## APPLICATIONS UNDER EXAMINATION

**HEUCHERA** 

# HEUCHERA (Heuchera)

**Proposed denomination:** 'Apple Twist' Application number: 18-9674 **Application date:** 2018/12/21

**Applicant:** Walters Gardens, Inc., Zeeland, Michigan, United States of America

**Agent in Canada:** Variety Rights Management, Oxford Station, Ontario

**Breeder:** Hans A. Hansen, Zeeland, Michigan, United States of America

Variety used for comparison: 'Appletini'

Summary: Colour one on the upper side of the young leaf blade of 'Apple Twist' covers a medium to large area distributed between the veins and along the margin while that of 'Appletini' covers a small area distributed along the veins and along the margin. Colour two on the upper side of the young leaf blade of 'Apple Twist' ranges from medium to light brown and covers a small area distributed along the veins while that of 'Appletini' is light green and covers a medium to large area distributed between the veins in the intermediate zone. The petiole of 'Apple Twist' is light green while that of 'Appletini' is medium brown purple. The fully expanded leaf blade of 'Apple Twist' is larger than that of 'Appletini'. The length to width ratio of the leaf blade of 'Apple Twist' is slightly elongated while that of 'Appletini' is very slightly elongated. The leaf blade of 'Apple Twist' has deep lobing and strong undulation of the margin while that of 'Appletini' has a medium degree of lobing and medium undulation of the margin. The leaf blade of 'Apple Twist' has many deep indentations along the margin while that of 'Appletini' has a medium number of shallow indentations along the margin. Colour two on the upper side of the mature leaf blade of 'Apple Twist' ranges between light green and light brown green while that of 'Appletini' is light green. The lower side of the mature leaf blade of 'Apple Twist' is medium brown green while that of 'Appletini' is light green.

### **Description:**

PLANT: medium to dense foliage

# PETIOLE: light green (RHS 145A), sparse pubescence

YOUNG LEAF BLADE (UPPER SIDE): colour one is light green (RHS 145A/B) covering a medium to large area distributed between the veins and along the margin in a solid or nearly solid pattern, colour two is medium to light brown (RHS 174C/D) covering a small area along veins in a solid or nearly solid pattern

LEAF BLADE: the length to width ratio is slightly elongated, rounded apex, deep lobing, many deep indentations of margin, strong undulation of margin, weak rugosity

LEAF BLADE (UPPER SIDE): absent or very weak glossiness, absent or very sparse pubescence, colour one is light green (RHS N144C) covering a small to medium sized area distributed along veins and along the margin in a solid or nearly solid pattern, colour two is light green to light brown green (between RHS 145C and 193A) covering a medium to large area distributed between veins throughout in a solid or nearly solid pattern

LEAF BLADE (LOWER SIDE): medium brown green (RHS 148C), absent or very sparse pubescence

#### TIME OF FLOWERING: begins early to mid-season

FLOWERING STEM: upright attitude, main colour is light green (RHS N144D), length to width ratio of flowering part is moderately elongated, medium density of flowers

FLOWER BUD: light green (RHS 145D)

FLOWER: outwards attitude, short, narrow, white (RHS NN155D) outer side

**Origin and Breeding:** 'Apple Twist' originated from a controlled cross between a proprietary unreleased hybrid known as 'Making Waves' and a proprietary seedling known as 'Malachite One' conducted at Walters Gardens, Inc. in Zeeland, Michigan, USA on March 08, 2013. From the resulting progeny, seeds were collected and sown by the breeder, Hans Hansen, later in 2013. Initial selections made in 2015 were based on distinct and compact plant habit. 'Apple Twist' was first asexually propagated using shoot tip tissue culture in the spring of 2016.



**Tests and Trials:** The comparative trial for 'Apple Twist' was conducted outdoors during the summer of 2022 at Variety Rights Management in Oxford Station, Ontario. The trial included 15 plants of each of the candidate and reference variety. The plants were grown in 16 cm pots with 40 cm spacing between pots under a galvanized steel structure covered with black mesh shade fabric. The observations and measurements were taken from 10 plants, or 10 parts of plants, of each variety. All colour determinations were made using the 2015 Royal Horticultural Society (RHS) Colour Chart. Mean differences were significant at the 5% probability level based on Student's t-tests.

Comparison table for 'Apple Twist'

	'Apple Twist'	<b>'Appletini'</b> *
Colour of young leaf blade (RHS) upper side (colour two)	RHS 174C/D	RHS145B/C
Colour of petiole (RHS) main	145A	185D
Leaf blade length (cm) mean std. deviation	7.6 0.92	6.3 0.89
Leaf blade width (cm) mean std. deviation	6.3 0.61	5.3 0.50
Colour of mature leaf blade (RHS) upper side (colour two) lower side	between 145C & 193A 148C	between 145D & 157A 144D to 145D
*reference variety		



Heuchera: 'Apple Twist' (left) with reference variety 'Appletini' (right)

Proposed denomination: 'Cherry Truffles'

**Application number:** 18-9675 **Application date:** 2018/12/21

**Applicant:** Walters Gardens, Inc., Zeeland, Michigan, United States of America

**Agent in Canada:** Variety Rights Management, Oxford Station, Ontario

Breeder: Hans A. Hansen, Zeeland, Michigan, United States of America

Varieties used for comparison: 'Fire Chief' and 'Mahogany Monster'

Summary: Colour one on the upper side of the young leaf blade of 'Cherry Truffles' is dark brown purple while that of 'Fire Chief' is dark purple red to medium brown purple. The petiole of 'Cherry Truffles' is longer than the petiole of 'Fire Chief'. The fully expanded leaf blade of 'Cherry Truffles' is larger than that of 'Fire Chief'. The leaf blade of 'Cherry Truffles' has a strong undulation of the margin and weak glossiness while those of the reference varieties have a medium degree of undulation of the margin and absent or very weak glossiness. The flowering stem of 'Cherry Truffles' is longer than the flowering stem of 'Fire Chief' and shorter than that of 'Mahogany Monster'. The flowering part on the flowering stem of 'Cherry Truffles' is moderately elongated while that of 'Mahogany Monster' is strongly elongated. The colour of the flower bud of 'Cherry Truffles' ranges between dark blue pink and medium blue pink while that of 'Fire Chief' ranges between medium blue pink and light blue pink. The colour of the outer surface of the flower of 'Cherry Truffles' is light blue pink while that of the reference varieties is white.

# **Description:**

PLANT: medium to dense foliage

PETIOLE: between dark brown purple and dark purple red (RHS N186C/D), sparse pubescence

YOUNG LEAF BLADE (UPPER SIDE): colour one is dark brown purple (RHS 183B/C) covering a large area distributed throughout in a solid or nearly solid pattern

LEAF BLADE: the length to width ratio is very slightly elongated, rounded apex, medium to deep lobing, medium number of very shallow indentations of margin, strong undulation of margin, weak rugosity

LEAF BLADE (UPPER SIDE): weak glossiness, absent or very sparse pubescence, colour one is a blend of dark brown (RHS187A) and dark purple red (RHS 187C) covering a large area distributed throughout in a solid or nearly solid pattern LEAF BLADE (LOWER SIDE): dark purple red (RHS 187B), absent or very sparse pubescence

TIME OF FLOWERING: begins early to mid-season

FLOWERING STEM: upright attitude, main colour is dark brown (RHS 187A), length to width ratio of flowering part is moderately elongated, medium density of flowers

FLOWER BUD: ranging between dark blue pink and medium blue pink (RHS 64C/D)

FLOWER: outwards to semi-downwards attitude, short, narrow, light blue pink (RHS 76D) outer side

**Origin and Breeding:** 'Cherry Truffles' originated from a controlled cross between the variety 'Inheuredfu' and a proprietary seedling known as '13-700-1' conducted at Walters Gardens, Inc. in Zeeland, Michigan, USA on February 16, 2015. From the resulting progeny, seeds were collected and sown by the breeder, Hans Hansen, later in 2015. Initial selections made in 2016 were based on distinct and colourful plant foliage. 'Mahogany Monster' was first asexually propagated using shoot tip tissue culture in the fall of 2016.

**Tests and Trials:** The comparative trial for 'Cherry Truffles' was conducted outdoors during the summer of 2022 at Variety Rights Management in Oxford Station, Ontario. The trial included 15 plants of each of the candidate and reference varieties. The plants were grown in 16 cm pots with 40 cm spacing between pots under a galvanized steel structure covered with black mesh shade fabric. The observations and measurements were taken from 10 plants, or 10 parts of plants, of each variety. All colour determinations were made using the 2015 Royal Horticultural Society (RHS) Colour Chart. Mean differences were significant at the 5% probability level based on Student's t-tests.

Comparison table for 'Cherry Truffles'

	'Cherry Truffles'	'Fire Chief'*	'Mahogany Monster'*
Colour one of young leaf blade (RHS) upper side	183B/C	185A/B	187B/C
Petiole length (cm) mean std. deviation	8.2 1.17	6.7 0.97	8.6 1.39
Leaf blade length (cm) mean std. deviation	8.9 1.12	7.2 0.85	9.6 1.19
Leaf blade width (cm) mean std. deviation	9.0 0.72	6.9 0.86	8.9 1.17
Flowering stem length (cm) mean std. deviation	30.7 1.75	26.0 1.82	46.2 3.92
Length of flowering part of flowering stem (cm) mean std. deviation	12.1 1.45	7.9 1.24	18.4 2.25
Colour of flower bud (RHS) main	64C/D	73C/D	64C/D
Colour of flower (RHS) outer surface	76D	N155B/C	NN155D
*reference varieties			



Heuchera: 'Cherry Truffles' (left) with reference varieties 'Fire Chief' (centre) and 'Mahogany Monster' (right)

Proposed denomination: 'Mahogany Monster'

**Application number:** 18-9676 **Application date:** 2018/12/21

Applicant: Walters Gardens, Inc., Zeeland, Michigan, United States of America

Agent in Canada: Variety Rights Management, Oxford Station, Ontario

Breeder: Hans A. Hansen, Zeeland, Michigan, United States of America

Varieties used for comparison: 'Fire Chief' and 'Cherry Truffles'

Summary: The plants of 'Mahogany Monster' are larger than those of 'Fire Chief.' Colour one on the upper side of the young leaf blade of 'Mahogany Monster' is dark purple red while that of 'Fire Chief' is dark purple red to medium brown purple. The petiole of 'Mahogany Monster' is longer than the petiole of 'Fire Chief'. The fully expanded leaf blade of 'Mahogany Monster' is larger than that of 'Fire Chief'. The length to width ratio of the leaf blade of 'Mahogany Monster' is very slightly to slightly elongated while that of 'Fire Chief' is roundish to very slightly elongated. The leaf blade of 'Mahogany Monster' has a medium degree of undulation of the margin and absent or very weak glossiness while that of 'Cherry Truffles' has a strong degree of undulation of the margin and weak glossiness. The flowering stem of 'Mahogany Monster' is longer than those of the reference varieties. The flowering part on the flowering stem of 'Mahogany Monster' is longer than those of the reference varieties. The length to width ratio of the flowering part of the flowering stem of 'Mahogany Monster' is strongly elongated while that of 'Fire Chief' is slightly to moderately elongated and that of 'Cherry Truffles' is moderately elongated. The colour of the flower bud of 'Mahogany Monster' ranges between dark blue pink and medium blue pink while that of 'Fire Chief' ranges between medium blue pink and light blue pink. The colour of the outer surface of the flower of 'Mahogany Monster' is white while that of 'Cherry Truffles' is light blue pink.

## **Description:**

PLANT: medium to dense foliage

PETIOLE: dark purple red (RHS 187B), sparse pubescence

YOUNG LEAF BLADE (UPPER SIDE): colour one is dark purple red (RHS 187B/C) covering a large area distributed throughout in a solid or nearly solid pattern

LEAF BLADE: length to width ratio is very slightly to slightly elongated, rounded apex, medium to deep lobing, medium number of shallow indentations of margin, medium undulation of margin, weak rugosity

LEAF BLADE (UPPER SIDE): absent or very weak glossiness, absent or very sparse pubescence, colour one is between dark brown purple (RHS N186C) and dark purple red (RHS N186D) covering a large area distributed throughout in a solid or nearly solid pattern

LEAF BLADE (LOWER SIDE): dark purple red (RHS 187B), absent or very sparse pubescence

TIME OF FLOWERING: begins mid-season

FLOWERING STEM: upright attitude, main colour is dark brown (RHS 187A), length to width ratio of flowering part is strongly elongated, medium density of flowers

FLOWER BUD: ranging between dark blue pink (RHS 64C) and medium blue pink (RHS 64D)

FLOWER: outwards to semi-downwards attitude, short, narrow, white (RHS NN155D) outer side

**Origin and Breeding:** 'Mahogany Monster' originated from a controlled cross between two proprietary seedlings known as 13-764-2 and 13-700-1 conducted at Walters Gardens, Inc. in Zeeland, Michigan, USA on March 31, 2015. From the resulting progeny, seeds were collected and sown by the breeder, Hans Hansen, later in 2015. Initial selections made in 2016 were based on distinct and colourful plant foliage. 'Mahogany Monster' was first asexually propagated using shoot tip tissue culture in the fall of 2016.

**Tests and Trials:** The comparative trial for 'Mahogany Monster' was conducted outdoors during the summer of 2022 at Variety Rights Management in Oxford Station, Ontario. The trial included 15 plants of each of the candidate and reference varieties. The plants were grown in 16 cm pots with 40 cm spacing between pots under a galvanized steel structure covered with black mesh shade fabric. The observations and measurements were taken from 10 plants, or 10 parts of plants, of each variety. All colour determinations were made using the 2015 Royal Horticultural Society (RHS) Colour Chart. Mean differences were significant at the 5% probability level based on Student's t-tests

Comparison table for 'Mahogany Monster'

	'Mahogany Monster'	'Fire Chief'*	'Cherry Truffles'*
Plant height (cm) mean std. deviation	18.7 1.51	13.4 1.54	18.2 1.25
Plant width (cm) mean std. deviation	24.1 1.95	21.1 2.17	22.4 2.05
Colour one of young leaf blade (Rupper side	<i>HS)</i> 187B/C	185 A/B	183B/C
Petiole length (cm) mean std. deviation	8.6 1.39	6.7 0.97	8.2 1.17
Leaf blade length (cm) mean std. deviation	9.6 1.19	7.2 0.85	8.9 1.12
Leaf blade width (cm) mean std. deviation	8.9 1.17	6.9 0.86	9.0 0.72
Flowering stem length (cm) mean std. deviation	46.2 3.92	26.0 1.82	30.7 1.75

Length of flowering part of flowering stem (cm)

mean 18.4 7.9 12.1 std. deviation 2.25 1.24 1.45

Colour of flower bud (RHS)

main between 64C & 64D between 73C & 73D between 64C & 64D

Colour of flower (RHS)

outer surface NN155D N155B/C 76D

\*reference varieties



Heuchera: 'Mahogany Monster' (left) with reference varieties 'Fire Chief' (centre) and 'Cherry Truffles' (right)

Proposed denomination: 'Peachberry Ice'

**Application number:** 18-9677 **Application date:** 2018/12/21

Applicant: Walters Gardens, Inc., Zeeland, Michigan, United States of America

**Agent in Canada:** Variety Rights Management, Oxford Station, Ontario

Breeder: Hans A. Hansen, Zeeland, Michigan, United States of America

Variety used for comparison: 'Peach Flambe'

Summary: The plants of 'Peachberry Ice' are larger than those of 'Peach Flambe.' Colour one on the upper side of the young leaf blade of 'Peachberry Ice' ranges between medium red and orange red while that of 'Peach Flambe' is red pink to between medium red and red pink. Colour two on the upper side of the young leaf blade of 'Peachberry Ice' is medium orange pink while that of 'Peach Flambe' ranges between medium brown and orange brown. The fully expanded leaf blade of 'Peachberry Ice' is slightly elongated while that of 'Peach Flambe' is very slightly elongated. The leaf blade of 'Peachberry Ice' has many deep indentations of margin while that of 'Peach Flambe' has few shallow indentations of margin. The leaf blade of 'Peachberry Ice' has a strong undulation of margin while that of 'Peach Flambe' has a medium degree of undulation of margin. Distributed along the veins and margin, colour one on the upper side of the mature leaf blade of 'Peachberry Ice' ranges between brown red and medium orange pink while that of 'Peach Flambe' is dark brown purple to medium brown purple. Distributed between the veins, colour two on the upper side of the mature leaf blade of 'Peachberry Ice' is medium orange pink while that of 'Peach Flambe' is brown red. The flowering stem of 'Peachberry Ice' is longer than that of 'Peach Flambe'. The flowering part on the flowering stem of 'Peachberry Ice' is longer than that of 'Peach Flambe'.

# **Description:**

PLANT: medium to dense foliage

PETIOLE: medium brown purple (RHS 185B/C), sparse pubescence

YOUNG LEAF BLADE (UPPER SIDE): colour one is medium red to orange red (RHS 42C/D) covering a small area distributed along veins and on margin in a solid or nearly solid pattern, colour two is medium orange pink (RHS 179C/D) covering a large area distributed between the veins throughout in a solid or nearly solid pattern

LEAF BLADE: length to width ratio is slightly elongated, rounded apex, medium to deep lobing, many deep indentations of margin, strong undulation of margin, weak rugosity

LEAF BLADE (UPPER SIDE): absent or very weak glossiness, absent or very sparse pubescence, colour one is between brown red and medium orange pink (RHS 179B/C) covering a small area distributed along veins and on margin in a solid or nearly solid pattern, colour two is medium orange pink (RHS 179C/D) covering a medium sized area distributed between veins throughout in a solid or nearly solid pattern

LEAF BLADE (LOWER SIDE): dark purple red (RHS 187C/D), absent or very sparse pubescence

TIME OF FLOWERING: begins early to mid-season

FLOWERING STEM: upright attitude, main colour is dark purple red (RHS 185A), length to width ratio of flowering part is moderately to strongly elongated, medium density of flowers

FLOWER BUD: white (RHS N155B)

FLOWER: outwards attitude, short, narrow, white (RHS NN155D) outer side

**Origin and Breeding:** 'Peachberry Ice' originated from a controlled cross between the proprietary seedling known as 12-120-1 and the variety 'Paprika' conducted at Walters Gardens, Inc. in Zeeland, Michigan, USA on February 26, 2015. From the resulting progeny, seeds were collected and sown by the breeder, Hans Hansen, later in 2015. Initial selections made in the fall of 2016 were based on distinct and colourful plant foliage. 'Peachberry Ice' was first asexually propagated using shoot tip tissue culture in the fall of 2016.

**Tests and Trials:** The comparative trial for 'Peachberry Ice' was conducted outdoors during the summer of 2022 at Variety Rights Management in Oxford Station, Ontario. The trial included 15 plants of each of the candidate and reference variety. The plants were grown in 16 cm pots with 40 cm spacing between pots under a galvanized steel structure covered with black mesh shade fabric. The observations and measurements were taken from 10 plants, or 10 parts of plants, of each variety. All colour determinations were made using the 2015 Royal Horticultural Society (RHS) Colour Chart. Mean differences were significant at the 5% probability level based on Student's t-tests

#### Comparison table for 'Peachberry Ice'

	'Peachberry Ice'	'Peach Flambe'*
Plant height (cm)		
mean	17.3	15.3
std. deviation	1.54	0.91

Plant width (cm) mean std. deviation	26.6 1.48	24.7 0.98
Colour of young leaf blade (RHS) upper side (colour one) upper side (colour two)	42C/D 179C/D	45D to 46C/D 172B/C
Leaf blade length (cm) mean std. deviation	10.5 1.07	6.9 0.85
Leaf blade width (cm) mean std. deviation	8.6 0.90	6.3 0.61
Colour of mature leaf blade (RHS) upper side (colour one) upper side (colour two)	179B/C 179C/D	183C/D 182C/D
Flowering stem length (cm) mean std. deviation	29.7 1.37	25.5 1.12
Length of flowering part of flowering s mean std. deviation	stem (cm) 15.3 1.07	10.8 0.86
*reference variety		



Heuchera: 'Peachberry Ice' (left) with reference variety 'Peach Flambe' (right)