PHLOX
(Phlox drummondii)

Proposed denomination: **'Sunphloconsa'**
Trade name: Astoria Peach
Application number: 08-6245
Application date: 2008/03/28
Applicant: Suntory Flowers Limited, Tokyo, Japan
Agent in Canada: BioFlora Inc., St. Thomas, Ontario
Breeder: Kiyoshi Miyazaki, Shiga, Japan

Variety used for comparison: 'Sunphlopin' (Astoria Pink)

Summary: *The plants of 'Sunphloconsa' are taller than those of 'Sunphlopin'. 'Sunphloconsa' has larger leaves, larger cymes and more florets per cyme than 'Sunphlopin'. The pedicels of 'Sunphloconsa' are shorter than those of 'Sunphlopin'. 'Sunphloconsa' has star shaped, bicolour florets while 'Sunphlopin' has round, tricolour florets. The upper and lower sides of the petals of 'Sunphloconsa' differ in colour from those of 'Sunphlopin'.*

Description:
PLANT: annual, upright to bushy

LEAF BLADE: lanceolate, glandular stickiness present, dense pubescence on upper side, sparse pubescence on lower side, medium green on upper side

CYME: dome shaped, compound type
FLORET: star shaped, bicolour, pink colour group
PETAL: cuspidate apex, eye pattern present, light blue pink (RHS 55C) with red pink (RHS 52B) eye on upper side, white (RHS N155B) on lower side, overlapping
PETAL MARGIN: weak fringe

Origin and Breeding: 'Sunphloconsa' originated from a cross between the female parent '3Ph-24a' and the male parent '4Ph-19' conducted in June 2004, at Higashiomi-shi, Shiga-ken, Japan. The seedlings obtained from the cross were grown in pots in a glasshouse and evaluated. In 2005, one seedling was selected based on its growth habit, flower size and flower colour. This new phlox variety was named 'Sunphloconsa'.

Tests and Trials: Trials for 'Sunphloconsa' were conducted in a polyhouse during the spring of 2009 in St. Thomas, Ontario. Trials included 15 plants each of the candidate and reference varieties. Rooted cuttings were transplanted into 15 cm pots on April 2, 2009. Observations and measurements were taken from 10 plants of each variety on May 28, 2009. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Sunphloconsa'

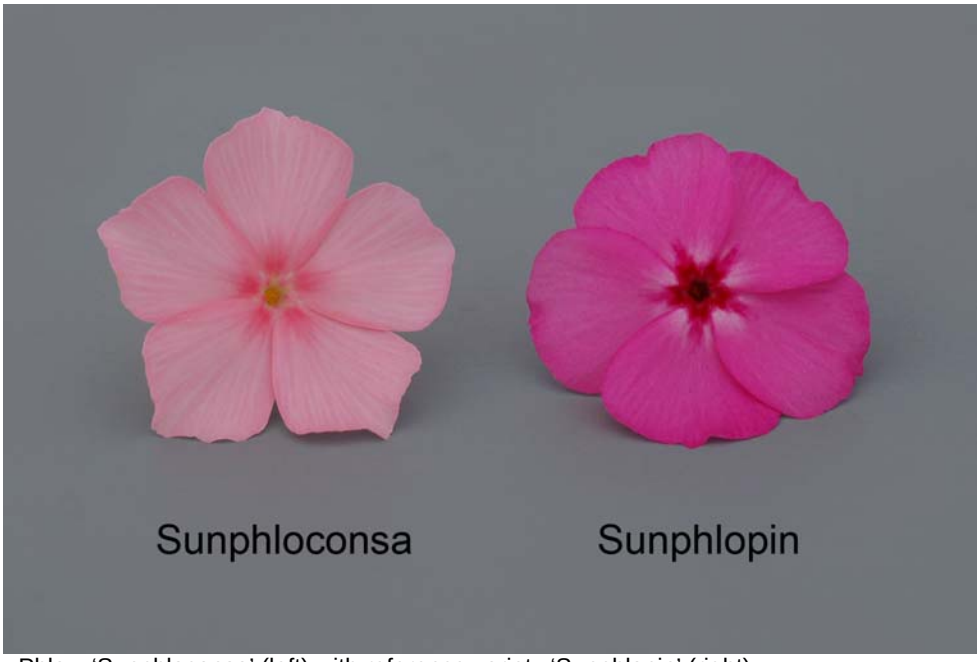
	'Sunphloconsa'	**'Sunphlopin'***
Plant height (cm)		
mean	20.9	16.4
std. deviation	1.44	2.18
Leaf length (cm)		
mean	4.8	3.4
std. deviation	0.37	0.26
Leaf width (cm)		
mean	1.6	1.0
std. deviation	0.17	0.12

Cyme diameter (cm)		
mean	9.6	8.0
std. deviation	0.58	0.69
Number of florets per cyme		
mean	11.5	7.8
std. deviation	2.32	1.32
Pedicel length (cm)		
mean	0.6	1.1
std. deviation	0.14	0.33
Colour of petal (RHS)		
upper side	55C	73A
marking on upper side	52B	60B with white at base
lower side	N155B	69C-D with N66D at margin

*reference variety

Phlox: ‘Sunphloconsa’ (left) with reference variety ‘Sunphlopin’ (right)

Phlox: 'Sunphloconsa' (left) with reference variety 'Sunphlopin' (right)



Phlox: 'Sunphloconsa' (left) with reference variety 'Sunphlopin' (right)

Proposed denomination: **'Sunphlorai'**
Trade name: Astoria Lilac
Application number: 07-5832
Application date: 2007/03/30
Applicant: Suntory Flowers Limited, Tokyo, Japan
Agent in Canada: BioFlora Inc., St. Thomas, Ontario
Breeder: Kazunari Iwaki, Suntory Flowers Limited, Shiga, Japan

Variety used for comparison: 'Sunphlopin' (Astoria Pink)

Summary: *The plants of 'Sunphlorai' are taller with larger diameter cymes than those of 'Sunphlopin'. The petals of 'Sunphlorai' have a broad acute apex while those of 'Sunphlopin' have a cuspidate apex. 'Sunphlorai' differs from 'Sunphlopin' in the colour of the upper and lower sides of the petals.*

Description:
PLANT: annual, bushy to rounded growth habit

LEAF BLADE: lanceolate, glandular stickiness present, dense pubescence on upper side, weak pubescence on lower side, light green on upper side

CYME: dome shaped, compound type
FLORET: round shaped, tricolour, purple colour group
PETAL: broad acute apex, eye pattern present, violet (RHS 77D) fading to light blue violet (RHS 84C) on upper side, violet (RHS N78B) eye with white at base on upper side, light blue violet (RHS 76D) to white on lower side, overlapping
PETAL MARGIN: weak fringe

Origin and Breeding: 'Sunphlorai' originated from a cross of the female parent '2Ph-54a' and the male parent '2Ph54b' conducted in June 2002, at Higashiomi-shi, Shiga-ken, Japan. The seedlings obtained from the cross were grown in pots in a glasshouse and evaluated. In May 2004, one seedling was selected based on its growth habit, flower size and flower colour. This new phlox variety was named 'Sunphlorai'.

Tests and Trials: Trials for 'Sunphlorai' were conducted in a polyhouse during the spring of 2009 in St. Thomas, Ontario. Trials included 15 plants each of the candidate and reference varieties. Rooted cuttings were transplanted into 15 cm pots on April 2, 2009. Observations and measurements were taken from 10 plants of each variety on May 28, 2009. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Sunphlorai'

	'Sunphlorai'	**'Sunphlopin'***
Plant height (cm)		
mean	21.2	16.4
std. devaition	2.31	2.18
Cyme diamter (cm)		
mean	9.4	8.0
std. deviation	0.97	0.69
Colour of petal (RHS)		
upper side	77D fading to 84C	73A
marking on upper side	lighter than N78B with white at base	60B with white at base
lower side	lighter than 76D to white	69C-D with N66D at margin

*reference variety

Phlox: ‘Sunphlorai’ (left) with reference variety ‘Sunphlopin’ (right)

Phlox: ‘Sunphlorai’ (left) with reference variety ‘Sunphlopin’ (right)

Phlox: 'Sunphlorai' (left) with reference variety 'Sunphlopin' (right)

Proposed denomination: **'Sunphlorozu'**
Trade name: Astoria Hot pink
Application number: 08-6246
Application date: 2008/03/28
Applicant: Suntory Flowers Limited, Tokyo, Japan
Agent in Canada: BioFlora Inc., St. Thomas, Ontario
Breeder: Kenichi Kitamura, Shiga, Japan

Variety used for comparison: 'USPHL03' (Intensia Neon Pink)

Summary: *The plants, stem internodes and leaves of 'Sunphlorozu' are shorter than those of 'USPHL03'. 'Sunphlorozu' has dense pubescence on the upper side of the leaf blades while 'USPHL03' has sparse pubescence. The lower side of the leaf blades of 'Sunphlorozu' have medium pubescence while those of 'USPHL03' have absent to very sparse pubescence. The upper side of the leaves of 'Sunphlorozu' are light green while those of 'USPHL03' are medium green. 'Sunphlorozu' has cymes with a smaller diameter and more florets than 'USPHL03'. The florets of 'Sunphlorozu' are star shaped while those of 'USPHL03' are round. 'Sunphlorozu' has petals with a medium fringe on the margin while 'USPHL03' has petals with a strong fringe. The colour on the upper and lower sides of the petals of 'Sunphlorozu' differs from that of 'USPHL03'.*

Description:
PLANT: annual, bushy to rounded growth habit

LEAF BLADE: lanceolate, glandular stickiness present, dense pubescence on upper side, medium pubescence on lower side, light green on upper side

CYME: dome shaped, compound type
FLORET: star shaped, bicolour, pink colour group
PETAL: broad acute apex, eye pattern present, purple red (RHS N66B) with darker purple red (N66A) tones on upper side, dark purple red (RHS 60A) marking on upper side, blue pink (RHS N66D) on lower side, overlapping
PETAL MARGIN: medium fringe

Origin and Breeding: 'Sunphlorozu' originated from a naturally occurring bud mutation of '9Ph-17a' discovered in June 2005, at Higashiomi-shi, Shiga-ken, Japan. The discovered shoot was propagated by cuttings, grown in pots in the glasshouse and evaluated. One plant was selected for the stability of its characteristics and named 'Sunphlorozu'.

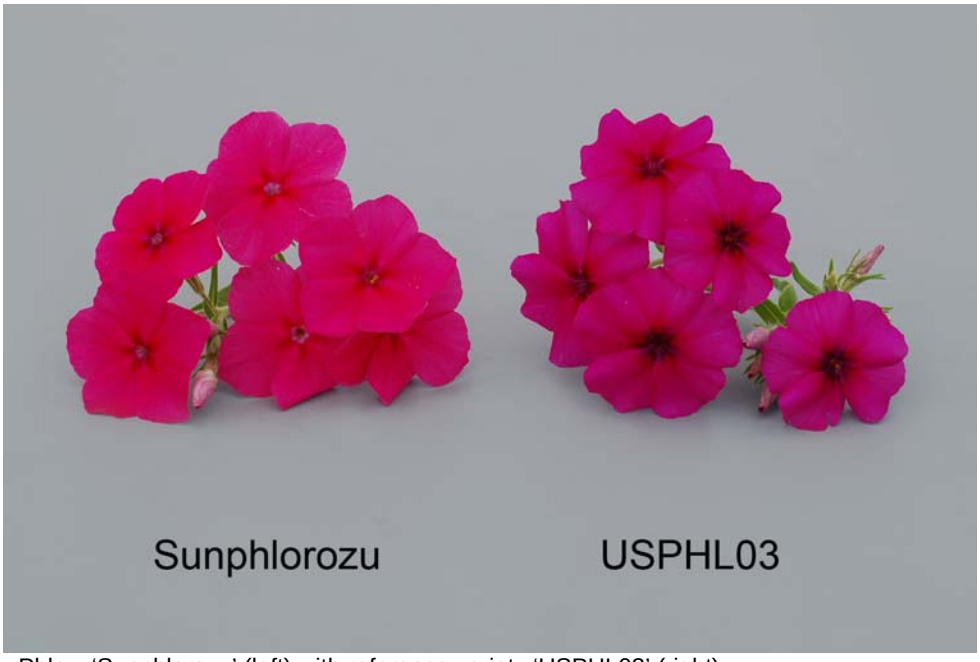
Tests and Trials: Trials for 'Sunphlorozu' were conducted in a polyhouse during the spring of 2009 in St. Thomas, Ontario. Trials included 15 plants each of the candidate and reference varieties. Rooted cuttings were transplanted into 15 cm pots on April 2, 2009. Observations and measurements were taken from 10 plants of each variety on May 28, 2009. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Sunphlorozu'

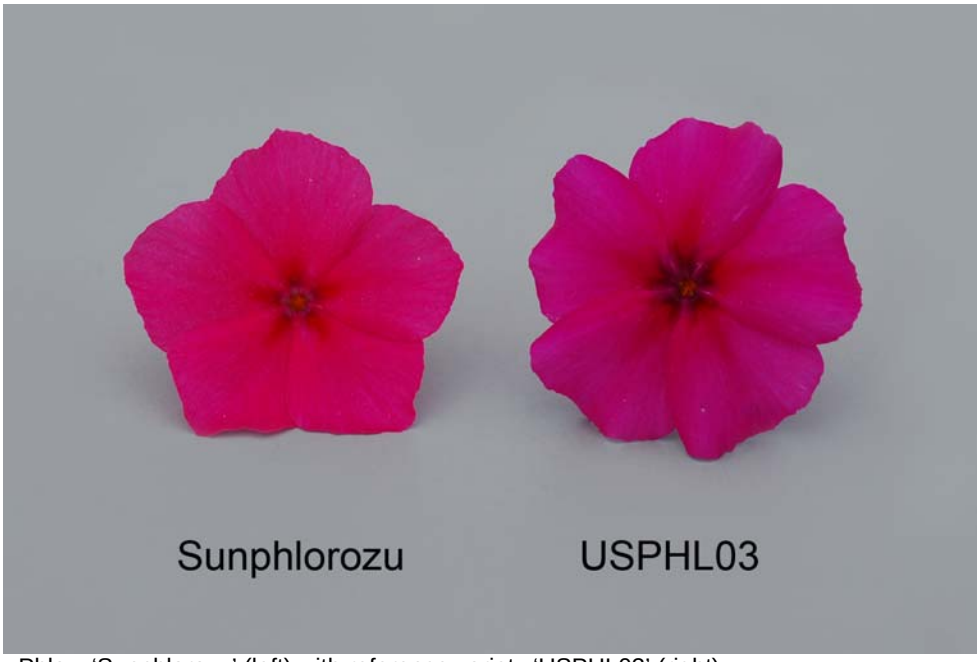
	'Sunphlorozu'	**'USPHL03'***
Plant height (cm)		
mean	16.2	25.4
std. deviation	1.46	2.08
Stem internode length (cm)		
mean	2.3	3.2
std. deviation	0.37	0.48
Leaf length (cm)		
mean	3.5	4.6
std. deviation	0.37	0.29
Cyme diameter (cm)		
mean	8.3	9.0
std. deviation	0.41	0.52
Number of florets per cyme		
mean	10.2	7.4
std. deviation	1.81	0.84
Color of petal (RHS)		
upper side	more purple than N66B with tones of N66A	brighter than N74A with redder tones at the base
marking on upper side	60A	83A with N81A between
lower side	N66D to more white towards base	75A to more white towards base

*reference variety

Phlox: 'Sunphlorozu' (left) with reference variety 'USPHL03' (right)



Phlox: ‘Sunphlorozu’ (left) with reference variety ‘USPHL03’ (right)



Phlox: ‘Sunphlorozu’ (left) with reference variety ‘USPHL03’ (right)