

Details of Application	
Application Number	2014/325
Variety Name	'MALOF003'
Genus Species	<i>Philodendron bipinnatifidum</i>
Common Name	Philodendron
Synonym	'GoldBullion'
Accepted Date	11-Apr-2016
Applicant	Malof Trading Pty Ltd
Agent	
Qualified Person	Ian Paananen

Details of Comparative Trial

Location	Oakville, NSW
Descriptor	UPOV General Descriptor
Period	July 2015-July 2016
Conditions	Trial conducted standard polyhouse conditions, plants propagated from micro-propagation, planted into 200 mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers. No pest and disease treatments were required.
Trial Design	Twelve pots of each variety arranged in a completely randomised design.
Measurements	Measurements were taken from ten plants according to the UPOV guidelines in metric system.
RHS Chart - edition	2015

Origin and Breeding

Spontaneous mutation: 'Winterbourn' (aka Xanadu™). The parent is characterised by a dark green leaf colour. Selection took place in Oakville, NSW in 2012. Selection criteria: presence of golden yellow leaf colour which does not turn green with maturity, compact plant growth habit. Propagation: vegetative micro-propagation, cuttings and divisions were found to be uniform and stable. Breeder: Stephen Solomon, Oakville, NSW.

Choice of Comparators Characteristics used for grouping varieties to identify the most similar Variety of Common Knowledge

Organ/Plant Part	Context	State of Expression in Group of Varieties
Plant	size	medium
Plant	width	medium
Leaf	shape	pinnatisect
Leaf	incision of margin	present
Leaf	undulation of margin	strong
Leaf	number of colours	one

Most Similar Varieties of Common Knowledge identified (VCK)

Name	Comments
Golden Xanadu	Originating Thailand 1999, assigned to Kerry's Bromeliads, Inc, USA. Described: USPP 19,214/ CPVO 2007/2470. Not found to be available any longer

'Winterbourn'		parent variety			
Varieties of Common Knowledge identified and subsequently excluded					
Variety	Distinguishing Characteristics		State of Expression in Candidate Variety	State of Expression in Comparator Variety	Comments
'Golden Xanadu'	Immature leaf blade	length	short	medium	
'Golden Xanadu'	Immature leaf blade	width	narrow	medium	
'Golden Xanadu'	Petiole	length	short	medium	
'Golden Xanadu'	Plant (immature)	height	short	medium	

Variety Description and Distinctness - Characteristics which distinguish the candidate from one or more of the comparators are marked with a tick.

Organ/Plant Part: Context	'MALOF003'	'Winterbourn'
<input type="checkbox"/> Plant: growth habit	erect	erect
<input type="checkbox"/> Plant: size	medium	medium
<input checked="" type="checkbox"/> Plant: height	short	medium
<input type="checkbox"/> Plant: width	medium	medium
<input type="checkbox"/> Stem: presence of anthocyanin in new growth	present	present
<input type="checkbox"/> Young shoot: anthocyanin colouration	medium	medium
<input type="checkbox"/> Leaf: leaf type	simple	simple
<input type="checkbox"/> Leaf: attitude	erect	erect
<input type="checkbox"/> Leaf: length of blade	medium	medium
<input type="checkbox"/> Leaf: width of blade	medium	medium
<input checked="" type="checkbox"/> Leaf: length of petiole	short	medium
<input type="checkbox"/> Leaf: shape	pinnatisect	pinnatisect
<input type="checkbox"/> Leaf: incision of margin	present	present
<input type="checkbox"/> Leaf: undulation of the margin	strong	strong
<input type="checkbox"/> Leaf: shape of cross-section	concave	concave
<input checked="" type="checkbox"/> Leaf: curvature of longitudinal axis	straight	recurved
<input type="checkbox"/> Leaf: glossiness of upper side	medium to strong	medium to strong
<input checked="" type="checkbox"/> Leaf: green colour	light	dark
<input type="checkbox"/> Leaf: presence of variegation	absent	absent
<input checked="" type="checkbox"/> Leaf: primary colour (RHS colour chart)	N144A	NN137B
<input type="checkbox"/> Leaf colour: number of colours	one	one

Characteristics Additional to the Descriptor/TG		
Organ/Plant Part: Context	'MALOF003'	'Winterbourn'

<input checked="" type="checkbox"/> Leaf: colour of lower side (RHS)	N144A	146A
<input checked="" type="checkbox"/> Immature leaf: colour of upper side (RHS)	N144A	ca 146A
<input checked="" type="checkbox"/> Immature leaf: colour of petiole (RHS)	177D	distal N199A, proximal 177A
<input checked="" type="checkbox"/> Immature leaf: colour of upper side midrib and primary veins (RHS)	182C	ca 177B
<input checked="" type="checkbox"/> Immature leaf: colour of lower side midrib and primary veins (RHS)	177D	177A

Statistical Table

Organ/Plant Part: Context	‘MALOF003’	‘Winterbourn’
<input type="checkbox"/> Plant: height		
Mean	18.80	21.80
Std. Deviation	2.20	1.50
Lsd/sig	2.42	P<=0.01
<input type="checkbox"/> Plant: width		
Mean	40.60	40.80
Std. Deviation	4.20	4.40
Lsd/sig	5.53	ns
<input type="checkbox"/> Leaf: length		
Mean	144.40	159.00
Std. Deviation	16.10	11.10
Lsd/sig	17.78	ns
<input type="checkbox"/> Leaf: width		
Mean	72.20	79.60
Std. Deviation	12.80	7.40
Lsd/sig	13.47	ns
<input type="checkbox"/> Leaf: length:width		
Mean	2.04	2.01
Std. Deviation	0.30	0.30
Lsd/sig	0.37	ns
<input type="checkbox"/> Petiole: length		
Mean	119.50	156.20
Std. Deviation	8.40	13.30
Lsd/sig	14.32	P<=0.01

Prior Applications and Sales:

Nil

Description: **Ian Paananen**, Crop & Nursery Services