

**Table S1** Origins of primer sequences for molecular markers genotyped for Sp x Stu cross. Marker types and locus in *A. thaliana* are indicated to all markers.

Chromosome	Locus name	Marker type	Locus or BAC in <i>A. thaliana</i>	Origin of primer sequences	Forward primer	Reverse primer
AL1	F20D22	Microsat	AT1G04120	Clauss <i>et al.</i> 2002		
AL1	CRY2	SNP	AT1G04400	Kuittinen <i>et al.</i> 2004		
AL1	PHYA	SNP	AT1G09570	Kuittinen <i>et al.</i> 2004		
AL1	ICE13	Microsat	AT1G13220	Clauss <i>et al.</i> 2002		
AL1	GI	SNP	AT1G22770	Kuittinen <i>et al.</i> 2004		
AL1	AthZFPG	Microsat	AT1G24625	Clauss <i>et al.</i> 2002		
AL1	ATTSO392	Microsat	AT1G30630	Clauss <i>et al.</i> 2002		
AL1	AT1G31930	SNP	AT1G31930	Ross-Ibarra <i>et al.</i> 2008		
AL1	AT1G36310	SNP	AT1G36310	Hansson <i>et al.</i> 2006		
AL1	RHL1	CAPS/ <i>Sma</i> I	AT1G48380	Kuittinen <i>et al.</i> 2004		
AL1	LAS	SNP	AT1G55580	Leppälä & Savolainen 2011		
AL1	nga280	Microsat	AT1G55840	Clauss <i>et al.</i> 2002		
AL2	AT1G64610	SNP	AT1G64610	Hansson <i>et al.</i> 2006		
AL2	AT1G62520	SNP	AT1G62520	Hansson <i>et al.</i> 2006		
AL2	F19K23	Microsat	AT1G62050	Clauss <i>et al.</i> 2002		
AL2	T15M6	Microsat	AT1G58180	Leppälä & Savolainen 2011		
AL2	FT	SNP	AT1G65480	Kuittinen <i>et al.</i> 2004		
AL2	FKF1	SNP	AT1G68050	A. Niittyvuopio		
AL2	AT1G74600	SNP	AT1G74600	Ross-Ibarra <i>et al.</i> 2008		
AL3	SPY	SNP	AT3G11540	Kuittinen <i>et al.</i> 2004		
AL3	BRC1	SNP	AT3G18550		ATTGCTCCCTTTTAGCCCTTC	TCTCTCGTCCTTGACAACCTC
AL3	DMC1	SNP	AT3G22880	Kuittinen <i>et al.</i> 2004		
AL3	ELF8	SNP	AT2G06210		GCTGCTAATGATGCGACTGAT	ACTTCCACTTGACGCTTCTTG
AL3	AGT	SNP	AT2G16870	Leppälä & Savolainen 2011		
AL3	PHYB	SNP	AT2G18790	Kuittinen <i>et al.</i> 2004		
AL3	ICE14	Microsat	AT2G20310	Clauss <i>et al.</i> 2002		
AL4	AT2G23170	SNP	AT2G23170	Ross-Ibarra <i>et al.</i> 2008		
AL4	ELF3	SNP	AT2G25930	Kuittinen <i>et al.</i> 2004		

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AL4	ATEX6	SNP	AT2G28950	Kuittinen et al. 2004		
AL4	TTG2	SNP	AT2G37260	Leppälä & Savolainen 2011		
AL4	CCA1	SNP	AT2G46830	A. Niittyvuopio		
AL4	MSAT2.22	Microsat	AT2G47960	Loudet et al. 2002		
AL5	RNS1	SNP	AT2G02990	Kuittinen et al. 2004		
AL5	GL1_A95D	SNP	AT3G27920	Kivimäki et al. 2007		
AL5	CK2alpha3	dCAPS/ <i>VspI</i>	AT3G50000		GGAAGCCTTGGTCCAAATTCAT <del>I</del> AA	CACATGTTGAGTTATGTTACGTG
AL5	AT3G54720	SNP	AT3G54720	Ross-Ibarra et al. 2008		
AL5	T10K17	Microsat	T10K17		CAAAGTTGGTGGTAGTGG	CACGCAAATTACAATCTCTG
AL5	F2809	Microsat	AT3G57320	Leppälä & Savolainen 2011		
AL5	nga112	Microsat	AT3G62650	Clauss et al. 2002		
AL5	APG1	SNP	AT3G63410		TTACCTTCCCAAGGGTTTAG	AGCTGCTAGAGTTCCCAGGAG
AL6	FLC	SNP	AT5G10140	A. Niittyvuopio		
AL6	nga151	Microsat	AT5G14480	Bell & Ecker 1994		
AL6	CO	SNP	AT5G15840	Kuittinen et al. 2004		
AL6	nga106	Microsat	AT5G16520	Bell & Ecker 1994		
AL6	AthCDPK9	Microsat	MQM1	Clauss et al. 2002		
AL6	CLC-D	SNP	AT5G26240	Kuittinen et al. 2004		
AL6	CRY1	CAPS/ <i>Bam</i> HI	AT4G08920	Kuittinen et al. 2004		
AL6	AT4G04350	SNP	AT4G04350	Ross-Ibarra et al. 2008		
AL6	AT4G00030	SNP	AT4G00030	Ross-Ibarra et al. 2008		
AL7	AP2	SNP	AT4G36920	Kuittinen et al. 2004		
AL7	AT4G28395	SNP	AT4G28395	Ponce et al. 1999		
AL7	MS5	SNP	AT4G20900	Leppälä & Savolainen 2011		
AL7	T16H5	Microsat	T16H5		TGGCAGTACCTATCTATCGTA	CGGAATTAGGGATTTCAGA
AL7	FCA	SNP	AT4G16280	Kuittinen et al. 2004		
AL7	HCF109	SNP	AT5G36170		AGAGCTTCTGCTGGTTGGAG	TCGCCAGTTGACTTCTCTCT
AL7	ATTSO191	Microsat	AT5G37780	Clauss et al. 2002		
AL7	ICE9	Microsat	AT5G40340	Clauss et al. 2002		
AL8	MJB21	Microsat	MJB21		AAAGTAAGCCAAGCGTCAT	AACTAACAAAAGCGGAGAAG

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AL8	AT5G48100	SNP	AT5G48100	Ross-Ibarra et al. 2008		
AL8	FRI	SNP & indel	AT4G00650	Kuittinen et al. 2004		
AL8	AT5G53020	SNP	AT5G53020	Ross-Ibarra et al. 2008		
AL8	ZTL	SNP	AT5G57360	A. Niittyvuopio		
AL8	TOC1	SNP	AT5G61380	A. Niittyvuopio		
AL8	MHJ24	Microsat	MHJ24	Clauss et al. 2002		
AL8	FRO1	SNP	AT5G67590	Leppälä & Savolainen 2011		