'Seki Blapalm' (right)

Proposed denomination:	'NCORNSP-012EMLC'
Trade name:	Illusion Emerald Lace
Application number:	09-6756
Application date:	2009/10/26
Applicant:	North Carolina State University, Raleigh, North Carolina, United States of America
Agent in Canada:	BioFlora Inc., St. Thomas, Ontario
Breeder:	Kenneth Pecota, North Carolina State University, Raleigh, North Carolina, United States of America G. Craig Yencho, North Carolina State University, Raleigh, North Carolina, United States of America

Variety used for comparison: 'Sweet Caroline Light Green'

Summary: *The leaf blade of 'NCORNSP-012EMLC' is wider than the leaf blade of 'Sweet Caroline Light Green'. The terminal leaf lobe is narrower for 'NCORNSP-012EMLC' than for 'Sweet Caroline Light Green'. The leaf of 'NCORNSP-012EMLC' is palmately lobed while the leaf of 'Sweet Caroline Light Green' is tri-lobed. The leaf of 'NCORNSP-012EMLC' has very deep lobes while the leaf of 'Sweet Caroline Light Green' has shallow to medium lobes. The lower side of the leaf blade of 'NCORNSP-012EMLC' has no anthocyanin colouration on the midrib while the lower side of the leaf blade of 'Sweet Caroline Light Green' has strong anthocyanin on the lower part of the midrib.*

Description:

PLANT: upright bushy growth habit becoming trailing with age, medium to many branches, dense foliage
STEM: light green, no anthocyanin colouration, sparse to medium pubescence, medium thickness, smooth shape

LEAF: opposite arrangement, simple, palmately lobed, acuminate apex, cordate base, lobes very deep, pubescence on upper side ranging from absent or very sparse to sparse, pubescence on lower side absent to sparse, no variegation, upper side light green (RHS 144B), lower side light green (RHS 145B-C)

PETIOLE: strong anthocyanin colouration where petiole meets base of leaf blade.

Origin and Breeding: The variety ‘NCORNSP-012EMLC’ originated from a conventional cross made at North Carolina State University, Raleigh, North Carolina, USA between October 2004 and April 2005. The female parent was a proprietary cultivar designated NC2591-002ORN and the male parent was a proprietary cultivar designated NC2279-001ORN. The resultant seed was harvested and planted in greenhouse trials in the last week of January 2005. The first cycle of selection was conducted on this seedling population for visual characteristics 4-6 weeks after germination. The selections were transferred to pots in a greenhouse to serve as virus-free source plants for future plantings. Two to three node cuttings of each source plant were taken in late April 2005 and transferred to rooting flats. These cuttings were planted in field trials during June and July of 2005 at the Horticultural Crops Research Station in Clinton, North Carolina. The new variety, ‘NCORNSP-012EMLC’ was selected as a single plant on September 1, 2005, based on a combination of characteristics including plant growth habit and vigour, and foliage colour, shape and orientation.

Tests and Trials: The trial of ‘NCORNSP-012EMLC’ was conducted in a polyhouse during the spring of 2010 in St. Thomas, Ontario. It included 15 plants of each variety. All plants were grown from rooted cuttings transplanted into 15 cm pots on April 30, 2010. Observations and measurements were taken from 10 plants or parts of plants of each variety on June 3, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

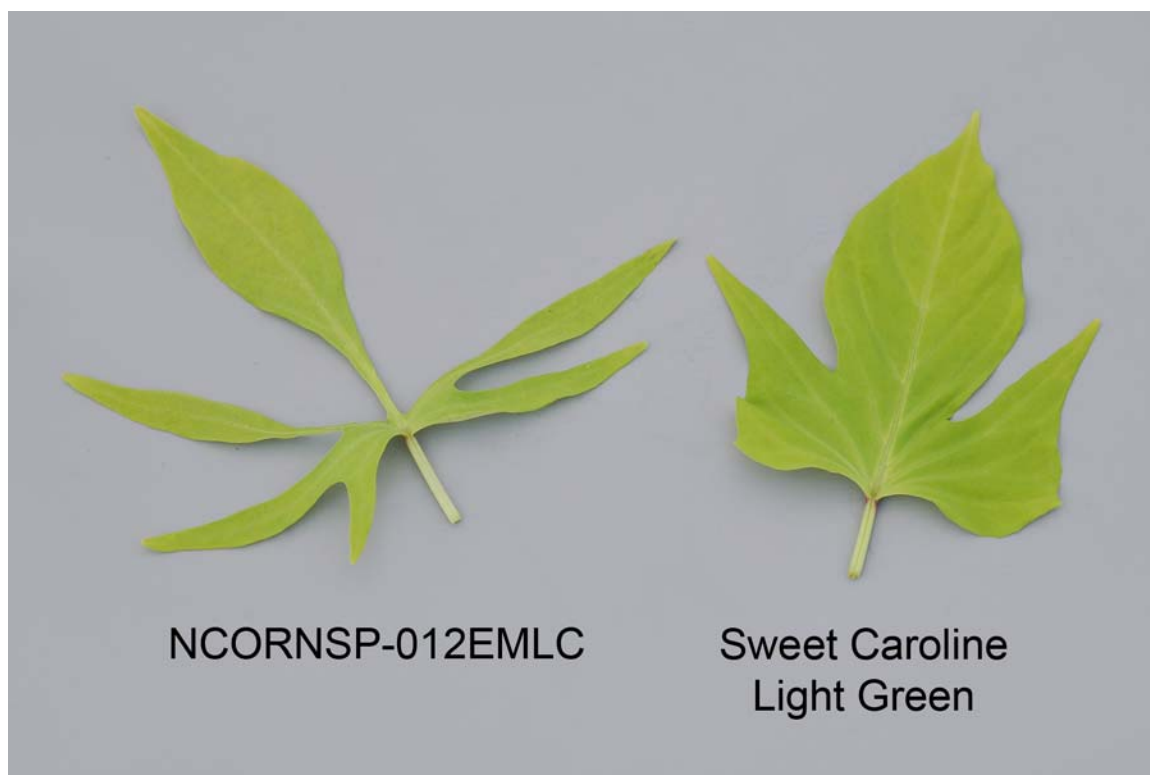
Comparison table for ‘NCORNSP-012EMLC’

	‘NCORNSP-012EMLC’	‘Sweet Caroline Light Green’*
<i>Leaf blade width (cm)</i>		
mean	13.8	8.8
std. deviation	1.86	0.99
<i>Terminal lobe width (cm)</i>		
mean	2.3	4.4
std. deviation	0.34	0.36

*reference variety



Sweet Potato, Ornamental: ‘NCORNSP-012EMLC’ (left) with reference variety ‘Sweet Caroline Light Green’ (right)



Sweet Potato, Ornamental: 'NCORNSP-012EMLC' (left) with reference variety 'Sweet Caroline Light Green' (right)
