

Supplemental Table 1. Genome composition, types of meiotic polyploidizaion, and recombinant rate of the plants in the backcross progenies originated from interspecific crossing of lilies

Authors	Genome composition of parent and crossing direction	Proge-nies	No. of analyzed plants (Chr. No.)	Genome composition of the analyzed plants (Chr. No.)	Types of meiosis (No. of plants)	Without and with recombination (No. of plants) ³⁾
Lim et al. 2000	LL ¹⁾ × RR	F ₁	2 (2n=24)	LR ²⁾	Normal	-
	LLRR × LL	BC ₁	9 (2n=36)	LLR	Normal	No
	LLR × LLLL	BC ₂	1 (2n=42)	LLLLR ⁶⁾	Normal	No
			1 (2n=43)	LLLLR ⁷⁾	Normal	No
			1 (2n=44)	LLLLR ⁸⁾	Normal	No
Zhou et al. 2008	LA × AA	BC ₁	17(2n=36)	LAA	FDR (17)	Yes (12)
			1 (2n=37)	L(AA) ²⁵⁾	FDR (1)	Yes (1)
			1(2n=37)	L ¹³⁾ AA	FDR (1)	Yes (1)
Kahn et al. 2010	LA × AA	BC ₁	42(2n=36)	LAA	FDR (42)	Yes (38)
			2 (2n=36)	L ¹¹⁾ (AA) ²⁵⁾	IMR (2)	Yes (2)
			2 (2n=36)	L ¹³⁾ (AA) ²³⁾	IMR (2)	Yes (2)
			1 (2n=37)	L(AA) ²⁵⁾	FDR (1)	Yes (1)
			1 (2n=37)	L ¹³⁾ AA	FDR (1)	Yes (1)
	AA × LA	BC ₁	11 (2n=36)	LAA	FDR (11)	Yes (8)
			4 (2n=36)	L ¹⁰⁾ (AA) ²⁶⁾	IMR (4)	Yes (4)
			3 (2n=35)	L ¹¹⁾ AA	FDR (1)	Yes (3)
	AA × OA	BC ₁	1(2n=37)	L ¹³⁾ AA	FDR (1)	Yes (1)
			47 (2n=36)	OAA	FDR (47)	Yes (42)
			1 (2n=37)	O(AA) ²⁵⁾	FDR (1)	Yes (1)
			3 (2n=48)	OAAA	FDR (3)*	Yes (1)
			1 (2n=48)	O ¹¹⁾ (AAA) ³⁷⁾	IMR (1)*	Yes (1)
Barba-Gonzalez et al. 2005	AA × OA	BC ₁	29 (2n=36)	OAA	FDR (28), IMR (1)	Yes (19)
			2(2n=48)	OAAA	FDR (2) *	Yes (1)
			1(2n=48)	O ¹¹⁾ (AAA) ³⁷⁾	IMR (1) *	Yes (1)
	OA × AA	BC ₁	1(2n=36)	OAA	FDR (1)	No
	OOAA × OA	F ₂	1 (2n=48)	OOAA	Normal	No
1(2n=72)			OOOAAA	FDR (1) *	Yes (1)	
Luo et al. 2012	OT × OO	BC ₁	14(2n=36)	OOT	FDR (14)	Yes (13)
			1(2n=25)	(OO) ²²⁾ T ³⁾	Normal	Yes (1)
			1 (2n=27)	(OO) ²³⁾ T ⁴⁾	Normal	Yes (1)
	OO × OT	BC ₁	1 (2n=24)	(OO) ²²⁾ T ²⁾	Normal	Yes (1)
			1(2n=25)	(OO) ²³⁾ T ²⁾	Normal	No
	OOT × OO	BC ₂	3(2n=25)	OOT ¹⁾	Normal	No
			1(2n=26)	OOT ²⁾	Normal	No
			2(2n=27)	OOT ³⁾	Normal	Yes (1)
			2(2n=28)	OOT ⁴⁾	Normal	No
			1(2n=29)	OOT ⁵⁾	Normal	Yes (1)
			1(2n=32)	(AA) ²²⁾ M ¹⁴⁾	IMR (1)	Yes (1)
	MA × AA	BC ₁	1(2n=35)	AAM ¹¹⁾	FDR (1)	Yes (1)
			1(2n=32)	(AA) ²²⁾ M ¹⁰⁾	FDR (1)	Yes (1)

¹⁾ *L. longiflorum* (LL), *L. rubellum* (RR), Oriental hybrids (OO), Trumpet hybrids (TT), *L. martagon* (MM) Asiatic hybrid and its parental species (AA).

²⁾ Superscript indicates aneuploidy of genome, and without superscript indicates euploid genome (n=12)

³⁾ No of plants detected chromosome recombination.

* : Bilateral polyploidization. FDR or IMR probably occurred in the male gamete formation.