

APPLICATIONS UNDER EXAMINATION

CHERRY (Prunus fruticosa × P. cerasus)

Proposed denomination:	'Juliet'
Application number:	02-3387
Application date:	2002/12/16
Applicant:	University of Saskatchewan, Saskatoon, Saskatchewan
Breeder:	Robert H. Bors, University of Saskatchewan, Saskatoon, Saskatchewan

Varieties used for comparison: 'Carmine Jewel' and 'Saint Valentine'

Summary: The leaves of 'Juliet' are longer and wider with longer petioles than those of both reference varieties. The flower diameter of 'Juliet' is larger than both reference varieties. The fruit of 'Juliet' is large whereas it is medium sized on 'Saint Valentine' and small on 'Carmine Jewel'. The fruit shape of 'Juliet' is reniform whereas it is circular on 'Carmine Jewel'. The skin colour of 'Juliet' is dark red to brown red whereas it is medium red on 'Saint Valentine' and blackish on 'Carmine Jewel'. The fruit flesh of 'Juliet' is dark red whereas it is medium red in 'Saint Valentine' and black in 'Carmine Jewel'. Fruit sweetness of 'Juliet' is high whereas it is medium in 'Carmine Jewel'. 'Juliet' begins flowering mid-season whereas 'Saint Valentine' begins flowering early. The fruit of 'Juliet' begins to ripen early whereas it ripens very early on 'Carmine Jewel'.

Description:

TREE: weak to medium vigour, semi-upright growth habit, medium branching, buds distributed along entire branch, midseason flowering, early fruit maturity

YOUNG SHOOT: normal length of internode

LEAF: medium green on upper surface, medium glossiness, weak anthocyanin on upper side of petiole, nectaries present

FLOWER: irregular arrangement PETAL: free arrangement of petals, broad obovate shape

FRUIT: large, reniform shape in ventral view, flat to depressed at pistil end FRUIT STALK: medium thickness, anthocyanin colouration present, abscission layer present between stalk and fruit FRUIT SKIN: dark red to brown red FRUIT FLESH: dark red, medium firmness, low to medium acidity, high sweetness, medium juiciness FRUIT JUICE: dark red

STONE: small to medium size, broad elliptic shape in ventral view, large ratio of weight of fruit flesh to weight of stone

Origin and Breeding: 'Juliet' arose from the cross of 'Kerr's Easy Pick' and 'Cacanski Rubin', made in 1992 as part of the Fruit Breeding and Research Program of the Department of Plant Sciences, University of Saskatchewan, Saskaton, Saskatchewan. 'Kerr's Easy Pick' was an unreleased selection derived from *Prunus fruticosa* x *Prunus cerasus* hybrids that were interbred several generations over 40 years. Progeny was collected from the original cross, was stratified and container grown, then field planted on their own rootstock in the spring of 1994. Advanced selection status took place in 1999. Selection criteria included productivity, winter hardiness, extent of suckering, ease of fruit removal and fruit quality characteristics.

Tests and Trials: The tests and trials for 'Juliet' were planted in 2004 at the University of Saskatchewan, Horticulture Fields, Saskatoon, Saskatchewan. Forty bushes were planted in rows, spaced 1.5 metres apart in the row with a row spacing alternating between 3 and 4 metres. The data for measured charateristics was collected during the 2009 growing season.



CHERRY



Comparison table for 'Juliet'				
'Juliet'	'Carmine Jewel'*	'Saint Valentine'*		
6.8	5.4	5.3		
0.77	1.00	0.54		
3.2	2.6	3.0		
0.34	0.39	0.41		
	'Juliet' 6.8 0.77 3.2	'Juliet' 'Carmine Jewel'* 6.8 5.4 0.77 1.00 3.2 2.6		

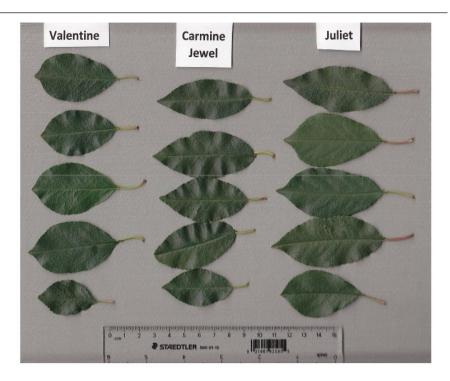
Comparison table for 'Juli	et'	
ʻJul	liet'	'Ca

mean std. deviation	6.8 0.77	5.4 1.00	5.3 0.54
Leaf blade width (cm) mean	3.2	2.6	3.0
std. deviation	0.34	0.39	0.41
Petiole length (cm)			
mean	1.9	1.2	1.5
std. deviation	0.20	0.16	0.30
Flower diameter (cm)			
mean	2.73	2.07	2.165
std. deviation	0.113	0.201	0.195

*reference varieties



Cherry: 'Juliet' (left) with reference varieties 'Carmine Jewel' (centre) and 'Saint Valentine' (right)



Cherry: 'Juliet' (right) with reference varieties 'Carmine Jewel' (centre) and 'Saint Valentine' (left)

Proposed denomination:	'Saint Valentine'
Application number:	02-3385
Application date:	2002/12/16
Applicant:	University of Saskatchewan, Saskatoon, Saskatchewan
Breeder:	Robert H. Bors, University of Saskatchewan, Saskatoon, Saskatchewan

Varieties used for comparison: 'Carmine Jewel' and 'Juliet'

Summary: The trees of 'Saint Valentine' begin flowering early whereas those of 'Carmine Jewel' and 'Juliet' flower midseason. The flower petals of 'Saint Valentine' are medium obovate whereas they are circular on both reference varieties. The fruit of 'Saint Valentine' is medium size and reniform to oblate in shape whereas it is small and circular on 'Carmine Jewel' and large and reniform on 'Juliet'. The fruit skin of 'Saint Valentine' is medium red whereas it is blackish on 'Carmine Jewel' and dark red to brown red on 'Juliet'. The fruit flesh of 'Saint Valentine' is medium red whereas it is black on 'Carmine Jewel' and dark red on 'Juliet'. The fruit of 'Saint Valentine' is high in sweetness whereas it is medium in 'Carmine Jewel'. The ratio of weight of fruit flesh to weight of stone of 'Saint Valentine' is medium whereas it is large for both reference varieties. The fruit of 'Saint Valentine' begins to ripen early whereas that of 'Carmine Jewel' ripens very early.

Description:

TREE: weak to medium vigour, semi-upright growth habit, medium branching, buds distributed along entire branch, early flowering, early fruit maturity YOUNG SHOOT: normal length of internode

LEAF: medium green on upper surface, medium glossiness, weak anthocyanin on upper side of petiole, nectaries present

FLOWER: irregular arrangement PETAL: free arrangement of petals, medium obovate shape

FRUIT: medium size, reniform to oblate shape in ventral view, flat at pistil end

FRUIT STALK: medium thickness, anthocyanin colouration present, abscission layer present between stalk and fruit FRUIT SKIN: medium red FRUIT FLESH: medium red, soft to medium firmness, low to medium acidity, high sweetness, medium juiciness FRUIT JUICE: medium red

STONE: small to medium size, broad elliptic shape in ventral view, medium ratio of weight of fruit flesh to weight of stone

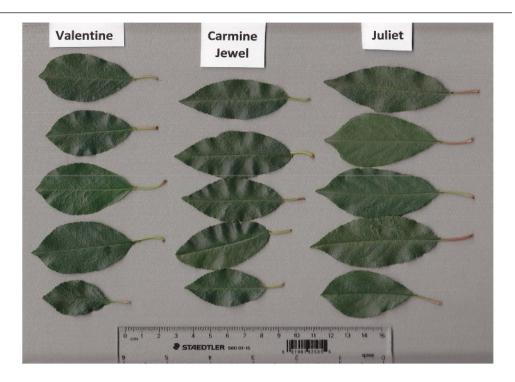
Origin and Breeding: 'Saint Valentine' arose from the cross of 'Kerr's Easy Pick' and 'Cacanski Rubin', made in 1992 as part of the Fruit Breeding and Research Program of the Department of Plant Sciences, University of Saskatchewan, Saskatoon, Saskatchewan. 'Kerr's Easy Pick' was an unreleased selection derived from *Prunus fruticosa* x *Prunus cerasus* hybrids that were interbred for several generations over 40 years. Progeny was collected from the original cross, was stratified and container grown, then field planted on their own rootstock in the spring of 1994. Advanced selection status took place in 1999. Selection criteria included productivity, winter hardiness, extent of suckering, ease of fruit removal and fruit quality characteristics.

Tests and Trials: The tests and trials for 'Saint Valentine' were planted in 2004 at the University of Saskatchewan, Horticulture Fields, Saskatoon, Saskatchewan. Forty bushes were planted in rows, spaced 1.5 metres apart in the row with a row spacing alternating between 3 and 4 metres. The data for the measured characteristics was collected during the 2009 growing season.

-	'Saint Valentine'	'Carmine Jewel'*	'Juliet'*
Leaf blade length (c	m)		
mean	5.3	5.4	6.8
std. deviation	0.54	1.00	0.77
Leaf blade width (cn	n)		
mean	3.0	2.6	3.2
std. deviation	0.41	0.39	0.34
Leaf petiole length (cm)		
mean	^{1.5}	1.2	1.9
std. deviation	0.30	0.16	0.20



Cherry: 'Saint Valentine' (right) with reference varieties 'Carmine Jewel' (centre) and 'Juliet' (left)



Cherry: 'Saint Valentine' (left) with reference varieties 'Carmine Jewel' (centre) and 'Juliet' (right)