

Table S1. Marker conversion from Cross Pollinated (CP) notation to Backcross 1 (BC1) notation for each marker type \diamond and phase () for QTL analysis.

Maternal meiosis		Paternal meiosis	
$\langle lm \times ll \rangle$		$\langle nn \times np \rangle$	
(0-)	(1-)	(-0)	(-1)
ll→a	ll→h	nn→a	nn→h
lm→h	lm→a	np→h	np→a
$\langle ab \times cd \rangle$		$\langle ab \times cd \rangle$	
(0-)	(1-)	(-0)	(-1)
ac and ad→a	ac and ad→h	ac and bc→a	ac and bc→h
bc and bd→h	bc and bd→a	ad and bd→h	ad and bd→a
$\langle ef \times eg \rangle$		$\langle ef \times eg \rangle$	
(0-)	(1-)	(-0)	(-1)
ee and eg→a	ee and eg→h	ee and ef→a	ee and ef→h
ef and fg→h	ef and fg→a	eg and fg→h	eg and fg→a
$\langle hk \times hk \rangle$		$\langle hk \times hk \rangle$	
(0-)	(1-)	(-0)	(-1)
hh→a	hh→b	hh→a	hh→b
hk→ -	hk→ -	hk→ -	hk→ -
kk→b	kk→a	kk→b	kk→a