



APPLICATIONS UNDER EXAMINATION

YARROW

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(Achillea tomentosa x millefolium)

Proposed denomination: 'Desred'
Trade name: Desert Eve Red
Application number: 09-6732
Application date: 2009/10/06
Applicant: Syngenta Crop Protection AG, Basel, Switzerland
Agent in Canada: BioFlora Inc., St. Thomas, Ontario
Breeder: Henricus G.W. Stemkens, Syngenta Seeds B.V., Enkhuizen, The Netherlands

Varieties used for comparison: 'Paprika' and 'Summerwine'

Summary: *The plants of 'Desred' are shorter and narrower than those of both reference varieties. The ray florets of 'Desred' are dark purple red whereas they are more purple for 'Summerwine'. The main colour of the lower surface of the ray florets of 'Desred' is a light yellow orange whereas it is purple for 'Summerwine'. The main colour of the disc florets of 'Desred' is yellow whereas it is purple red for 'Summerwine'.*

Description:

PLANT: upright growth habit, dense branching, flowers mid to late season for long duration

STEM: green tinged with brownish red

LEAF: pinnately dissected, alternate arrangement

BLADE: oblong and oblanceolate shape, mucronate apex, truncate base, pinnatisect margin, dense pubescence on upper and lower surfaces, light to medium green on upper surface, light green on lower surface

INFLORESCENCE: upright corymb

RAY FLORET: single coloured, sinuate/notched apex, five ray florets per capitulum

UPPER SURFACE: dark purple red (darker than RHS 53A when fully opened fading to 53B), light yellow/brown red at base

LOWER SURFACE: light yellow orange (RHS 11D) with orange brown margins (RHS N170D)

DISC FLORET: mainly yellow

Origin and Breeding: 'Desred' arose from an open pollinated cross of an *Achillea tomentosa* seedling designated 'H4981-5' as the female parent with an unknown *Achillea millefolium* variety as the male parent which was carried out in the summer of 2003 in Enkhuizen, the Netherlands. The resulting progeny were sown in the greenhouse in March 2004. The new variety, 'Desred' was selected as a single seedling in July 2004 in Enkhuizen based on flower colour, plant habit and production characteristics.

Tests and Trials: Trials for 'Desred' were conducted in a polyhouse during the spring of 2010 in St. Thomas, Ontario. The trials included a total of 15 plants of each variety. All plants were grown from rooted cuttings and transplanted into 4.5 litre containers on July 2, 2010. Observations and measurements were taken from 10 plants of each variety on August 3, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Desred'

	'Desred'	'Paprika'*	'Summerwine'*
<i>Plant height (cm)</i>			
mean	18.6	37.8	26.2
std. deviation	1.46	5.37	4.64
<i>Plant diameter (cm)</i>			
mean	25.1	40.4	34.7
std. deviation	3.45	4.07	5.90

Ray floret: main colour of upper surface (RHS)

fully opened darker than 53B
aging to 53B

60A changing to 53B-C
59D changing to 53D

redder than 59A
closest to 71A-70A

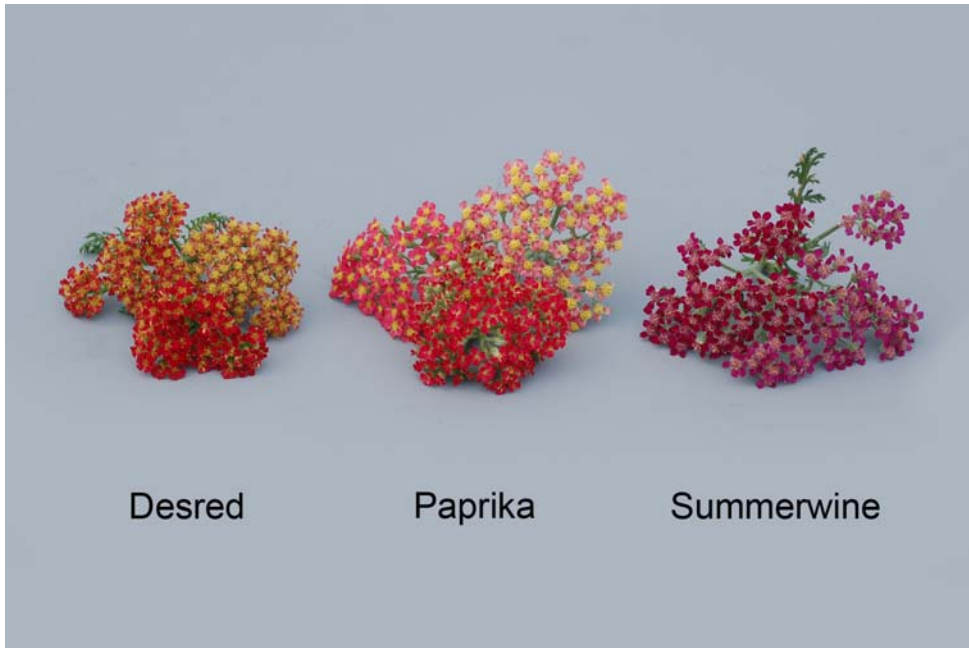
Ray floret: colour of lower surface (RHS)

main colour 11D with N170D at margins

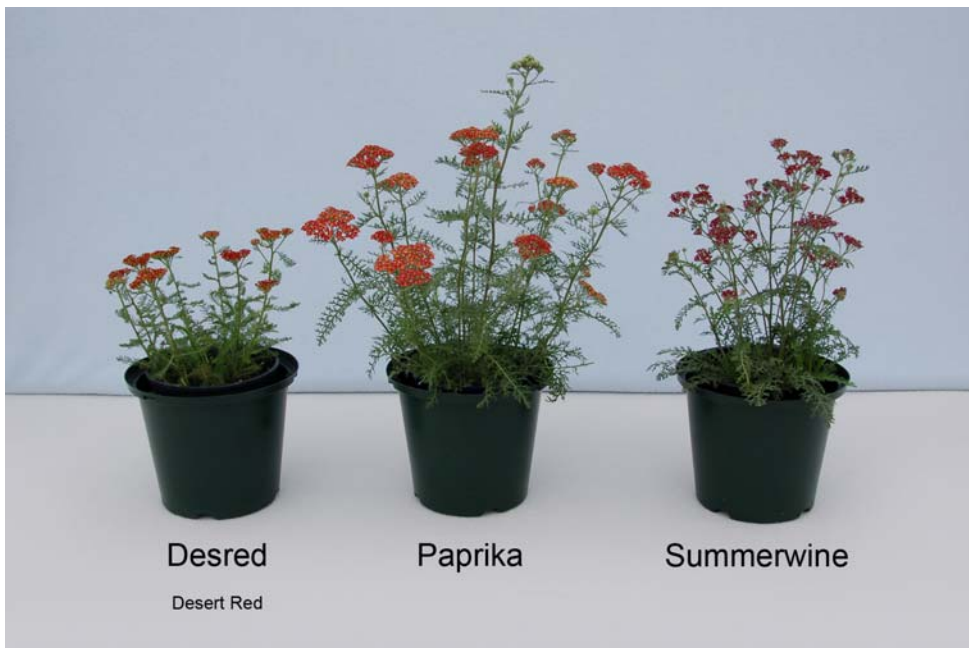
11D with 49C-D at margins

70A-B

*reference varieties



Yarrow: 'Desred' (left) with reference varieties 'Paprika' (centre) and 'Summerwine' (right)



Yarrow: 'Desred' (left) with reference varieties 'Paprika' (centre) and 'Summerwine' (right)

Proposed denomination: 'Desyel'
Trade name: Desert Eve Yellow
Application number: 09-6733
Application date: 2009/10/06
Applicant: Syngenta Crop Protection AG, Basel, Switzerland
Agent in Canada: BioFlora Inc., St. Thomas, Ontario
Breeder: Henricus G.W. Stemkens, Syngenta Seeds B.V., Enkhuizen, The Netherlands

Varieties used for comparison: 'Desert Eve Light Yellow' and 'Moonshine'

Summary: *The leaves of 'Desyel' are shorter than those of both reference varieties. The inflorescence of 'Desyel' has a smaller diameter than that of both reference varieties. The diameter of the capitulum of 'Desyel' is larger than that of both reference varieties. The main colour of the ray floret of 'Desyel' is a darker yellow than that of 'Desert Eve Light Yellow'.*

Description:

PLANT: upright growth habit, dense branching, flowers mid to late season for long duration
 STEM: light green

LEAF: pinnately dissected, alternate arrangement

BLADE: oblong shape, acute to mucronate apex, truncate base, pinnatisect margin, dense pubescence on upper and lower surfaces, medium green on upper and lower surfaces

INFLORESCENCE: upright corymb

RAY FLORET: single coloured, sinuate/notched apex, five ray florets per capitulum

UPPER SURFACE: yellow (RHS 2A)

LOWER SURFACE: yellow green (RHS 2D)

DISC FLORET: yellow

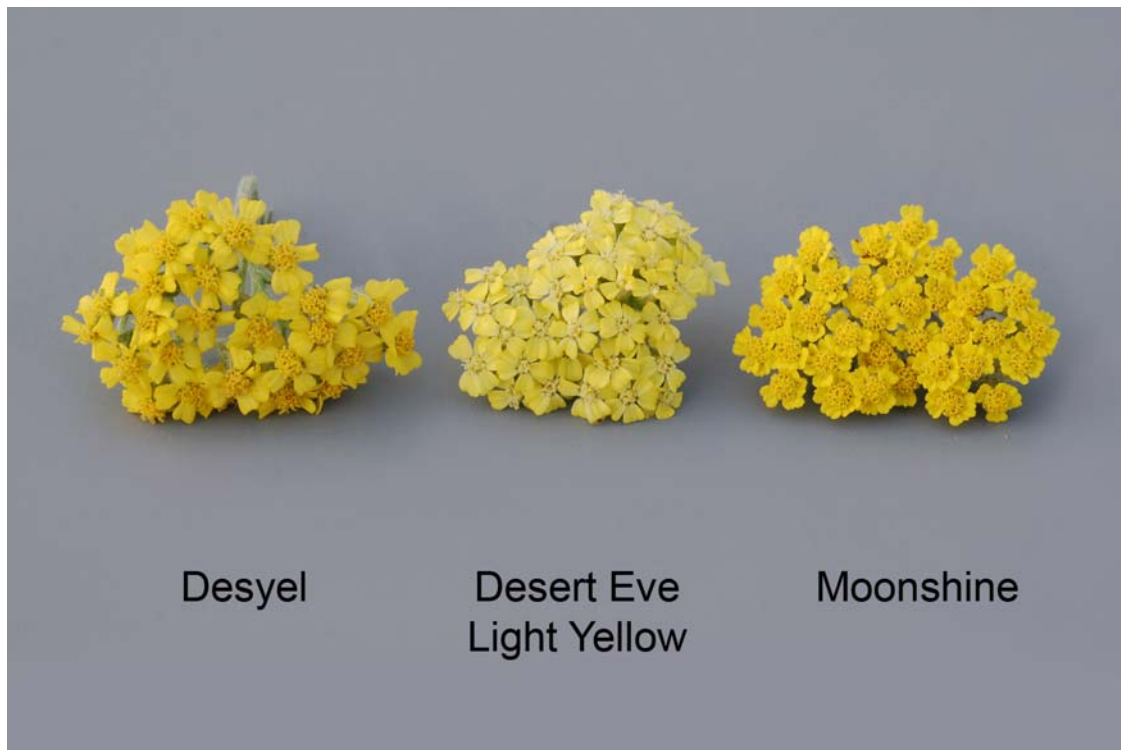
Origin and Breeding: 'Desyel' arose from an open pollinated cross of an *Achillea tomentosa* seedling designated 'G6331-1' as the female parent with an unknown *Achillea millefolium* variety as the male parent which was carried out in the summer of 2002 in Enkhuizen, the Netherlands. The resulting progeny were sown in the greenhouse in March 2003. The new variety, 'Desyel' was selected as a single seedling in July 2003 in Enkhuizen based on flower colour, plant habit and production characteristics.

Tests and Trials: Trials for 'Desyel' were conducted in a polyhouse during the spring of 2010 in St. Thomas, Ontario. The trials included a total of 15 plants of each variety. All plants were grown from rooted cuttings and transplanted into 4.5 litre containers on July 2, 2010. Observations and measurements were taken from 10 plants of each variety on August 3, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Desyel'

	'Desyel'	'Desert Eve Light Yellow'*	'Moonshine'*
<i>Leaf length (cm)</i>			
mean	5.0	5.5	6.7
std. deviation	0.36	0.51	0.78
<i>Inflorescence diameter (cm)</i>			
mean	5.9	6.3	10.4
std. deviation	0.52	0.51	1.34
<i>Capitulum diameter (mm)</i>			
mean	10.1	8.3	5.0
std. deviation	0.96	0.48	0.00
<i>Ray floret colour (RHS)</i>			
upper surface	2A	4B	brighter than 2A
lower surface	2D	4D	2D

*reference varieties



Yarrow: 'Desyel' (left) with reference varieties 'Desert Eve Light Yellow' (centre) and 'Moonshine' (right)



Yarrow: 'Desyel' (left) with reference varieties 'Desert Eve Light Yellow' (centre) and 'Moonshine' (right)