



APPLICATIONS UNDER EXAMINATION

CONEFLOWER

CONEFLOWER
(Echinacea purpurea)

Proposed denomination: 'Meringue'
Application number: 08-6399
Application date: 2008/07/03
Applicant: Arie Blom, Vleuten, The Netherlands
Agent in Canada: BioFlora Inc., St. Thomas, Ontario
Breeder: Arie Blom, Vleuten, The Netherlands

Variety used for comparison: 'Coconut Lime'

Summary: *The plants of 'Meringue' are shorter than those of 'Coconut Lime'. 'Meringue' has narrower leaves than 'Coconut Lime'. The leaves of 'Meringue' are elliptic to lanceolate with medium undulation of the margin while those of 'Coconut Lime' are ovate with weak undulation of the margin. 'Meringue' has a light green calyx while 'Coconut Lime' has a medium green calyx. 'Meringue' has larger discs and higher cones than 'Coconut Lime'. The disc florets of 'Meringue' are larger than those of 'Coconut Lime'.*

Description:

PLANT: upright growth habit, basal branching

STEM: medium thickness, smooth, light green, dense pubescence, no anthocyanin colouration

LEAF: alternate arrangement, elliptic to lanceolate, acute apex, cuneate to attenuate base, irregularly dentate margin, medium undulation of margin, medium green on upper side, weak pubescence, no glossiness, no anthocyanin colouration on upper side, petiole present

PEDUNCLE: no waviness

CALYX: light green, reflexing of sepals present

FLOWER: anemone

RAY FLORET: straight to downward with aging along longitudinal axis, reflexing of tip, lanceolate, fringed apex, upper side white (RHS 155C) with light green (RHS 145C) at the tip of apex, lower side yellow green (RHS 2D) with light green (RHS 145C) at the tip of apex

DISC FLORET: dark green before dehiscence, dense, petaloid, white (RHS NN155A) with light yellow (RHS 11B) along apex, pollen yellow orange (RHS 13A)

Origin and Breeding: 'Meringue' originated from a cross conducted in July 2004, in IJsselstein, The Netherlands, between the female parent, proprietary seedling Ec 301-36 and the male parent, proprietary seedling Ec 202-02. The new Echinacea variety was selected by the breeder, Arie Blom, in Zuidwolde, The Netherlands, in September 2006 based on growth habit, flower colour, cone colour, flower form and flower abundance. In vitro propagation, by tissue culture of 'Meringue' was first conducted in September 2006, in The Netherlands.

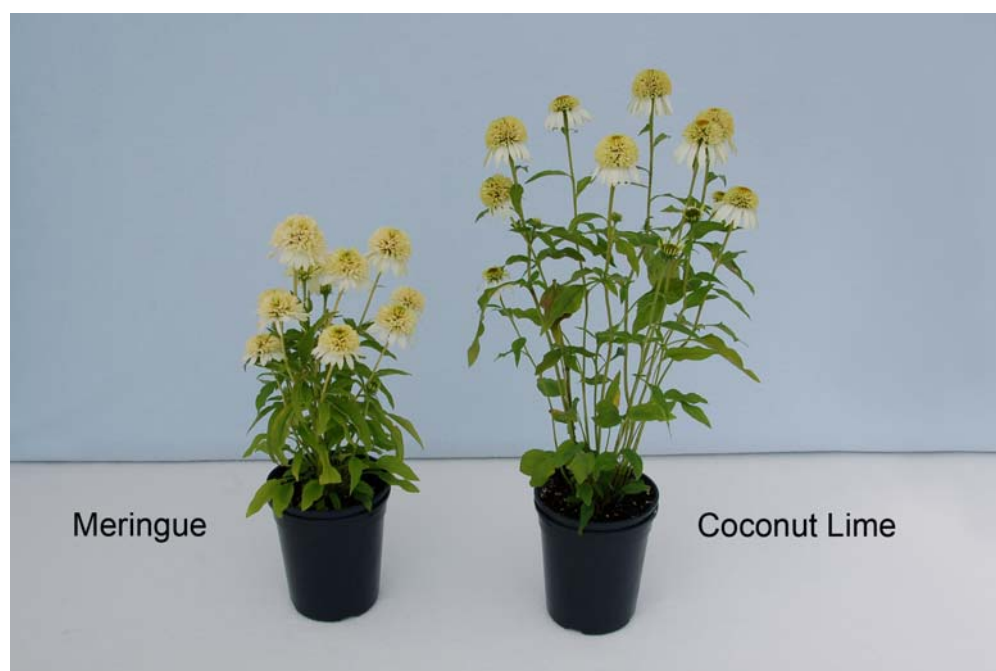
Tests and Trials: Trials for 'Meringue' were conducted in an outdoor container trial during the summer of 2009, in St. Thomas, Ontario. The trial included 15 plants each of the candidate and reference varieties. All plants were grown from rooted cuttings planted into 4 litre containers on June 12, 2009. Observations and measurements were taken from 10 plants of each variety on August 10, 2009 and September 10, 2009 (for plant size and disc characteristics). All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

Comparison table for 'Meringue'

	'Meringue'	'Coconut Lime'*
<i>Plant height (cm)</i>		
mean	37.7	48.8
std. deviation	2.45	4.18

<i>Leaf width (cm)</i>		
mean	3.7	4.5
std. deviation	0.44	0.52
<i>Disc diameter (cm)</i>		
mean	6.5	4.8
std. deviation	0.42	0.41
<i>Disc: height of cone (cm)</i>		
mean	3.1	2.4
std. deviation	0.32	0.32
<i>Disc floret length (cm)</i>		
mean	2.7	1.9
std. deviation	0.16	0.13
<i>Disc floret width (cm)</i>		
mean	0.5	0.3
std. deviation	0.12	0.05

*reference variety



Coneflower: 'Meringue' (left) with reference variety 'Coconut Lime' (right)



Coneflower: 'Meringue' (left) with reference variety 'Coconut Lime' (right)



Coneflower: 'Meringue' (left) with reference variety 'Coconut Lime' (right)