

Online Resource 20 Numbers of informative meioses across the studied germplasm for *Ma* and *Ma3* under the initial bi-allelic QTL model. Mat = maternal, Pat = paternal

Family				No. informative meioses			
#	Parents		No. offspring	<i>Ma</i>		<i>Ma3</i>	
	Maternal	Paternal		Mat	Pat	Mat	Pat
1	Aurora Golden Gala	Arlet	13	13	13		
2	Aurora Golden Gala	Enterprise	13	13	13		13
3	Aurora Golden Gala	Honeycrisp	32	32	32		
4	Cripps Pink	Aurora Golden Gala	12	12	12	12	
5	Cripps Pink	Delicious	3	3	3	3	
6	Cripps Pink	Honeycrisp	7	7		7	
7	Cripps Pink	WA 5	20	20	20	20	20
8	Cripps Pink	W1	24	24		24	
9	Delicious	Honeycrisp	9	9			
10	Enterprise	Arlet	9		9	9	
11	Honeycrisp	Arlet	15		15		
12	Honeycrisp	Cameo	1		1		
13	Honeycrisp	Enterprise	13		13		13
14	Honeycrisp	Golden Delicious	2		2		
15	Honeycrisp	Splendour	4		4		
16	W1	WA 5	23		23		23
Total			200	293		144	