APPLICATIONS UNDER EXAMINATION

HYDRANGEA

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(Hydrangea macrophylla)

Proposed denomination: 'PIIHM-I'

Trade name: Endless Summer Twist-n-Shout

Application number: 08-6394

Application date: 2007/12/07 (priority claimed)

Applicant: Plant Introductions Inc., Watkinsville, Georgia, United States of America

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

Breeder: Michael A. Dirr, Chapel Hill, North Carolina, United States of America

Variety used for comparison: 'Lynn' (Let's Dance Starlight)

Summary: 'PIIHM-I' has a taller plant height than 'Lynn'. 'PIIHM-I' has very strong anthocyanin colouration in the petiole and strong to very strong anthocyanin in the stem while 'Lynn' has absent to very weak anthocyanin in the petiole and stem. 'PIIHM-I' has a larger diameter large calyx than 'Lynn'. 'PIIHM-I' has more intense colouration of the small calyx than 'Lynn'. The small calyx of 'PIIHM-I' has purple petal colour while 'Lynn' has light blue pink petal colour. The anthers of 'PIIHM-I' are violet and the filaments are purple while the anthers of 'Lynn' are light blue pink and the filaments are white. 'PIIHM-I' has blue pink and purple bud colour while 'Lynn' has light blue pink bud colour.

Description:

PLANT: upright growth habit, remontant (reblooming) type, strong to very strong stem anthocyanin colouration

LEAF: medium green upper side, no variegation, absent to very weak glossiness, strong to very strong anthocyanin on midrib and margin edge, broadly elliptic, acuminate to acute apex, rounded base, no lobing, medium to coarse margin incisions, very strong anthocyanin in petiole

INFLORESCENCE: flowers with small calyx conspicuous, flowers with large calyx arranged in one circle, flattened lace-cap shape, peduncle with medium to strong anthocyanin

LARGE CALYX: strong intensity of colouration, purple to blue pink, maturing to light blue pink, four sepals, sepals medium to strongly overlapping, no margin incisions

SMALL CALYX: strong intensity of colouration, purple petal colour, violet anthers, purple filament, bud blue pink.

Origin and Breeding: 'PIIHM-I' originated from a controlled cross pollination conducted in Athens, Georgia, USA in 2003. The female parent was the variety 'Penny Mac' and the male parent was the variety 'Lady in Red'. The new variety was selected from the progeny seedlings of the above stated cross based on continued evaluation for reblooming, increased resistance to mildew and improved leaf and flower characteristics. The new variety was first propagated by softwood cuttings in Athens, Georgia, USA in 2004.

Tests and Trials: The trials for 'PIIHM-I' were conducted in an outdoor trial at BioFlora in St. Thomas, Ontario in the summer of 2008. The trials included 10 plants of each variety, arranged in rows with one meter spacing between plants. All plants were grown from rooted cuttings which were transplanted into containers in the spring of 2008. Observations and measurements were taken from 10 plants of each variety on September 3, 2008. All colour determinations were made using the 2001 Royal Horticultural Society (RHS) Colour chart.

Comparison table for 'PIIHM-I'

•	'PIIHM-I'	'Lynn'*	
Plant height (cm)			
mean	57.1	48.1	
std. deviation	2.85	1.79	



Large calyx diameter (cm)

mean 3.6 3.1 std. deviation 0.15 0.22

Large calyx colour (RHS)

new 67A-B 68A-B

mature 64C with 62B underlay N66C-D with 69B underlay

Small calyx colour (RHS)

petal 64A-B 55C-D anther N77B 55C

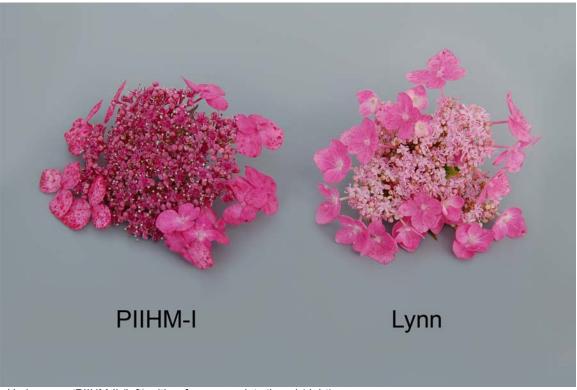
filament 67A N155B (lighter than)

bud 64C with 74C tones 56A

^{*}reference variety



Hydrangea: 'PIIHM-I' (left) with reference variety 'Lynn' (right)



Hydrangea: 'PIIHM-I' (left) with reference variety 'Lynn' (right)



Hydrangea: 'PIIHM-I' (left) with reference variety 'Lynn' (right)