### APPLICATIONS UNDER EXAMINATION

**DAHLIA** 

DAHLIA (Dahlia)

Proposed denomination: 'VDTG14'

**Trade name:** Dark Angel Star Wars

**Application number:** 06-5690 **Application date:** 2006/12/07

**Applicant:** Verwer-Dahlia's BV, Lisse, The Netherlands

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

**Breeder:** Aad W.M. Verwer, Verwer-Dahlia's BV, Lisse, The Netherlands

Variety used for comparison: 'HS Flame' (Happy Single Flame)

**Summary:** 'VDTG14' has a shorter plant height than 'HS Flame'. 'VDTG14' has a smaller flower head diameter and shorter, narrower ray florets than 'HS Flame'. The inner side of the ray floret is red with yellow at the basal three quarters for 'VDTG14' while it is dark purple red to red with yellow orange at the base for 'HS Flame'.

## **Description:**

PLANT: upright growth habit, medium height, brownish red stem colour

LEAF: predominantly bipinnate, moderate wing present, long, wide, green tinged with brownish red on veins and midrib, weak to medium glossiness, smooth to weakly rugose, veins flat to raised, elliptic, acute to attenuate base, medium to many incisions on margin, incisions medium in depth

PEDUNCLE: medium to long, brownish red

FLOWER HEAD: at same level to moderately above foliage, upright to semi upright attitude, single, daisy type, no collar segments, small diameter

RAY FLORET: very few, short, very narrow, 1:0.57 length to width ratio, keeled upper surface with more than two keels, moderately concave in cross section at mid point, weakly concave in profile in cross section at 3/4 point, margin not rolled, longitudinal axis incurved, weak curving from distal quarter to distal half, absent to very weak twisting, mamillate apex, red with yellow secondary colour on inner side, secondary colour on basal three quarters in a solid or nearly solid pattern, colour on outer side similar to inner side, red to orange brown along keels on outer side

DISC: small, orange to red brown before anther dehiscence, yellow to orange at anther dehiscence.

**Origin and Breeding:** 'VDTG14' originated from an open pollinated cross between the female parent, a Dahlia plant identified as 'R', and an unidentified male parent. The cross took place in the summer of 2003 in Lisse, The Netherlands. A single seedling was selected in the summer of 2004 based on criteria for flower form, flower colour, compact plant habit and dark foliage colour. Asexual propagation by cuttings was first conducted in Lisse, The Netherlands, in the spring of 2005.

**Tests and Trials:** Trials for 'VDTG14' were conducted in a polyhouse during the summer of 2008 at BioFlora Inc. in St. Thomas, Ontario. The trial included 15 plants per variety. All plants were grown from rooted cuttings and transplanted into 15 cm pots on May 15, 2008. Observations and measurements were taken from 10 plants of each variety on July 8, 2008. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

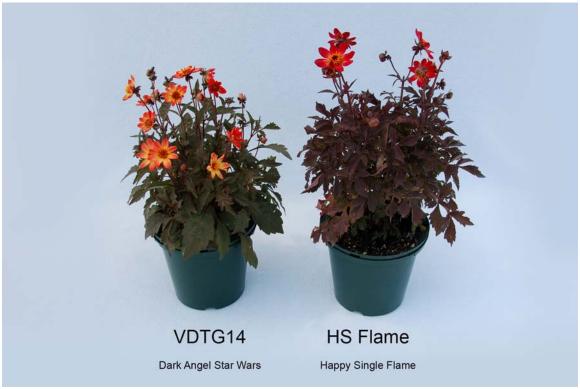
#### Comparison table for 'VDTG14'

	'VDTG14'	'HS Flame'*	
Plant height (cm)			
mean	31.4	40.9	
std. deviation	3.41	4.09	

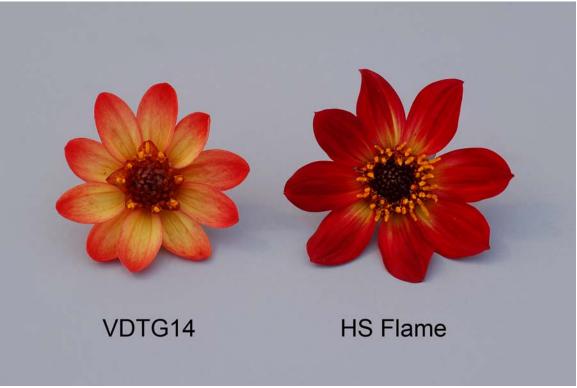


Flower head diameter (cm) mean std. deviation	5.7 0.40	6.6 0.53
Ray floret length (cm) mean std. deviation	2.1 0.21	2.7 0.3
Ray floret width (cm) mean std. deviation	1.2 0.18	1.6 0.10
Colour of ray floret (RHS) inner side - primary inner side - secondary outer side	40A-B 7A 34A-B (keels)	46A-B 13A 72A-B (veins and keels)
*reference variety		





Dahlia: 'VDTG14' (left) with reference variety 'HS Flame' (right)



Dahlia: 'VDTG14' (left) with reference variety 'HS Flame' (right)



Dahlia: 'VDTG14' (left) with reference variety 'HS Flame' (right)

**Proposed denomination:** 'VDTG17'

Trade name: Dark Angel Dracula

**Application number:** 06-5691 **Application date:** 2006/12/07

**Applicant:** Verwer-Dahlia's BV, Lisse, The Netherlands

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

**Breeder:** Aad W.M. Verwer, Verwer-Dahlia's BV, Lisse, The Netherlands

Variety used for comparison: 'HS Romeo' (Happy Single Romeo)

**Summary:** 'VDTG17' has brownish red to purple stem colour while 'HS Romeo' has green tinged with brownish red or purple stem colour. 'VDTG17' has predominantly pinnate leaves while 'HS Romeo' has predominantly simple leaves. The leaf veins are depressed for 'VDTG17' while they are raised for 'HS Romeo'. The ray floret of 'VDTG17' has weak to medium reflexing along the distal quarter of the longitudinal axis while 'HS Romeo' is straight along the longitudinal axis.

## **Description:**

PLANT: upright growth habit, medium height, brownish red to purple stem colour

LEAF: predominantly pinnate, strong wing present, short, narrow, green tinged with purple, weak glossiness, smooth to very weakly rugose, veins depressed, ovate and elliptic, acute base, few shallow incisions on margin

PEDUNCLE: short to medium length, brownish red

FLOWER HEAD: moderately above foliage, semi upright attitude, single, daisy type, no collar segments, medium diameter RAY FLORET: few in number, 1:0.69 length to width ratio, keeled upper surface with two keels, weakly concave in cross section at mid point, weakly convex in cross section at 3/4 point, margin weakly revolute at distal quarter, longitudinal axis reflexed, weak to medium curving at distal quarter, absent to very weak twisting, mamillate apex, dark purple red on inner side with darker purple red secondary colour at base and purple tertiary colour at distal quarter, secondary colour pattern nearly solid, tertiary colour pattern flushed, colour on outer side dark purple red with purple around keels DISC: medium diameter, red brown before anther dehiscence, yellow orange at anther dehiscence.

**Origin and Breeding:** 'VDTG17' originated from an open pollinated cross between the female parent, a Dahlia plant identified as 'R', and an unidentified male parent. The cross took place in the summer of 2002 in Lisse, The Netherlands. A single seedling was selected in the summer of 2003 based on criteria for flower form, flower colour, compact plant habit and dark foliage colour. Asexual propagation by cuttings was first conducted in Lisse, The Netherlands, in the spring of 2004.

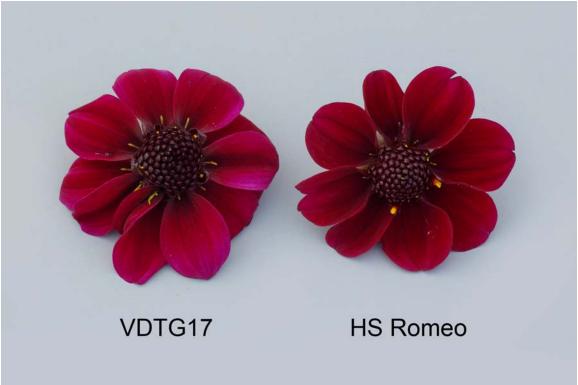
**Tests and Trials:** Trials for 'VDTG17' were conducted in a polyhouse during the summer of 2008 at BioFlora Inc. in St. Thomas, Ontario. The trial included 15 plants per variety. All plants were grown from rooted cuttings and transplanted into 15 cm pots on May 15, 2008. Observations and measurements were taken from 10 plants of each variety on July 8, 2008. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'VDTG17'

	'VDTG17'	'HS Romeo'*
Colour of ray floret (RHS)		
inner side - primary	53A	53A
inner side - secondary	46A (darker than)	53A (darker than)
inner side - tertiary	N74B & 67A	64C `
outer side	53A with 61B around keels	53A with 70B and 67C around keels



Dahlia: 'VDTG17' (left) with reference variety 'HS Romeo' (right)



Dahlia: 'VDTG17' (left) with reference variety 'HS Romeo' (right)



Dahlia: 'VDTG17' (left) with reference variety 'HS Romeo' (right)

Proposed denomination: 'VDTG57'

**Trade name:** Dark Angel Taxi Driver

**Application number:** 06-5695 **Application date:** 2006/12/07

**Applicant:** Verwer-Dahlia's BV, Lisse, The Netherlands

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

**Breeder:** Aad W.M. Verwer, Verwer-Dahlia's BV, Lisse, The Netherlands

Variety used for comparison: 'Knockout' (Mystic Illusion)

**Summary:** 'VDTG57' has a shorter plant height and shorter peduncle length than 'Knockout'. 'VDTG57' has a higher number of incisions on the leaf margin than 'Knockout'. 'VDTG57' has a smaller flower head diameter than 'Knockout'. 'VDTG57' has orange brown to orange red secondary colour on the inner side of the ray floret while 'Knockout' has no secondary colour. 'VDTG57' has a larger disc diameter than 'Knockout'.

# **Description:**

PLANT: upright growth habit, medium height, brownish red to purple stem colour

LEAF: predominantly bipinnate, strong wing present, long, very wide, green tinged with purple, weak to medium glossiness, smooth or very weakly rugose, veins depressed, elliptic, acute base, many shallow to medium depth incisions on margin

PEDUNCLE: medium length, brownish red to purple

FLOWER HEAD: moderately above foliage, upright to semi upright attitude, single, daisy type, no collar segments, small to medium diameter

RAY FLORET: very few in number, 1:0.68 length to width ratio, keeled upper surface with more than two keels, weakly concave to flat in cross section at mid point, flat to weakly convex in cross section at 3/4 point, no rolling of margin, longitudinal axis straight to reflexed, very weak curving at distal quarter, absent to very weak twisting, dentate to retuse apex,

yellow on inner side with orange brown to orange red secondary colour in diffused stripes, outer side with orange red along keels and veins

DISC: medium diameter, orange to red brown before anther dehiscence, yellow to orange at anther dehiscence.

**Origin and Breeding:** 'VDTG57' originated from an open pollinated cross between the female parent, a Dahlia plant identified as 'R', and an unidentified male parent. The cross took place in the summer of 2002 in Lisse, The Netherlands. A single seedling was selected in the summer of 2003 based on criteria for flower form, flower colour, compact plant habit and dark foliage colour. Asexual propagation by cuttings was first conducted in Lisse, The Netherlands, in the spring of 2005.

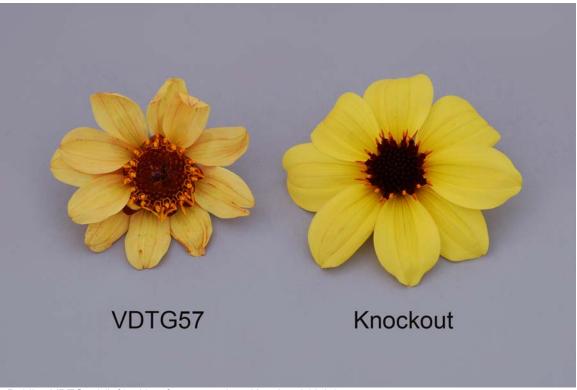
**Tests and Trials:** Trials for 'VDTG57' were conducted in a polyhouse during the spring/summer of 2008 at BioFlora Inc. in St. Thomas, Ontario. The trial included 15 plants per variety. All plants were grown from rooted cuttings and transplanted into 15 cm pots on May 15, 2008. Observations and measurements were taken from 10 plants of each variety on July 8, 2008. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'VDTG57'

Comparison table for VB1CO1	'VDTG57'	'Knockout'*
Plant height (cm) mean	29.9	43.6
std. deviation  Peduncle length (cm)	2.81	2.67
mean std. deviation	11.0 2.45	20.9 2.60
Flower head diameter (cm) mean std. deviation	5.8 0.69	9.6 1.10
Colour of ray floret (RHS) inner side - primary inner side - secondary outer side - keels and veins	7A-B 35A-B 39A	2A N/A N34A
*reference variety		



Dahlia: 'VDTG57' (left) with reference variety 'Knockout' (right)



Dahlia: 'VDTG57' (left) with reference variety 'Knockout' (right)



Dahlia: 'VDTG57' (left) with reference variety 'Knockout' (right)

Proposed denomination: 'VDTG61'

**Trade name:** Dark Angel Pulp Fiction

**Application number:** 06-5696 **Application date:** 2006/12/07

**Applicant:** Verwer-Dahlia's BV, Lisse, The Netherlands

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

**Breeder:** Aad W.M. Verwer, Verwer-Dahlia's BV, Lisse, The Netherlands

Varieties used for comparison: 'Scarlet Fern' (Mystic Desire) and 'HS Flame' (Happy Single Flame)

**Summary:** 'VDTG61' has a shorter plant height than 'HS Flame'. 'VDTG61' has a shorter peduncle length than 'Scarlet Fern'. 'VDTG61' has a smaller flower head diameter than the reference varieties. The primary colour on the inner side of the ray floret is red for 'VDTG61' while it is red to orange red for 'Scarlet Fern' and dark purple red for 'HS Flame'. The secondary colour on the inner side of the ray floret is orange red for 'VDTG61' while it is yellow orange for 'Scarlet Fern' and 'HS Flame'.

# **Description:**

PLANT: upright growth habit, medium height, brownish red to purple stem colour

LEAF: predominantly bipinnate, moderate wing present, very long, very wide, green tinged with purple, medium glossiness, smooth to very weakly rugose, veins depressed, ovate and elliptic, acute base, medium to many incisions on margin, incisions medium to deep

PEDUNCLE: short to medium length, brownish red

FLOWER HEAD: moderately above foliage, upright to semi upright attitude, single, daisy type, no collar segments, small diameter

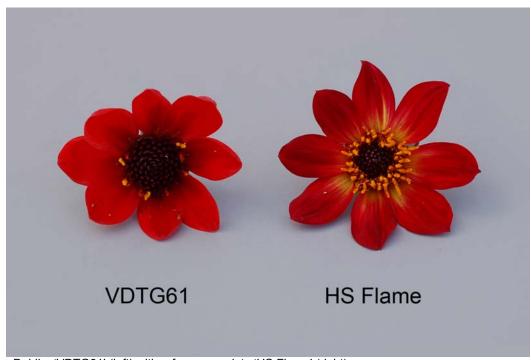
RAY FLORET: few in number, 1:0.68 length to width ratio, keeled upper surface with two keels, weakly concave in cross section at mid point, weakly revolute rolling of margin at distal half, longitudinal axis straight, absent to very weak twisting, mamillate apex, red on inner side with red orange secondary colour in a flushed pattern on distal three quarters, outer side red DISC: medium diameter, red brown before anther dehiscence, yellow to orange at anther dehiscence.

**Origin and Breeding:** 'VDTG61' originated from an open pollinated cross between the female parent, a Dahlia plant identified as 'R', and an unidentified male parent. The cross took place in the summer of 2003 in Lisse, The Netherlands. A single seedling was selected in the summer of 2004 based on criteria for flower form, flower colour, compact plant habit and dark foliage colour. Asexual propagation by cuttings was first conducted in Lisse, The Netherlands, in the spring of 2005.

**Tests and Trials:** Trials for 'VDTG61' were conducted in a polyhouse during the spring/summer of 2008 at BioFlora Inc. in St. Thomas, Ontario. The trial included 15 plants per variety. All plants were grown from rooted cuttings and transplanted into 15 cm pots on May 15, 2008. Observations and measurements were taken from 10 plants of each variety on July 8, 2008. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'VDTG61'

Companson table for VD1G	'VDTG61'	'Scarlet Fern'*	'HS Flame'*
Plant height (cm)			
mean	31.0	27.1	40.9
std. deviation	1.83	1.66	4.09
Peduncle length (cm)			
mean	9.7	16.6	9.6
std. deviation	0.95	4.06	2.80
Flower head diameter (cm)			
mean	5.2	8.1	6.6
std. deviation	0.50	0.69	0.53
0.1			
Colour of ray floret (RHS)	44A (daylean than)	NOOA D	46A D
inner side - primary	44A (darker than)	N30A-B	46A-B
inner side - secondary	N25A	23A	13A
*reference varieties			



Dahlia: 'VDTG61' (left) with reference variety 'HS Flame' (right)



Dahlia: 'VDTG61' (left) with reference variety 'Scarlet Fern' (right)

Proposed denomination: 'VDTG67'

**Trade name:** Dark Angel Braveheart

**Application number:** 06-5697 **Application date:** 2006/12/07

**Applicant:** Verwer-Dahlia's BV, Lisse, The Netherlands

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

**Breeder:** Aad W.M. Verwer, Verwer-Dahlia's BV, Lisse, The Netherlands

Varieties used for comparison: 'VDTG17' (Dark Angel Dracula) and 'HS Romeo' (Happy Single Romeo)

**Summary:** 'VDTG67' has a shorter plant height than 'VDTG17'. 'VDTG67' has purple stem colour while 'HS Romeo' has green stems tinged with brownish red or purple. 'VDTG67' has a predominantly pinnate leaf while 'HS Romeo' has a predominantly simple leaf. 'VDTG67' has a shorter peduncle length and smaller flower head diameter than the reference varieties. 'VDTG67' differs slightly in flower colour from the reference varieties.

# **Description:**

PLANT: upright growth habit, short height, purple stem colour

LEAF: predominantly pinnate, very weak to weak wing present, short, narrow, purple, weak glossiness, smooth to very weakly rugose, veins depressed, elliptic, acute base, few to medium incisions on margin, incisions shallow

PEDUNCLE: very short, brownish red to purple

FLOWER HEAD: at same level and moderately above foliage, semi upright attitude, single, daisy type, no collar segments, very small diameter

RAY FLORET: few in number, 1:0.67 length to width ratio, keeled upper surface with two keels, weakly concave to flat in cross section at mid point, margin not rolled, longitudinal axis straight, absent to very weak twisting, mamillate apex, purple with tones of dark purple red on inner side with purple secondary colour in a flushed pattern on distal quarter, outer side similar to inner side

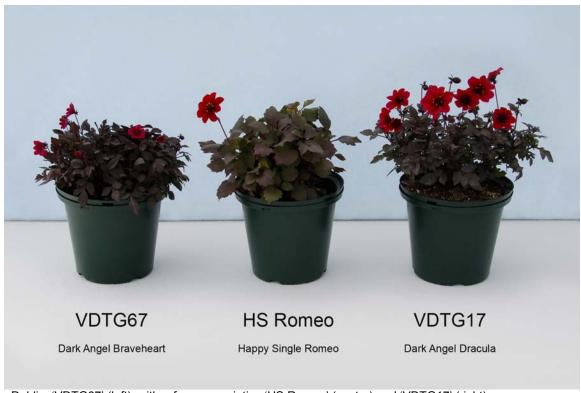
DISC: medium diameter, red brown before anther dehiscence, yellow-orange at anther dehiscence.

**Origin and Breeding:** 'VDTG67' originated from an open pollinated cross between the female parent, a Dahlia plant identified as 'R', and an unidentified male parent. The cross took place in the summer of 2003 in Lisse, The Netherlands. A single seedling was selected in the summer of 2004 based on criteria for flower form, flower colour, compact plant habit and dark foliage colour. Asexual propagation by cuttings was first conducted in Lisse, The Netherlands, in the spring of 2005.

**Tests and Trials:** Trials for 'VDTG67' were conducted in a polyhouse during the spring/summer of 2008 at BioFlora Inc. in St. Thomas, Ontario. The trial included 15 plants per variety. All plants were grown from rooted cuttings and transplanted into 15 cm pots on May 15, 2008. Observations and measurements were taken from 10 plants of each variety on July 8, 2008. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'VDTG67'

	'VDTG67'	'VDTG17'*	'HS Romeo'*
Plant height (cm)			
mean	22.9	31.7	26.8
std. deviation	1.52	1.57	2.82
Peduncle length (cm)			
mean	5.7	9.3	7.7
std. deviation	0.82	1.23	0.96
Flower head diameter (cm)			
mean	4.3	6.6	6.7
std. deviation	0.28	0.32	0.42
Colour of ray floret (RHS)			
inner side - primary	61A with tones of 46A	53A	53A
inner side - secondary	N74A	46A (darker than)	53A (darker than)
inner side - tertiary	N/A	N74B with tones of 67A	64C `
reference varieties			



Dahlia: 'VDTG67' (left) with reference varieties 'HS Romeo' (centre) and 'VDTG17' (right)



Dahlia: 'VDTG67' (left) with reference varieties 'HS Romeo' (centre) and 'VDTG17' (right)