

## Appendix A Primers used in this study

Marker	Primer	Sequence	Published Size (bp)	Annealing TM	Reference	PCR profile <sup>1)</sup>
<i>VRNAI</i> Promoter region marker	VRN1-1000F	TGATGGATGTCTGGTCGGTA			Yan <i>et al.</i> (2004)	Q2SSR
	VRN1-INT1R	GCAGGAAATCGAAATCGAAG				
	VRN1AF	GAAAGGAAAAATTCTGCTCG	965+876 for <i>VRN-A1a</i>	50	Yan <i>et al.</i> (2004)	V1-50 Ramp
	VRN1-INT1R	GCAGGAAATCGAAATCGAAG	714 for <i>VRN-A1b</i>  734 for <i>VRN-A1c</i>  734 for <i>VRN-A1</i>		Zhang <i>et al.</i> (2008)	
A, B, D Genome- specific marker	VRN1AF	GAAAGGAAAAATTCTGCTCG	500	55	Yan <i>et al.</i> (2004)	Q2SSR
	VRN1BF	CAGTACCCCTGCTACCAAGTG	1000	58	Yan <i>et al.</i> (2004)	
	VRN1DF	CGACCCGGGCGGCACGAGTG	750	60	Yan <i>et al.</i> (2004)	
	VRN-R	TGCACCTTCCC <sup>(C/G)</sup> CGCCCCAT  ( <sup>C/G</sup> ): C for A genomic. G for B and D genomic				
IL 369 <i>VRN-A1</i> Deletion marker	Intr1/A/F2	AGCCTCCACGGTTTGAAAGTAA	1170	58.9	Fu <i>et al.</i> (2005)	V1-58.9 Ramp
	Intr1/A/R3	AAGTAAGACAACACGAATGTGAGA				
<i>VRN-A1</i> Non-deletion marker	Intr1/C/F	GCACTCCTAACCCACTAACC	1068	56	Fu <i>et al.</i> (2005)	V1-56 Ramp
	Intr1/AB/R	TCATCCATCATCAAGGCAAA				
TDB <i>VRN-B1</i> Deletion marker	Intr1/B/F	CAAGTGGAACGGTTAGGACA	709	58	Fu <i>et al.</i> (2005)	V1-58 Ramp
	Intr1/B/R3	CTCATGCCAAAAATTGAAGATGA				
<i>VRN-B1</i> Non-deletion marker	Intr1/B/F	CAAGTGGAACGGTTAGGACA	1149	56.4	Fu <i>et al.</i> (2005)	V1-56.4 Ramp
	Intr1/B/R4	CAAATGAAAAGGAATGAGAGCA				
TDE <i>VRN-D1</i> Deletion marker	Intr1/D/F	GTTGTCTGCCTCATCAAATCC	1671	61	Fu <i>et al.</i> (2005)	V1-61 Ramp
	Intr1/D/R3	GGTCACTGGTGGTCTGTGC				
<i>VRN-D1</i> Non-deletion marker	Intr1/D/F	GTTGTCTGCCTCATCAAATCC	997	61	Fu <i>et al.</i> (2005)	V1-61 Ramp

	Intr1/D/R4	AAATGAAAAGGAACGAGAGCG				
VA1-CAPS marker	VA1-F	TCAGATTCTAGACTGAGATGTTCAA	532“W” 456 “S”		Sherman <i>et al.</i> (2004)	Q2SSR Digested with Acil
	361S-F	AAGCCCGTTATATCACCTTA	264-bp for Spring		Sherman <i>et al.</i> (2004)	Q2SSR Digested with Acil
	361W-F	AAGCCCGTTATATCATTT	360-bp for Winter		Sherman <i>et al.</i> (2004)	Q2SSR Digested with Acil
	VA1-R	GATGTGGCTCACCATCCACG				
VRN-1 Position (MADS- Box) marker	AP1-F	TCTGATGGGAGAGGATCTTGA			Yan <i>et al.</i> (2003)	Q2SSR Hinf1 degested
	AP1-R	GGCTGAGTCTGATCTTGTGTC				
	AP1 ProDel F1	ACAGCGGCTATGCTCCAG	152		Yan <i>et al.</i> (2003)	Q2-SSR
	AP1 ProDel R1	TATCAGGTGGTTGGGTGAGG				
VRN3 marker	FT-B-INS-F	CATAATGCCAAGCCGGTGAGTAC	1200	57	Yan <i>et al.</i> (2006)	57 Ramp
	FT-B-INS-R	ATGTCTGCCAATTAGCTAGC				
	FT-B-NOINS-F	ATGCTTTCGCTTGCCATCC	1140	57	Yan <i>et al.</i> (2006)	57 Ramp
	FT-B-NOINS-F2	GCTGTGTGATCTTGCTCTCC	691	57	Yan <i>et al.</i> (2006)	57 Ramp
	FT-B-NOINS-R	CTATCCCTACCGGCCATTAG				

<sup>1)</sup>Ramp: 1, 94°C 5 min; 2, 94°C, 30 s; 3, 0.5°C/s to annealing TM; 4, annealing TM 30 s; 5, 0.2°C/s to 72°C; 6, 2°C, 30s; 7, goto step 2, 39 more times; 8, 72°C, 5 min; 9, 4°C, 5 min.

Q2SSR: 1, 95°C, 5 min; 2, 96°C, 1 min; 3, 68°C, 5 min, -2.0°C/cycle; 4, 72°C, 1 min; 5, goto step 2, 4 more times; 6, 96°C, 1 min; 7, 58°C, 2 min, -2.0°C/cycle; 8, 72°C, 1 min; 9, goto step 6, 4 more times; 10, 96°C, 1 min; 11, 50°C, 1 min; 12, 72°C, 1 min; 13, goto step 10, 24 more times; 14, 72°C, 5 min; 15, 4°C, 5 min.