

Table ESM S1: Details of SSR consensus map including marker loci, position, SSR motif, PIC value and developing laboratory of SSR markers

Linkage group	Marker Type	Marker loci ^a	BIN	Position (cM)	Map ^b	SSR motif	PIC value ^c	Developing laboratory	Reference
1H	AFLP	*E39M61-334	1H_01.1	0.00	-	-	-	-	-
1H	SSR	GBMS187		2.52	5	(GT)20	0.94	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	AFLP	*E42M51-113	1H_01.2	6.55	-	-	-	-	-
1H	RFLP	*MWG938	1H_02.1	11.63	-	-	-	-	-
1H	RFLP	*cMWG645	1H_02.2	16.65	-	-	-	-	-
1H	SSR	GBMS062		20.50	5	(AG)10	0.68	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	RFLP	*MWG837	1H_03.1	21.33	-	-	-	-	-
1H	SSR	EBmac0565a		21.86	6	(AT)7(AC)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GMS021		25.62	5, 6	(GA)17(GA)7	0.78	IPK (D. Struss)	Struss and Plieske 1998
1H	SSR	GBM1007		26.45	4, 5	(AC)11	0.61	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	Bmac0399		28.86	1, 3, 4, 6	(AC)21	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
1H	STS	*ABA004	1H_04.1	29.70	3	-	-	-	-
1H	SSR	Bmac0213		30.81	3, 5, 6	(AC)23	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	RFLP	*BCD098	1H_05.1	37.32	-	-	-	-	-
1H	RFLP	*ABG053	1H_05.2	42.17	-	-	-	-	-
1H	SSR	GBM1042		45.99	4	(AAC)5	0.50	IPK (A. Graner)	Thiel et al. 2003
1H	RFLP	*Ica1	1H_06.1	46.99	-	-	-	-	-
1H	SSR	Bmag0504		49.18	6	(AG)6,(GAGG)4, (GA)7	0.35	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0872		49.78	3	(AG)27	0.81	SCRI (R. Waugh)	Ramsay et al. 2000
1H	AFLP	*E35M61-92	1H_06.2	52.02	-	-	-	-	-
1H	SSR	Bmag0347		53.27	6	(CT)28	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	EBmac0656		56.08	6	(CA)7	0.24	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0344c		57.46	6	(CT)10GT(CT)16	0.79	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBMS014		57.78	5	(CT)15	0.83	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	Bmac0297e		57.78	5	(AC)9(AC)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	AFLP	*E37M50-192	1H_07.1	58.43	-	-	-	-	-

1H	SSR	Bmag0345	58.64	6	(CT)6AA(CT)9AA (CT)6AA(CT)7AA (CT)7	0.29	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1311	58.66	4	(AGC)9	0.24	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	EBmac0560a	58.76	1, 6	(AC)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1412	59.11	2	(AGTAG)6	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	GBMS093	59.19	5	(CT)12	0.05	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1032	59.19	4, 5	(AG)9	0.72	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	Bmag0350c	59.83	6	(AG)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBMS065	60.42	3	(AG)10	0.35	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1487	60.42	1	(AG)12	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	Bmag0103c	60.42	6	(AG)22	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0113c	60.42	6	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0211	60.42	1, 3, 4, 6	(CT)16	0.83	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0318b	60.42	6	(AG)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0770	60.42	3	(GT)13,(AG)19	0.81	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1004	60.42	4	(TAC)5	0.61	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	GBM1025	60.42	4	(AC)10	0.44	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	GBM1029	60.42	4	(AG)10	0.50	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	GBMS219a	60.52	3	(GT)14	0.84	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1451	60.52	5	(TCG)7	0.57	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	Bmac0144h	61.06	4	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1070	61.06	4	(AG)6	0.50	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	GBM1234	61.06	4	(AT)8	0.57	IPK (A. Graner)	Varshney et al. 2006
1H	RFLP	*Pcr2	61.52	-	-	-	-	-
1H	SSR	EBmac0659	61.81	6	(AC)10AT(AC)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1336	63.01	2	(CGG)8	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	GBM1480	63.30	2	(CT)11	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	Bmac0090	63.66	3, 6	(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1216	64.10	1	(CA)12	0.67	WUR (R. Niks)	Marcel et al. 2006

1H	SSR	EBmac0816		64.13	6	(CA)7,(CA)7	0.13	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmac0044		64.84	6	(AC)26	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	EBmac0405		64.84	6	(GT)16	0.21	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	EBmac0501		64.84	6	(AC)13	0.93	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	HvALAAT		64.84	6	(CT)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	RAPD	*ABR337	1H_08.2	65.07	-	-	-	-	-
1H	SSR	EBmac0695		65.31	6	(TG)18	0.50	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	HVM64		65.55	6	(GA)4(GT)7(CT)2 (GT)4(GA)8	0.18	VPISU (MA Saghai Maroof)	Li et al. 2003
1H	SSR	HVM20		66.25	6	-	-	VPISU (MA Saghai Maroof)	Liu et al. 1996
1H	SSR	GBMS037		66.52	3, 5	(TG)27	0.41	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1013		67.50	3	(CTG)9	0.50	IPK (A. Graner)	Thiel et al. 2003
1H	RFLP	*Glb1	1H_09.1	68.07	-	-	-	-	-
1H	SSR	GBM1072		68.22	4	(AT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	GBM1051		69.17	4, 5	(AGG)5	0.50	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	Bmag0228a		70.58	6	(AG)13	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1334		70.69	4	(GGC)8	0.49	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	HVM22b		71.88	1	(AC)13	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
1H	SSR	Bmac0063		72.52	6	(AC)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1153		73.37	2	(CCG)5	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	Bmag0105		73.47	6	(AG)10	0.24	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmac0032	1H_09.2	73.74	1, 3, 4, 5, 6	(AC)7T(CA)15(AT)9	0.61	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBMS017		75.08	5	(TG)11	0.32	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	AFLP	*E33M61-347	1H_09.3	78.62	-	-	-	-	-
1H	SSR	scssr10477		79.09	4	(GAG)4	0.82	SCRI (R. Waugh)	Ramsay et al. 2004
1H	SSR	GBM1411		79.91	4	(TCTT)6	0.24	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	Bmag0103b		82.00	6	(AG)22	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	AFLP	*E45M61-160	1H_10.1	83.43	-	-	-	-	-
1H	RFLP	*His4A	1H_10.2	87.23	-	-	-	-	-
1H	SSR	Bmac0154		87.83	6	(AT)19/(AC)6	nd	SCRI (R. Waugh)	Ramsay et al. 2000

1H	SSR	Bmac0144a	1H_11.1	91.79	4, 6	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	GBM1092		91.79	4	(CT)7	0.24	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	GBM1143		92.93	4	(AG)7	0.49	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	GBM5162		93.12	1	(CGG)7	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	GBM1371		93.12	1, 3	(CGG)7	0.41	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	Bmag0113h		93.50	4	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
1H	RFLP	*cMWG649B	1H_11.2	96.82	-	-	-	-	-
1H	SSR	GBMS054		97.17	3	(CA)9	0.69	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBMS128c		98.92	1	(GT)12	0.74	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1272		99.67	4	(TGA)8	0.41	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	Bmag0382		99.69	5, 6	(AG)7AA(AG)7	0.36	SCRI (R. Waugh)	Ramsay et al. 2000
1H	RFLP	*cMWG706A	1H_12.1	101.50	-	-	-	-	-
1H	SSR	GBM1002		101.50	5	(CCT)7	0.50	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	HvHVA1		102.49	6	(ACC)5	0.34	SCRI (R. Waugh)	Ramsay et al. 2000
1H	RFLP	*ABC257	1H_12.2	106.92	-	-	-	-	-
1H	RFLP	*cMWG733	1H_13.1	112.29	-	-	-	-	-
1H	RFLP	*ABG702	1H_13.2	118.97	-	-	-	-	-
1H	SSR	GBMS053		120.62	3, 5	(GT)11	0.36	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBMS012		123.66	3	(CT)11(CA)20	0.85	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	RFLP	*ABC261	1H_14.1	125.88	-	-	-	-	-
1H	SSR	GBM1278		126.02	3	(GCT)7	0.49	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	GBM1308		128.38	1	(CCG)9	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	GMS149		129.52	3	-	-	IPK (D. Struss)	Struss and Plieske 1998
1H	RFLP	*MWG632B	1H_14.2	130.39	-	-	-	-	-
1H	SSR	GBM1061		130.75	4	(GGT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
1H	SSR	WMC1E8		131.93	3, 4, 5, 6	(AC)24	0.43	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	Bmag0579		132.84	3, 6	(AC)6(AG)15	0.50	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	scssr02748		133.46	4	(CT)12	0.48	SCRI (R. Waugh)	Ramsay et al. 2004
1H	SSR	GBMS143		134.19	3	(CA)8	0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1461	1H_14.3	135.94	1, 3	(CA)6n(CA)18	0.73	IPK (A. Graner)	Varshney et al. 2006

1H	SSR	GBMS184		135.97	3	(GT)5 (GA)14	0.62	IPK (M Röder, Martin Ganal)	Li et al. 2003
1H	SSR	GBM1434		136.38	3	(AAG)7	0.41	IPK (A. Graner)	Varshney et al. 2006
1H	SSR	GBM1314		138.33	1	(GAG)9	0.44	WUR (R. Niks)	Marcel et al. 2006
1H	SSR	EBmac0783		138.49	6	(CA)5	0.12	SCRI (R. Waugh)	Ramsay et al. 2000
1H	SSR	scssr04163		139.81	4	(GAA)5	nd	SCRI (R. Waugh)	Ramsay et al. 2004
1H	SSR	scssr08238		139.81	4	(CAA)12	nd	SCRI (R. Waugh)	Ramsay et al. 2004
1H	SSR	GBM1204		139.81	4	(GGTT)5	0.24	IPK (A. Graner)	Varshney et al. 2006
2H	RFLP	*MWG844A	2H_01.1	2.40	-	-	-	-	-
2H	RFLP	*ABG313A	2H_01.2	5.58	-	-	-	-	-
2H	SSR	GBMS247		8.11	3	(GT)9	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	Bmac0134		10.87	1, 4, 5, 6	(AC)28	0.76	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*ABG703B	2H_02.1	11.26	-	-	-	-	-
2H	SSR	GBMS031		11.84	3, 5	(AG)14	0.44	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	AFLP	*E37M33-160	2H_02.2	14.77	-	-	-	-	-
2H	RFLP	*MWG878	2H_03.1	18.99	-	-	-	-	-
2H	SSR	GBM1187		19.51	1, 3	(CCG)5	0.49	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1281		20.79	4	(GCT)7	0.57	IPK (A. Graner)	Varshney et al. 2006
2H	AFLP	*E42M48-308	2H_03.2	25.14	-	-	-	-	-
2H	SSR	GBMS090		25.67	5	(GA)17n(G)11	0.95	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBM1035		29.46	3	(CT)8	0.61	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	GBM1121		29.46	1, 3	(AG)7	0.69	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	HVM36		30.97	1, 6	(GA)13	0.77	VPISU (MA Saghai Maroof)	Liu et al. 1996
2H	RFLP	*ABG318	2H_04.1	32.94	-	-	-	-	-
2H	SSR	GBM5018		33.20	1	(CCG)8	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	GBMS002		37.94	3	(GA)14	0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	AFLP	*E33M61-135	2H_04.2	38.59	-	-	-	-	-
2H	SSR	GBM1052		40.37	1, 3	(ATC)5	0.50	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	Bmac0222		41.60	6	(AC)23	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*ABG358	2H_05.1	43.27	-	-	-	-	-
2H	SSR	GBMS229		43.27	3	(GT)10	0.67	IPK (M Röder, Martin Ganal)	Li et al. 2003

2H	SSR	GBMS235	43.27	5	(TC)12n(TC)23	0.80	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBM1214	43.27	5	(CA)15	0.65	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	Bmag0692	46.23	6	(CT)19	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBMS066	46.61	5	(CA)10	0.65	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	scssr10226	46.63	4	(GA)9	nd	SCRI (R. Waugh)	Ramsay et al. 2004
2H	AFLP	*E32M61-226	2H_05.2 48.13	-	-	-	-	-
2H	SSR	scssr07759	48.58	4	(GCA)6 (CAG)8	0.55	SCRI (R. Waugh)	Ramsay et al. 2004
2H	SSR	GBMS137	48.64	3, 5	(GA)40	0.86	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBM1523	49.26	3	(CTC)7	0.65	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1011	49.90	4	(CTT)7	0.44	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	GBM1066	49.90	4	(ATGG)5	0.32	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	Bmac0218a	51.14	4, 6	(AC)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*Pox	2H_06.1 53.58	-	-	-	-	-
2H	SSR	GBM1446	58.13	1	(CAC)8	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	AFLP	*E38M54-169	2H_06.2 58.58	-	-	-	-	-
2H	SSR	GBM1251	58.80	4	(AG)10	0.49	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBMS233	59.22	5	(TG)8n(GT)3	0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	HvXan	62.69	6	(CCT)6	0.10	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*B15C	2H_07.1 63.00	-	-	-	-	-
2H	SSR	scssr03381	63.61	4	(GT)7	nd	SCRI (R. Waugh)	Ramsay et al. 2004
2H	SSR	Bmac0144g	63.65	6	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1459	64.35	1, 3	(AC)7	0.65	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	EBmac0615	65.09	6	(TG)5CG(TG)3, (TG)10	0.23	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM5230	65.16	1	(AT)6	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	GBM1172	65.84	1	(CCT)8	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	GMS003	66.05	6	(GT)15	0.63	IPK (D. Struss)	Struss and Plieske 1999, Li et al. 2003
2H	SSR	HvKASI	67.01	6	(C)10	0.17	MPIZ (M. Heun)	Becker and Heun 1995
2H	SSR	HVM23	67.01	6	(GA)9	nd	VPISU (MA Saghai Maroof)	Li et al. 2003

2H	SSR	HVM26	67.01	6	(CA)11	nd	VPISU (MA Saghai Maroof)	Li et al. 2003
2H	SSR	HVM63	67.01	6	(GA)9	nd	VPISU (MA Saghai Maroof)	Li et al. 2003
2H	SSR	Bmac0093	67.01	6	(AC)24	0.81	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0129b	67.01	6	(AC)28	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0132	67.01	6	(AC)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0175c	67.01	6	(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0576	67.01	6	(GT)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0578	67.01	6	(AC)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0015	67.01	6	(AG)8	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	EBmac0521	67.01	5, 6	(AC)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	EBmac0557	67.01	6	(AC)8	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	EBmac0607	67.01	6	(TG)7,(TG)6(GA)10, (AG)6	0.38	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	EBmac0623	67.01	6	(TG)11,(GA)10, (AG)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	EBmac0849	67.01	6	(GT)5(TG)10TA (TG)13	0.24	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	HvTUB	67.01	6	(AGC)8	0.10	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1366	67.22	2	(CAT)7	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	GBMS103	67.97	3	(GT)19	0.52	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	EBmac0715	67.97	3, 6	(GT)9,(TG)6(GA)10 (AAG)2(AG)6	0.35	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*ABC468	2H_08.1 68.76	-	-	-	-	-
2H	SSR	EBmac0640	68.78	6	(GT)10,(TG)6(GA)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1158	69.52	1	(GGT)7	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	GBM1203	69.58	1	(AT)6	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	EBmac0684b	69.58	1, 4	(TA)7(TG)11,(TG)11 (TTG)5	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	EBmac0558	69.72	5, 6	(AC)7	0.18	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBMS011	69.72	5	(AG)14	0.75	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	EBmac0854	70.39	6	(GT)9,(GCGT)3,(GT)	0.35	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1023	70.80	4	(AC)8	0.28	IPK (A. Graner)	Thiel et al. 2003

2H	SSR	scssr00334	70.98	4	(CA)10	0.09	SCRI (R. Waugh)	Ramsay et al. 2004
2H	SSR	GBM1024	70.98	4	(AC)11	0.50	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	EBmac0525	70.98	4, 6	(AC)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	scssr12344	71.06	4	(GT)8	nd	SCRI (R. Waugh)	Ramsay et al. 2004
2H	SSR	Bmag0742	72.01	3	(TC)29	0.35	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0518	72.01	3, 6	(TC)23	0.66	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1119	72.09	4	(CCG)8	0.45	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1225	72.09	4	(CA)9	0.45	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1232	72.16	4	(CA)8	0.45	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	scssr02236	72.30	4	(GT)13	nd	SCRI (R. Waugh)	Ramsay et al. 2004
2H	SSR	Bmag0720	72.46	3	(GT)6,(AG)49	0.84	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1218	72.46	3, 4	(GA)11	0.69	IPK (A. Graner)	Varshney et al. 2006
2H	AFLP	*E33M55-420	2H_08.2 73.64	-	-	-	-	-
2H	SSR	Bmag0829	74.56	3	(GA)28	0.81	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0115	75.05	6	(AG)21	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBMS188	75.19	3	(GA)19	0.68	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBMS230	75.19	3	(GT)9	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBMS160	75.31	3	(GA)14	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBMS095	75.43	3	(CT)4n(CT)10	0.64	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBMS202	75.66	3	(GT)12	0.89	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	Bmag0378	76.11	4, 6	(AG)14	0.79	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	HVHOTR1	76.16	6	(CAA)6	0.12	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0381	76.22	6	(CT)7(ATCT)6 (CT)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0140	76.26	3, 6	(AG)15	0.35	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0350a	76.57	6	(AG)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0571d	76.57	6	(GA)25	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBMS075b	76.90	3	(AT)8(GT)16	0.94	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	RFLP	*ABC451	2H_09.1 78.45	-	-	-	-	-
2H	SSR	EBmac0850	78.49	6	(AC)13AT(AC)10A (AC)5	nd	SCRI (R. Waugh)	Ramsay et al. 2000

2H	SSR	Bmag0711		79.52	3	(GA)21	0.84	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0113e		79.78	4	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1365		80.06	3	(GGC)7	0.41	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	EBmac0737		80.10	6	(TG)17	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0192c		81.70	6	(AC)25	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*MWG865	2H_10.1	84.06	-	-	-	-	-
2H	SSR	GBM1468		84.06	2	(CT)7	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	Bmac0144f		86.13	4	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0003c		86.39	6	(AG)28	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmac0216		88.97	6	(AC)5	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Hv5s		88.97	6	(AGT)5	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1408		89.44	1	(TGCA)5	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	Bmac0144i		89.83	4	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	Bmag0125		89.83	1, 3, 4, 5, 6	(AG)19	0.76	SCRI (R. Waugh)	Ramsay et al. 2000
2H	AFLP	*E37M33-162	2H_10.2	91.43	-	-	-	-	-
2H	SSR	EBmatc0039		93.26	6	(ATC)5	0.40	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1328		93.65	1	(GCG)8	nd	WUR (R. Niks)	Marcel et al. 2006
2H	RFLP	*MWG503	2H_11.1	95.05	-	-	-	-	-
2H	SSR	GBM1062		95.73	4	(AAAC)5	0.44	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	GBM1440		96.34	1	(AG)6	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	Bmac0144b		99.81	4, 6	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
2H	RFLP	*MWG882	2H_11.2	100.50	-	-	-	-	-
2H	SSR	GBMS244		102.68	5	(GT)10	0.64	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBM1208		102.85	4	(AG)6	0.24	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1309		107.18	4	(CCG)9	0.61	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1149		107.89	4	(CT)7	0.50	IPK (A. Graner)	Varshney et al. 2006
2H	RFLP	*ksuD22	2H_12.1	108.85	-	-	-	-	-
2H	SSR	GBM1469		112.74	1	(AG)7	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	AFLP	*E33M54-307	2H_12.2	113.17	-	-	-	-	-

2H	SSR	EBmac0415		117.86	2, 4, 6	(AC)17	0.58	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1016		117.86	4	(ATCC)6	0.50	IPK (A. Graner)	Thiel et al. 2003
2H	RFLP	*CDO373	2H_12.3	118.53	-	-	-	-	-
2H	SSR	GBMS040		118.53	3	(AG)18	0.23	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	HVM54		122.41	1, 3, 6	(GA)14	0.78	VPISU (MA Saghai Maroof)	Liu et al. 1996
2H	SSR	GBM1437		122.85	2	(AG)8	nd	WUR (R. Niks)	Marcel et al. 2006
2H	RFLP	*ABC252	2H_13.1	123.04	-	-	-	-	-
2H	SSR	GBM1200		124.80	1	(AGC)5	0.44	WUR (R. Niks)	Marcel et al. 2006
2H	SSR	GBM1498		125.71	4	(GA)6	0.65	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1047	2H_13.2	129.66	1, 4	(AGC)5	0.61	IPK (A. Graner)	Thiel et al. 2003
2H	RFLP	*ABC165A	2H_14.1	135.78	-	-	-	-	-
2H	SSR	GBM1462		137.85	1, 4	(GCA)8	0.61	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1019		138.70	4	(AC)7	0.67	IPK (A. Graner)	Thiel et al. 2003
2H	AFLP	*E37M33-501	2H_14.2	140.64	-	-	-	-	-
2H	RFLP	*CDO036	2H_15.1	144.83	-	-	-	-	-
2H	SSR	Bmag0749		147.93	1, 3	(AG)11	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
2H	SSR	GBM1475		149.47	1, 2, 3, 4	(CTCA)5n(TC)8	0.61	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1012	2H_15.2	149.81	1, 2, 3, 4	(CTG)7	0.67	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	GBMS216		153.52	1, 2, 5	(GA)33	0.77	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	CAPS	*MWG2200	2H_15.3	154.42	-	-	-	-	-
2H	SSR	GBMS128b		155.98	1, 5	(GT)12	0.74	IPK (M Röder, Martin Ganal)	Li et al. 2003
2H	SSR	GBM1421		156.38	4	(ACACAA)5	0.49	IPK (A. Graner)	Varshney et al. 2006
2H	SSR	GBM1036		156.39	3, 4	(CT)8	0.61	IPK (A. Graner)	Thiel et al. 2003
2H	SSR	scssr08447		156.49	4	(GAT)6	0.38	SCRI (R. Waugh)	Ramsay et al. 2004
3H	RFLP	*BCD907	3H_01.0	0.00	-	-	-	-	-
3H	SSR	GBM1280		3.83	4	(CTT)7	0.57	IPK (A. Graner)	Varshney et al. 2006
3H	RFLP	*ABG070	3H_01.1	4.66	-	-	-	-	-
3H	SSR	GBMS085		8.45	3	-	-	IPK (M Röder, Martin Ganal)	unpublished
3H	AFLP	*E35M48-250	3H_01.2	10.67	-	-	-	-	-
3H	SSR	GBM1450		13.94	3	(T)10(TG)6	0.41	IPK (A. Graner)	Varshney et al. 2006

3H	AFLP	*E42M55-233	3H_02.1	15.04	-	-	-	-	-
3H	SSR	GBM1078		15.39	4	(CT)6	0.61	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1382		16.32	3	(CTTA)8	0.45	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1010		17.38	4	(CCT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	HvLTPPB	3H_03.1	20.49	1, 4, 6	(AC)10(AT)5	0.61	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	EBmac0705		20.49	6	(AC)16	0.46	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1040		20.49	4	(GT)10	0.28	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBM1073		20.49	4	(CT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBM1074		20.49	4	(CT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBM1159		20.49	4	(AC)6	0.24	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	EBmac0565b		20.49	6	(AT)7(AC)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	scssr10559		23.26	4	(CA)10	0.65	SCRI (R. Waugh)	Ramsay et al. 2004
3H	RFLP	*MWG798B	3H_04.1	26.45	-	-	-	-	-
3H	CAPS	*MWG584	3H_04.2	30.97	-	-	-	-	-
3H	SSR	GBM1284		31.95	2	(GTC)6	0.44	WUR (R. Niks)	Marcel et al. 2006
3H	AFLP	*E32M60-226	3H_05.1	36.51	-	-	-	-	-
3H	AFLP	*E38M55-320	3H_05.2	40.14	-	-	-	-	-
3H	AFLP	*E37M60-144	3H_06.0	45.01	-	-	-	-	-
3H	SSR	Bmag0023		46.28	6	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1300		47.34	4	(ATC)6	0.24	IPK (A. Graner)	Varshney et al. 2006
3H	RFLP	*ABG396	3H_06.1	48.37	-	-	-	-	-
3H	SSR	GBMS046		49.46	3, 5	(AG)32	0.60	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS157		49.54	3	(GT)10	0.54	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBM1413		49.69	4	(TCATA)6	0.57	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	Bmac0067		49.76	4, 5, 6	(AC)18	0.82	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBMS057		49.84	5	(CT)9	0.49	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS117		49.84	5	(CT)9	0.58	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS139b		49.84	5	(CA)10	0.85	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS166		49.84	5	(CA)6n(CA)9	0.74	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	Bmag0006		50.14	5, 6	(AG)17	0.64	SCRI (R. Waugh)	Ramsay et al. 2000

3H	SSR	Bmag0010c	50.14	6	(CT)19	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1031	50.26	5	(AG)15	0.67	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBM1425	50.55	4	(GCAGCG)5	0.24	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	Bmac0043	50.57	6	(AC)11	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBMS185	50.57	3	(GA)14	0.51	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS189	50.57	3	(GA)32	0.64	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS198	50.57	3	(CA)4GA	0.57	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS223b	50.57	3	(GT)14	0.91	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS050	50.67	3, 5	(AC)13(AG)14	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	Bmag0905	50.87	3	(TC)14	0.37	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	HVM27	51.00	5, 6	(GA)14	0.66	VPISU (MA Saghai Maroof)	Liu et al. 1996
3H	SSR	GBMS149	51.05	3, 5	(CAT)24	0.64	IPK (M Röder, Martin Ganal)	unpublished
3H	SSR	HVM44	51.06	6	(GA)8	0.18	VPISU (MA Saghai Maroof)	Li et al. 2003
3H	SSR	Bmag0121b	51.06	6	(AG)21/(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0131	51.06	5, 6	(AG)16G(AG)15	0.87	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBMS110	51.28	3	(GA)21	0.67	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBM1444	51.46	3	(CGG)7n(AGA)7	0.73	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBMS089	51.61	3, 5	(GA)9	0.69	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS147	51.61	3	(GT)18	0.20	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS140	51.80	3, 5	(CA)19(AT)15	0.89	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	Bmac0273c	52.02	3	(AC)20(AG)20	0.63	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1139	52.02	1, 3	(ATG)6	0.49	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1213	52.03	1, 3	(TC)17	0.65	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	Bmag0136	52.09	1, 2, 4, 6	(AG)6-(AG)10-	0.33	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBMS048	52.17	3	(AG)8n(AG)10	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	Bmac0129a	52.39	6	(AC)28	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmac0192b	52.39	6	(AC)25	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmac0209	52.39	1, 2, 4, 5, 6	(AC)13	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0508a	52.56	6	(AG)14	0.14	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1094	52.67	1, 3	(CT)7	0.45	IPK (A. Graner)	Varshney et al. 2006

3H	SSR	Bmag0122	52.73	6	(AG)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBMS212	52.78	3	(GA)14	0.49	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	Bmag0482c	52.82	6	(AG)17	0.61	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0828	52.82	3	(TC)39	0.81	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0482a	52.91	6	(AG)17	0.61	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0138a	52.99	3, 6	(AG)6(AG)15	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1123	53.24	4	(AC)8	0.41	IPK (A. Graner)	Varshney et al. 2006
3H	AFLP	*E38M61-521	3H_06.2 53.36	-	-	-	-	-
3H	SSR	Bmag0113b	53.57	4, 6	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0318a	53.57	6	(AG)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0350b	53.57	6	(AG)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBMS203a	54.05	3	(GT)14	0.06	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	Bmag0603	54.55	3, 6	(AG)24	0.78	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1242	55.43	4	(AG)13	0.57	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	EBmac0871	57.62	6	(TG)13	0.67	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*MWG571B	3H_07.1 59.54	-	-	-	-	-
3H	SSR	GBM1163	60.27	1	(AGC)7	0.44	WUR (R. Niks)	Marcel et al. 2006
3H	SSR	GBM1110	60.27	1, 3, 4	(AAG)6	0.61	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1495	62.57	4	(GCA)8	0.57	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBMS102	62.99	3	(CA)10	0.52	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	HVM33	65.50	6	(CA)7	0.47	VPISU (MA Saghai Maroof)	Li et al. 2003
3H	SSR	Bmac0127b	65.50	6	(AC)26	0.83	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0112	65.50	6	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*ABC176	3H_07.2 65.76	-	-	-	-	-
3H	SSR	GBM1253	66.38	4	(AG)9	0.65	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1162	67.36	4	(CCT)6	0.24	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBMS022	68.01	3	(GT)20	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	scssr25691	68.16	4	(CA)17	0.37	SCRI (R. Waugh)	Ramsay et al. 2004
3H	SSR	GBM1090	68.32	1	(AG)8	0.44	WUR (R. Niks)	Marcel et al. 2006
3H	SSR	GBM5047	68.32	1	(AG)8	nd	WUR (R. Niks)	Marcel et al. 2006

3H	SSR	GMS116A		69.16	3, 6	(CA)16n(CA)4	0.48	IPK (D. Struss)	Struss and Plieske 1998
3H	RFLP	*ABG377	3H_08.1	70.33	-	-	-	-	-
3H	SSR	HVM60		73.19	4, 6	(AG)11,(GA)14	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
3H	RFLP	*MWG555B	3H_08.2	74.55	-	-	-	-	-
3H	SSR	Bmag0225		75.54	1, 3, 4, 6	(AG)26	0.42	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1034		75.54	3	(AT)7	0.61	IPK (A. Graner)	Thiel et al. 2003
3H	RFLP	*ABG453	3H_09.1	77.33	-	-	-	-	-
3H	SSR	GBMS074		78.37	3, 5	(CA)22	0.77	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS045		80.52	5	(AC)11	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	SSR	GBMS204		80.52	5	(GT)10	0.64	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	RAPD	*ABR320	3H_09.2	83.28	-	-	-	-	-
3H	SSR	GBM1405		86.33	4	(CGCA)5	0.69	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1014		87.47	4	(CTG)6	0.44	IPK (A. Graner)	Thiel et al. 2003
3H	RFLP	*ABG499	3H_10.1	87.83	-	-	-	-	-
3H	SSR	GBM1233		89.66	4	(CG)8	0.78	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	GBM1043		90.39	4	(AAC)5	0.61	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	Bmag0841		91.21	3	(TC)8(CCTC)4, (CT)11	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0010b		93.23	6	(CT)19	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*CDO113B	3H_11.1	94.68	-	-	-	-	-
3H	SSR	Bmag0606		101.77	3, 6	(CT)22	0.87	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*His4B	3H_12.1	102.13	-	-	-	-	-
3H	SSR	GBM1226		102.22	2	(GA)9	0.44	WUR (R. Niks)	Marcel et al. 2006
3H	SSR	Bmag0306b		104.15	6	(AG)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*MWG847	3H_12.2	107.19	-	-	-	-	-
3H	RFLP	*ABG004	3H_13.1	111.42	-	-	-	-	-
3H	SSR	Bmag0013		113.70	1, 4, 6	(CT)21	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*WG110	3H_13.2	116.32	-	-	-	-	-
3H	RFLP	*ABC161	3H_14.1	121.18	-	-	-	-	-
3H	SSR	GBM1118		122.54	1	(CGT)7	nd	WUR (R. Niks)	Marcel et al. 2006
3H	SSR	GBM1037		122.84	1, 3	(CT)8	0.50	IPK (A. Graner)	Thiel et al. 2003

3H	SSR	Bmag0877		124.98	3	(GA)15	0.77	SCRI (R. Waugh)	Ramsay et al. 2000
3H	STS	*ABA302	3H_14.2	126.08	3	-	-	-	-
3H	SSR	GBM1050		128.98	4	(AGG)5	0.44	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBM1056		128.98	4, 5	(CGG)6	0.50	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBM1059		128.99	4, 5	(GGT)5	0.61	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	GBMS038		131.31	3, 5	(TC)22	0.83	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	RFLP	*ABC174	3H_15.1	132.39	-	-	-	-	-
3H	SSR	GBM1288		134.92	1	(CTG)6	0.44	WUR (R. Niks)	Marcel et al. 2006
3H	RFLP	*Glb3	3H_15.2	136.11	-	-	-	-	-
3H	SSR	Bmac0144k		136.17	4	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	EBmac0541		137.16	3, 6	(AC)9	0.26	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	HVM62		139.43	1, 3, 4, 6	(GA)11	0.68	VPISU (MA Saghai Maroof)	Liu et al. 1996
3H	RFLP	*Adh10	3H_15.3	140.48	-	-	-	-	-
3H	SSR	EBmac0708		142.33	6	(AT)5(GT)16CT (GT)5(GC)6	0.79	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	Bmag0853		144.10	3	(GA)15	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
3H	SSR	GBM1046		144.10	3	(AGC)6	0.28	IPK (A. Graner)	Thiel et al. 2003
3H	SSR	EBmag0705		145.35	3, 6	(TC)31	0.80	SCRI (R. Waugh)	Ramsay et al. 2000
3H	RFLP	*ABC166	3H_16.1	146.66	-	-	-	-	-
3H	SSR	GBM1238		146.66	3	(AC)21	0.24	IPK (A. Graner)	Varshney et al. 2006
3H	SSR	HVM70a		150.63	6	(CA)7	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
3H	RFLP	*ABG319B	3H_16.2	152.30	-	-	-	-	-
3H	SSR	GBM1420		152.53	1	(CAAGA)5	0.44	WUR (R. Niks)	Marcel et al. 2006
3H	SSR	Bmac0029		156.87	4, 5, 6	-	-	SCRI (R. Waugh)	Commercialised
3H	SSR	GBMS138		156.87	5	(GT)11	0.52	IPK (M Röder, Martin Ganal)	Li et al. 2003
3H	RFLP	*ABC172	3H_16.3	157.51	-	-	-	-	-
3H	SSR	scssr25538		157.51	4	(CT)8	nd	SCRI (R. Waugh)	Ramsay et al. 2004
3H	SSR	GBM1069		157.51	4	(AC)6	0.28	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	GBM1501		0.00	4	(TAGA)6	0.41	IPK (A. Graner)	Varshney et al. 2006
4H	RFLP	*MWG634	4H_01.1	2.40	-	-	-	-	-

4H	SSR	GBMS028		4.93	5	(GT)11	0.26	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	RFLP	*MWG2282	4H_01.2	5.96	-	-	-	-	-
4H	AFLP	*P15M51-424	4H_01.3	9.77	-	-	-	-	-
4H	RFLP	*ABG313B	4H_02.1	14.13	-	-	-	-	-
4H	SSR	GBM1221		14.65	1, 3, 4	(AC)10	0.69	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1465		17.06	4	(GCT)7	0.41	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1525		17.06	4	(AG)8	0.41	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1055		18.43	4	(CCT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
4H	AFLP	*E42M40-94	4H_02.2	19.07	-	-	-	-	-
4H	SSR	HVM40		22.40	1, 2, 3, 4	(GA)6(GT)4(GA)7	0.58	VPISU (MA Saghai Maroof)	Liu et al. 1996
4H	SSR	Bmac0273d		22.40	3	(AC)20(AG)20	0.63	SCRI (R. Waugh)	Ramsay et al. 2000
4H	AFLP	*E42M32-682	4H_03.1	26.23	-	-	-	-	-
4H	SSR	GBMS114		26.49	3, 5	(CT)9	0.62	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	GBM1252		27.35	1	(AG)9	0.44	WUR (R. Niks)	Marcel et al. 2006
4H	SSR	GBM1323		28.96	4	(GCC)8	0.73	IPK (A. Graner)	Varshney et al. 2006
4H	RFLP	*LoxA	4H_03.2	31.06	-	-	-	-	-
4H	RFLP	*BCD402B	4H_04.1	35.77	-	-	-	-	-
4H	SSR	GBM1482		36.81	3	(GAA)5n(GAA)9	0.61	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	HVKNOX3	4H_04.2	40.19	4	(AG)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBMS087		41.26	3	(CT)15	0.74	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	scssr20569		44.87	4	(GT)14	0.67	SCRI (R. Waugh)	Ramsay et al. 2004
4H	AFLP	*E37M33-189	4H_05.1	45.31	-	-	-	-	-
4H	SSR	HvOLE		45.76	6	(GCCT)4	0.26	SCRI (R. Waugh)	Ramsay et al. 2000
4H	RFLP	*ABC303	4H_05.2	50.30	-	-	-	-	-
4H	SSR	Bmag0740		50.86	3	(CT)28	0.78	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1028		50.86	3	(AC)7	0.28	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	GBMS029		51.20	5	(AC)12(AT)14	0.84	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	Bmag0014		52.48	6	(CT)15	0.28	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBMS133		53.04	3	(CA)17(AT)12	0.74	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	GBMS203b		53.04	3	(GT)14	0.07	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	Bmag0808		53.04	3	(GA)16	0.84	SCRI (R. Waugh)	Ramsay et al. 2000

4H	SSR	GMS089	53.04	3, 6	(GA)21	0.74	IPK (D. Struss)	Struss and Plieske 1998
4H	SSR	Bmag0110b	53.20	6	(AG)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	RFLP	*ABG484	4H_06.1 54.63	-	-	-	-	-
4H	SSR	GBM1452	54.87	4	(GTG)7	0.57	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	EBmac0906	54.98	3, 5, 6	(GC)5n(GT)16	0.75	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0113g	56.28	4	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	EBmac0691	56.31	6	(CA)3CG(CA)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0350d	56.76	6	(AG)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1236	57.15	4	(AG)23	0.61	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1422	57.15	4	(CTGTAT)9	0.24	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1364	57.23	1	(CGG)7	0.44	WUR (R. Niks)	Marcel et al. 2006
4H	SSR	EBmag0781	57.42	6	(CT)21	0.37	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0303c	57.50	4	(AG)13(AC)21	0.68	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0218	57.50	4	(AG)6(AG)6	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0306a	57.50	6	(AG)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0375	57.50	6	(AG)19	0.68	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0384	57.50	1, 4, 6	(AG)18	0.76	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1067	57.91	4	(TGC)5	0.28	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	HVM03	58.33	2, 4, 5, 6	(AT)29	0.82	VPISU (MA Saghai Maroof)	Liu et al. 1996
4H	SSR	scssr18005	58.33	4	(GA)11	0.25	SCRI (R. Waugh)	Ramsay et al. 2004
4H	SSR	Bmac0047b	58.51	6	(AC)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0084	58.51	6	(AC)13	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0181	58.51	5, 6	(AC)20	0.75	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0297b	58.51	6	(AC)9(AC)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0297d	58.51	5	(AC)9(AC)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0298	58.51	6	(AC)11	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0299	58.51	6	(AC)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0577	58.51	6	(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	EBmac0540	58.51	6	(AC)8	0.26	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	EBmacc0009	58.51	6	(CAA)14(CAC)7 (CAA)4	0.47	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmag0344b	58.52	6	(CT)10GT(CT)16	0.79	SCRI (R. Waugh)	Ramsay et al. 2000

4H	SSR	EBmac0669		58.52	6	(AC)8	0.23	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0030		58.60	6	(AC)22	0.77	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0144d		58.61	6	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBMS049		58.71	5	(AG)14	0.72	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	Bmac0192d		58.80	6	(AC)25	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	HVM77		58.95	5	(CA)7	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
4H	SSR	HVM13		58.95	5, 6	(GA)6,(GA)6,(GA)6	0.10	VPISU (MA Saghai Maroof)	Liu et al. 1996
4H	SSR	GBMS081		58.96	5	(AG)12	0.65	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	RFLP	*PBI25	4H_06.2	59.79	-	-	-	-	-
4H	SSR	GBMS150		59.79	3, 5	(CT)12	0.35	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	Bmag0490		62.19	3, 6	(AG)24	0.73	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	HVM68		62.52	5, 6	(GA)22	0.81	VPISU (MA Saghai Maroof)	Liu et al. 1996
4H	SSR	GBM1509		63.21	1, 3	(GCA)6	0.57	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	Bmac0186		63.89	4, 6	(AC)7	0.60	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1020		64.05	4	(AC)7	0.44	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	Bmac0310		64.37	5, 6	(CT)11(AC)20	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	EBmac0775		64.37	6	(TG)4TT(TG)17	0.78	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1071		64.47	4	(AG)6	0.44	IPK (A. Graner)	Thiel et al. 2003
4H	RFLP	*bBE54A	4H_07.1	64.84	-	-	-	-	-
4H	SSR	Bmag0353		65.01	1, 4, 6	(AG)21	0.67	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	Bmac0175a		66.40	6	(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBMS015		66.75	3, 5	(GT)19	0.49	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	AFLP	*P17M54-205	4H_07.2	69.75	-	-	-	-	-
4H	SSR	GBM1299		72.04	4	(CAG)6	0.49	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM5210		72.93	1	(AAAG)5	0.44	WUR (R. Niks)	Marcel et al. 2006
4H	RFLP	*BCD453B	4H_08.1	73.92	-	-	-	-	-
4H	SSR	EBmac0658		75.59	6	(GT)8	0.24	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1350	4H_08.2	78.23	1, 3	(CCG)7	0.57	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	scssr14079		78.92	4	(AG)6	0.27	SCRI (R. Waugh)	Ramsay et al. 2004

4H	SSR	GBM1003		79.53	4	(CTT)8	0.67	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	GBM1044		79.53	4	(AAG)6	0.72	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	GBM1009		79.72	4	(AGG)7	0.28	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	GBMS190		80.30	5	(GA)10	0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	RFLP	*ABG319A	4H_09.1	83.57	-	-	-	-	-
4H	AFLP	*E39M61-367	4H_09.2	89.12	-	-	-	-	-
4H	RFLP	*KFP221	4H_10.1	92.74	-	-	-	-	-
4H	SSR	EBmac0635		93.06	3, 6	(AC)23	0.54	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	EBmac0679		94.50	3, 6	(AC)22	0.80	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	MGB84 (HVBAMY)		95.92	3	-	-	Univ Bonn (K. Pillen)	Pillen et al. 2000
4H	SSR	EBmac0701		96.17	1, 3, 4, 6	(AC)23	0.74	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	EBmac0788		97.67	3, 6	(TG)23	0.76	SCRI (R. Waugh)	Ramsay et al. 2000
4H	Gene	*iAco2	4H_10.2	97.82	-	-	-	-	-
4H	SSR	GBM1220		99.86	3	(CA)10	0.65	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1048		101.05	4	(AGC)5	0.28	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	HVMLOH1A		102.27	6	(GA)6	0.52	SCRI (R. Waugh)	Ramsay et al. 2000
4H	RFLP	*ABG397	4H_11.1	103.64	-	-	-	-	-
4H	AFLP	*E37M38-178	4H_11.2	109.61	-	-	-	-	-
4H	SSR	GBM1448		113.17	3	(CT)9	0.69	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	GBM1015		115.94	1, 3, 4, 5	(ACAT)13	0.78	IPK (A. Graner)	Thiel et al. 2003
4H	SSR	WMS6		116.36	6	(GA)40	0.35	VPISU (MA Saghai Maroof)	Li et al. 2003
4H	RFLP	*ABG319C	4H_12.1	116.86	-	-	-	-	-
4H	SSR	HVM67	4H_12.2	120.50	4, 5, 6	(GA)11	0.53	VPISU (MA Saghai Maroof)	Liu et al. 1996
4H	SSR	GBMS128a		120.50	5	(GT)12	0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
4H	SSR	GBM1388		122.35	4	(CGTA)5	0.24	IPK (A. Graner)	Varshney et al. 2006
4H	SSR	Bmag0138b		124.00	5, 6	(AG)6(AG)15	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
4H	SSR	GBM1324		125.51	1	(CCG)8	0.44	WUR (R. Niks)	Marcel et al. 2006
4H	AFLP	*E42M58-312	4H_12.3	127.28	-	-	-	-	-
4H	SSR	GBM1453		132.27	1	(AT)6	0.67	WUR (R. Niks)	Marcel et al. 2006
4H	SSR	GBM1018		132.69	1, 3, 4	(CCG)6	0.44	IPK (A. Graner)	Thiel et al. 2003

4H	RFLP	*Bmy1	4H_13.1	133.33	-	-	-	-	-
5H	RFLP	*Mad2	5H_01.1	0.00	-	-	-	-	-
5H	RAPD	*ABR313	5H_01.2	5.33	-	-	-	-	-
5H	SSR	scssr02306		6.13	4	(AT)6 (CA)7	0.67	SCRI (R. Waugh)	Ramsay et al. 2004
5H	RFLP	*MWG920-1A	5H_02.1	8.07	-	-	-	-	-
5H	AFLP	*E38M54-247	5H_02.2	12.54	-	-	-	-	-
5H	SSR	GBM1176	5H_02.3	18.59	1, 3, 4	(AT)8	0.69	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	scssr07106		20.44	4	(TA)9	0.66	SCRI (R. Waugh)	Ramsay et al. 2004
5H	AFLP	*E45M55-400	5H_02.4	25.57	-	-	-	-	-
5H	SSR	GBM5028		27.41	1	(CTT)6	nd	WUR (R. Niks)	Marcel et al. 2006
5H	RFLP	*ABG705	5H_03.1	31.15	-	-	-	-	-
5H	RAPD	*ABR336	5H_03.2	35.18	-	-	-	-	-
5H	SSR	GBMS032		36.89	3	(GT)5n(GT)11	0.64	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	Bmac0163		37.74	3, 6	(AC)6(GC)3(AC)17	0.49	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBMS070		38.09	3	(AT)8(GA)12	0.51	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	RFLP	*ABG395	5H_04.1	38.72	-	-	-	-	-
5H	SSR	GBMS156		39.57	3	(GT)11	0.69	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBMS115		40.05	3	(AT)38	0.84	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	EBmac0970		40.77	6	(AC)8	0.49	SCRI (R. Waugh)	Ramsay et al. 2000
5H	AFLP	*E32M50-121	5H_04.2	41.14	-	-	-	-	-
5H	SSR	HVM30a		41.93	1, 6	(CA)8	0.40	VPISU (MA Saghai Maroof)	Liu et al. 1996
5H	SSR	scssr02503		42.39	4	(CT)9	nd	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	GBM1229		42.52	4	(AC)8	0.41	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	Bmac0047e		42.83	4	(AC)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmac0273b		42.83	1, 3, 4	(AC)20(AG)20	0.63	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	scssr18076		42.83	4	(CT)9	nd	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	GBM1039		42.83	4	(CT)10	0.28	IPK (A. Graner)	Thiel et al. 2003
5H	SSR	Bmag0751		42.87	3	(GA)20,(AGAT)10, (AG)5	0.49	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	EBmac0560d		43.76	1	(AC)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000

5H	SSR	GBM1325	44.59	1	(GCG)8	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	RFLP	*Ltp1	5H_05.1 44.63	-	-	-	-	-
5H	SSR	GBM1508	44.82	1	(GCG)8	nd	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	Bmag0337	44.99	6	(AG)22	0.67	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0387	44.99	3, 6	(AG)16	0.67	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0394	44.99	6	(AG)9CG(AG)4 CG(AG)4	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1222	45.12	1	(AG)9	nd	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	Bmac0144e	46.88	6	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	AFLP	*E32M61-81	5H_05.2 48.21	-	-	-	-	-
5H	SSR	EBmac0560b	48.21	1, 6	(AC)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBMS075a	48.81	3, 5	(AT)8(GT)16	0.94	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBMS196	48.81	3	(GT)10	0.49	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBM1293	50.85	1	(AAG)6	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	Bmag0323	50.85	1, 3, 6	(CT)24	0.76	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	HVLEU	51.26	5	(ATTT)4	0.38	VPISU (MA Saghai Maroof)	Liu et al. 1996
5H	RFLP	*WG530	5H_06.1 51.63	-	-	-	-	-
5H	SSR	Bmac0311	52.10	6	(AC)28(AT)9	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0121c	52.10	6	(AG)21/(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmac0282a	52.78	6	(AC)5	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	EBmatc0054	52.78	6	(GGA)3,(ATC)4	0.32	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1026	53.08	4, 5	(AC)9	0.50	IPK (A. Graner)	Thiel et al. 2003
5H	SSR	Bmac0303b	53.10	3, 5, 6	(AG)13(AC)21	0.68	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBMS174	53.10	5	(GT)19	0.38	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	Bmac0096	53.12	4, 5, 6	(AT)6(AC)16	0.74	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmac0113	53.12	6	(AT)7(AC)18	0.66	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmac0284	53.12	6	(AC)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0003b	53.12	6	(AG)28	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0005	53.12	6	(AG)15	0.45	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	EBmac0518	53.12	6	(AC)5/(AC)5	0.43	SCRI (R. Waugh)	Ramsay et al. 2000

5H	SSR	EBmatc0040		53.12	6	(ATC)6N3(ATC)3	0.47	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1398		53.27	4	(CTCA)5	0.41	IPK (A. Graner)	Varshney et al. 2006
5H	AFLP	*E35M55-181	5H_06.2	55.10	-	-	-	-	-
5H	SSR	Bmac0306		55.17	6	(AC)10-(AC)5	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	RFLP	*ABC324	5H_07.1	59.34	-	-	-	-	-
5H	SSR	Bmag0357		65.04	6	(AG)8G(AG)9	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	RFLP	*ABC302	5H_08.1	66.62	-	-	-	-	-
5H	SSR	Bmag0760		68.72	3	(GA)24	0.38	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1399		69.86	4	(GACG)5	0.24	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBM1426		70.25	3	(AAGCTC)5	0.41	IPK (A. Graner)	Varshney et al. 2006
5H	AFLP	*E38M55-128	5H_08.2	72.06	-	-	-	-	-
5H	SSR	EBmac0684a		73.79	6	(TA)7(TG)11,(TG)11 (TTG)5	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1506		75.45	1	(CTT)1	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	scssr16991		76.81	4	(GCA)9	0.20	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	scssr15334		77.79	4	(CTT)10	nd	SCRI (R. Waugh)	Ramsay et al. 2004
5H	AFLP	*E42M40-482	5H_09.1	78.23	-	-	-	-	-
5H	SSR	GBM1041		79.59	3	(GT)7	0.28	IPK (A. Graner)	Thiel et al. 2003
5H	SSR	GBM1483		80.64	4	(GCG)7	0.41	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	Bmag0113a		81.44	6	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmac01441		84.78	4	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0113f		84.78	4	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	RFLP	*MWG522	5H_09.2	85.27	-	-	-	-	-
5H	SSR	GBM1038		85.27	4	(CT)8	0.28	IPK (A. Graner)	Thiel et al. 2003
5H	SSR	Bmag0223		86.88	1, 3, 4, 5, 6	(AG)16	0.82	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	Bmag0812		90.32	3	(CT)26	0.79	SCRI (R. Waugh)	Ramsay et al. 2000
5H	RFLP	*ABG473	5H_10.1	90.57	-	-	-	-	-
5H	SSR	scssr05939		90.64	4	(AT)5	0.26	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	GBMS106		90.68	5	(GA)38	0.84	IPK (M Röder, Martin Ganal)	Li et al. 2003

5H	SSR	Bmag0113d		91.82	4	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1227		91.82	4	(CA)8	0.57	IPK (A. Graner)	Varshney et al. 2006
5H	RFLP	*MWG2191	5H_10.2	95.50	-	-	-	-	-
5H	AFLP	*E42M51-335	5H_10.3	101.55	-	-	-	-	-
5H	SSR	GBM1231		102.27	5	(AG)8	0.45	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBMS013		104.51	5	(CT)10	0.59	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBM1438		104.74	4	(GC)11	0.65	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBM1295	5H_10.4	107.11	1	(CCT)6	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	GBM1141		108.26	1	(ATC)5	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	HVDHN09		110.11	5	(AC)6	nd	MPIZ (M. Heun)	Becker and Heun 1995
5H	SSR	HvLOX		113.20	6	(AG)9	0.48	SCRI (R. Waugh)	Ramsay et al. 2000
5H	AFLP	*E42M48-282	5H_10.5	114.40	-	-	-	-	-
5H	SSR	GBM5008		118.98	2	(CG)10	nd	WUR (R. Niks)	Marcel et al. 2006
5H	RFLP	*MWG514B	5H_11.1	120.68	-	-	-	-	-
5H	SSR	GBM1363		120.68	3	(AGG)7	0.49	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBMS119		122.09	3	(CA)22	0.68	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GMS061		122.09	3, 6	(GA)16	0.64	IPK (D. Struss)	Struss and Plieske 1998
5H	SSR	scssr10148		122.34	4	(GT)10	0.65	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	AF043094A		123.37	6	(CTGT)5	0.38	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBMS068		123.76	5	(CT)11	0.53	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBMS219b		125.32	3	(GT)14	0.28	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBMS219d		125.32	3	(GT)15	0.23	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	RFLP	*cMWG716A	5H_11.2	125.73	-	-	-	-	-
5H	SSR	EBmac0824		125.75	6	(TG)4,(TG)4,(TG)4, (GT)4,(GT)4	0.43	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	EBmatc0003		127.69	6	(ATC)4N3(ATC)3	0.60	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBM1436		128.54	1, 3	(CGC)7	0.57	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBM1463		130.55	4	(GA)8	0.24	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBM1470		130.55	4	(TC)9	0.49	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBM1045		132.16	4	(ACC)6	0.28	IPK (A. Graner)	Thiel et al. 2003

5H	SSR	GBM1054		132.16	4	(CCG)5	0.61	IPK (A. Graner)	Thiel et al. 2003
5H	RFLP	*WG908	5H_12.1	132.49	-	-	-	-	-
5H	SSR	GBM1166		133.50	1	(CGG)5	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	GMS027		135.91	3, 6	(GT)5(CT)2(GT)27	0.71	IPK (D. Struss)	Struss and Plieske 1998
5H	AFLP	*E42M55-75	5H_12.2	137.13	-	-	-	-	-
5H	RFLP	*ABG496	5H_13.1	143.61	-	-	-	-	-
5H	SSR	GBM1490		144.14	1	(GTAA)5n(T)10	0.44	WUR (R. Niks)	Marcel et al. 2006
5H	SSR	Bmag0222		144.14	1, 4, 6	(AC)9(AG)17	0.60	SCRI (R. Waugh)	Ramsay et al. 2000
5H	SSR	GBMS060		144.93	5	(GT)11	0.64	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	SSR	GBMS077		144.93	5	(GT)18	0.84	IPK (M Röder, Martin Ganal)	Li et al. 2003
5H	RFLP	*ABC482	5H_13.2	150.70	-	-	-	-	-
5H	RFLP	*ABG391	5H_13.3	156.31	-	-	-	-	-
5H	SSR	GBM1164		156.88	4	(ATC)5	0.57	IPK (A. Graner)	Varshney et al. 2006
5H	SSR	GBM1064		157.60	4	(AGGG)5	0.44	IPK (A. Graner)	Thiel et al. 2003
5H	SSR	GBM1001		157.65	4	(ATG)7	0.28	IPK (A. Graner)	Thiel et al. 2003
5H	SSR	Bmag0113i		160.00	4	(AG)18	nd	SCRI (R. Waugh)	Ramsay et al. 2000
5H	RFLP	*ABG390	5H_14.1	160.98	-	-	-	-	-
5H	AFLP	*E42M58-64	5H_14.2	166.47	-	-	-	-	-
5H	RFLP	*ABG463	5H_15.1	173.92	-	-	-	-	-
5H	RFLP	*ABC309	5H_15.2	178.70	-	-	-	-	-
5H	RFLP	*MWG851B	5H_15.3	183.01	-	-	-	-	-
5H	SSR	GMS001		183.25	1, 3, 6	(CT)7n(CT)2	0.69	IPK (D. Struss)	Struss and Plieske 1998
5H	SSR	scssr03907		183.45	1, 4	(CT)13	0.88	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	scssr09041		183.46	1, 4	(CATA)12	nd	SCRI (R. Waugh)	Ramsay et al. 2004
5H	SSR	GMS002		183.75	1, 3	(CT)18	0.41	IPK (D. Struss)	Struss and Plieske 1998
6H	SSR	AF166121A		0.00	6	(A)10	nd	SCRI (R. Waugh)	Cardle et al 2000
6H	SSR	BAC84c21_s33		0.00	6	(T)10	nd	SCRI (R. Waugh)	Cardle et al 2000
6H	RFLP	*ABG062	6H_01.1	3.81	-	-	-	-	-
6H	RFLP	*cMWG2500	6H_01.2	6.71	-	-	-	-	-
6H	SSR	Bmac0316		7.16	1, 2, 3, 4, 6	(AC)19	0.69	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	scssr09398		7.16	4	(CTT)9	0.80	SCRI (R. Waugh)	Ramsay et al. 2004

6H	RFLP	*MWG663-2A	6H_01.3	10.31	-	-	-	-	-
6H	RFLP	*ABG378	6H_02.1	14.97	-	-	-	-	-
6H	AFLP	*E42M54-160	6H_02.2	19.45	-	-	-	-	-
6H	AFLP	*E33M61-401	6H_02.3	24.30	-	-	-	-	-
6H	RFLP	*cMWG652A	6H_03.1	27.74	-	-	-	-	-
6H	SSR	GBMS033		28.81	3, 5	(AT)5n(AC)19 (AT)7	0.28	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	Bmag0500		31.65	5, 6	(AG)6CG(AG)29 (AGAGGG)3(AG)6	0.80	SCRI (R. Waugh)	Ramsay et al. 2000
6H	AFLP	*E33M55-63	6H_03.2	32.84	-	-	-	-	-
6H	SSR	GBM1270	6H_04.1	36.52	1	(GCC)8	0.44	WUR (R. Niks)	Marcel et al. 2006
6H	SSR	GBMS072		36.65	5	(TG)11	0.73	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	GBM1215		39.54	4	(AC)12	0.65	IPK (A. Graner)	Varshney et al. 2006
6H	AFLP	*P15M51-124	6H_04.2	40.13	-	-	-	-	-
6H	SSR	GBM1021		40.17	4, 5	(AC)8	0.72	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	GBM1049		40.17	4	(AGC)5	0.28	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	GBM1057		40.17	4	(CGG)5	0.28	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	GBM1355		40.43	1, 3	(GCA)7	0.50	IPK (A. Graner)	Varshney et al. 2006
6H	RFLP	*ABG387B	6H_05.1	43.91	-	-	-	-	-
6H	SSR	GBM1053		49.11	3	(CCG)7	0.32	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	GBM1068		50.08	4	(AC)6	0.28	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	GBM1075		50.08	4, 5	(GT)6	0.72	IPK (A. Graner)	Thiel et al. 2003
6H	AFLP	*E35M61-269	6H_05.2	50.15	-	-	-	-	-
6H	SSR	GBM1212	6H_06.1	55.10	1, 3	(AGG)5	0.65	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1319		55.10	3	(GGC)8	0.57	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	Bmag0807		56.11	3	(TC)18	0.59	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBMS222		56.70	3	(AC)3TC(AC)8	0.51	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	Bmag0173		57.79	6	(CT)29	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GMS006		57.88	3, 6	(GA)2ATA(GA)19	0.54	IPK (D. Struss)	Struss and Plieske 1998
6H	SSR	GBM1423		58.46	4	(CGGCTC)5	0.41	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1027		59.93	4	(AC)9	0.50	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	HVM31		60.90	4, 6	(AC)9	0.36	VPISU (MA Saghai Maroof)	Liu et al. 1996

6H	SSR	Bmac0040b	61.07	1	(AC)20	0.89	SCRI (R. Waugh)	Ramsay et al. 2000
6H	RFLP	*ABG020	6H_06.2 61.15	-	-	-	-	-
6H	SSR	Bmag0174a	61.40	6	(AG)9	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBM1267	61.70	1	(TTG)9	0.44	WUR (R. Niks)	Marcel et al. 2006
6H	SSR	EBmac0560c	61.70	1	(AC)7	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBMS121	61.78	3	(GA)13	0.47	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	Bmac0018	61.79	1, 3, 5, 6	(AC)11	0.59	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmac0144c	61.79	6	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmac0175b	61.79	6	(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBM5012	61.95	1	(ACG)7	0.67	WUR (R. Niks)	Marcel et al. 2006
6H	SSR	EBmac0674	61.96	6	(TG)18(AG)9	0.13	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	EBmac0874	61.96	6	(CA)8AA(CA)4CG (CA)8AA(CA)7AA (CA)9(TA)8	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBMS135	62.03	3, 5	(GT)23	0.75	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	GBMS178	62.03	3	(GT)11	0.05	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	GBMS201	62.03	3	(GT)15	0.35	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	GBMS107	62.10	3, 5	(GT)8T(GT)4	0.62	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	HVM65	62.11	1, 6	(GA)10	0.68	VPISU (MA Saghai Maroof)	Liu et al. 1996
6H	SSR	HVM22a	62.14	1, 5	(AC)13	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
6H	SSR	Bmag0009	62.21	1, 3, 4, 5, 6	(AG)13	0.59	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	EBmac0639	62.21	6	(TG)5,(TG)8	0.13	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	EBmatc0028	62.21	6	(ATC)3N3(ATC)6	0.59	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmac0297c	62.23	6	(AC)9(AC)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmac0047a	62.27	4, 6	(AC)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmac0127a	62.27	6	(AC)26	0.83	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBM1389	62.27	4	(GCCT)5	0.61	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	HVM14	62.28	1, 3, 5, 6	(CA)11	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
6H	SSR	Bmag0210	62.28	5	(AG)7T(AG)13	0.60	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBMS083	62.43	3, 5	(AC)20(AT)5	0.59	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	HVM34	62.43	5	(GA)10	nd	VPISU (MA Saghai Maroof)	Li et al. 2003

6H	SSR	HVM74	62.66	1, 5	(GA)13	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
6H	SSR	Bmac0297f	63.49	5	(AC)9(AC)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmag0003a	63.49	5	(AG)28	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmag0867	63.49	3	(TC)20	0.53	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBM1063	63.49	1, 2, 3, 5	(ACAT)7	0.61	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	Bmag0496	63.75	6	(CT)20	0.83	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmag0219	64.31	6	(AG)5GG(AG)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmag0004a	64.71	6	(AG)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmg0001	64.71	5, 6	(G)10	0.77	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmgtttttt0001	64.71	6	(GTTTTT)5	0.50	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	HvWaxy4b	64.71	6	(GCAT)4	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBMS125	65.33	3	(GA)6	0.49	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	SSR	Bmag0103a	66.05	6	(AG)22	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	RFLP	*ABG474	66.20	-	-	-	-	-
6H	SSR	scssr02093	67.20	4	(GA)18	nd	SCRI (R. Waugh)	Ramsay et al. 2004
6H	SSR	Bmag0344a	67.80	5, 6	(CT)10GT(CT)16	0.79	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	EBmac0853	67.80	6	(TG)6,(TG)6	0.12	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBM1400	67.80	5	(CACG)5	0.57	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1076	67.86	1, 4	(GT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	Bmac0251	69.25	6	(AC)12A(AC)13	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	Bmag0613	69.82	6	(GA)17	0.73	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBMS180	70.16	3	(GA)30	0.85	IPK (M Röder, Martin Ganal)	Li et al. 2003
6H	AFLP	*E35M54-181	70.44	-	-	-	-	-
6H	SSR	Bmac0218c	71.99	4	(AC)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
6H	RFLP	*ABC170B	75.26	-	-	-	-	-
6H	SSR	EBmac0602	75.42	3, 6	(AC)9AT(AC)7 (AG)9	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	EBmac0806	75.46	1, 3, 6	(CA)4GA(CA)8, (CA)5	0.78	SCRI (R. Waugh)	Ramsay et al. 2000
6H	SSR	GBM1256	75.46	3	(GA)8	0.45	IPK (A. Graner)	Varshney et al. 2006
6H	AFLP	*E41M40-288	79.62	-	-	-	-	-

6H	RFLP	*Nar7	6H_09.1	84.66	-	-	-	-	-
6H	SSR	HVM11a		88.47	6	(GGA)3,(GGA), (GAA)2	nd	VPISU (MA Saghai Maroof)	Saghai Maroof et al. 1994
6H	RFLP	*bBE54B	6H_09.2	90.93	-	-	-	-	-
6H	SSR	GBM1008		95.37	4, 5	(AAC)10	0.64	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	scssr05599		96.34	4	(AAG)4	0.59	SCRI (R. Waugh)	Ramsay et al. 2004
6H	RFLP	*MWG934	6H_10.1	97.31	-	-	-	-	-
6H	SSR	GBM1140		97.31	5	(ATC)5	0.24	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1356		98.38	4	(GTG)7	0.49	IPK (A. Graner)	Varshney et al. 2006
6H	RFLP	*Tef1	6H_11.1	102.33	-	-	-	-	-
6H	SSR	scssr00103		105.26	4	(GT)10	0.76	SCRI (R. Waugh)	Ramsay et al. 2004
6H	SSR	GBM1022		105.26	1, 4, 5	(AC)10	0.50	IPK (A. Graner)	Thiel et al. 2003
6H	SSR	Bmag0571a		105.45	6	(GA)25	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
6H	RFLP	*MWG684A	6H_11.2	107.10	-	-	-	-	-
6H	SSR	Bmac0040a	6H_12.1	113.19	1, 3, 4, 6	(AC)20	0.89	SCRI (R. Waugh)	Ramsay et al. 2000
6H	AFLP	*PI6M51-215	6H_12.2	118.85	-	-	-	-	-
6H	SSR	GBM1274	6H_13.1	123.45	1, 4	(TCG)7	0.24	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1275		124.29	1	(TGC)7	0.44	WUR (R. Niks)	Marcel et al. 2006
6H	SSR	GBM1276		124.29	1	(TGC)7	0.44	WUR (R. Niks)	Marcel et al. 2006
6H	SSR	GBM1087		127.70	1	(AGG)5	0.57	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1404	6H_13.2	129.76	1, 4	(TATG)5	0.61	IPK (A. Graner)	Varshney et al. 2006
6H	SSR	GBM1005		131.12	1, 4	(ATC)7	0.28	IPK (A. Graner)	Thiel et al. 2003
6H	RFLP	*cMWG684A	6H_14.1	139.90	-	-	-	-	-
7H	AFLP	*E37M50-401	7H_01.0	0.00	-	-	-	-	-
7H	SSR	HVPLASC1B		2.65	6	(TCTAC)4	0.32	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABG704	7H_01.1	5.46	-	-	-	-	-
7H	SSR	Bmag0021		6.78	5, 6	(CA)10AA(GA)28	0.78	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1060		8.78	4	(GGT)6	0.50	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	GBM1126		8.80	1, 3	(AT)6	0.57	IPK (A. Graner)	Varshney et al. 2006
7H	RFLP	*MWG555A	7H_01.2	10.12	-	-	-	-	-
7H	SSR	GBMS192		10.12	3	(GT)14	0.47	IPK (M Röder, Martin Ganal)	Li et al. 2003

7H	SSR	EBmac0713		12.35	3, 6	(CA)6TA(CA)3(GA) 0.90	SCRI (R. Waugh)	Ramsay et al. 2000
						2(CA)6TA(CA)17		
7H	SSR	Bmag0206		15.25	5, 6	(GT)5(AG)14 0.79	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	EBmag0794		15.79	6	(TA)23,(GA)16 0.84	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABG320	7H_02.1	16.52	-	-	-	-
7H	SSR	Bmag0007		20.62	1, 4, 5, 6	(AG)16(AC)16 0.76	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	HVWAXYG		21.80	5	(AT)9 -	MPIZ (M. Heun)	Becker and Heun 1995
7H	SSR	HVM04	7H_02.2	22.19	5, 6	(AT)9 nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
7H	SSR	GBMS094		22.89	3	(GT)11 0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	HVCABG		23.21	6	(AT)29 nd	MPIZ (M. Heun)	Becker and Heun 1995
7H	SSR	HvWaxy4a		23.21	4, 6	(GCAT)4 nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABC151A	7H_03.1	27.75	-	-	-	-
7H	SSR	GBMS240		31.09	3	(GA)10 0.73	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBMS139a		31.17	3	(CA)10 0.85	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBM1326	7H_03.2	31.24	1, 3	(CTT)8 0.69	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	GBM5060		31.24	1	(AAG)6 0.44	WUR (R. Niks)	Marcel et al. 2006
7H	RFLP	*ABG380	7H_04.1	34.78	-	-	-	-
7H	SSR	EBmac0603		35.39	3, 5, 6	(CA)10 0.74	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABC158	7H_04.2	41.28	-	-	-	-
7H	RFLP	*ksuA1A	7H_05.1	45.21	-	-	-	-
7H	SSR	AF022725A		45.80	6	(TG)8 0.55	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS129		46.02	3	(CA)11 0.69	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBMS035		46.85	3	(GA)12 0.75	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	Bmag0914		46.85	3	(CT)16 0.20	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1116		50.57	4	(CCG)5 0.61	IPK (A. Graner)	Varshney et al. 2006
7H	AFLP	*E35M62-52	7H_05.2	51.52	-	-	-	-
7H	SSR	GBM1464		53.43	4	(CAG)8n(CAG)5 0.73	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	scssr07970		53.98	4	n.a. 0.69	SCRI (R. Waugh)	Ramsay et al. 2004
7H	SSR	Bmac0282b		59.31	6	(AC)5 nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABC255	7H_06.1	60.99	-	-	-	-

7H	SSR	GBMS226	62.09	5	(GT)9	0.63	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	EBmatc0016	64.76	6	(ATC)4N9(ATC)12	0.22	SCRI (R. Waugh)	Ramsay et al. 2000
7H	AFLP	*P17M47-67	7H_06.2 66.15	-	-	-	-	-
7H	SSR	GBM1033	67.13	4, 5	(AT)9	0.50	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	HVCMA	67.59	2, 4, 5, 6	(AT)9	0.34	MPIZ (M. Heun)	Becker and Heun 1995
7H	AFLP	*E33M54-261	7H_06.3 71.44	-	-	-	-	-
7H	SSR	Bmac0144j	71.48	4	(AT)4(AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0187	72.57	3, 4, 6	(AC)13(AT)9	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1432	72.81	4	(GGT)5(GGC)7	0.57	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	scssr15864	72.83	4	(GAG)4	0.36	SCRI (R. Waugh)	Ramsay et al. 2004
7H	SSR	Bmac0303e	72.93	4	(AG)13(AC)21	0.68	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1030	72.93	4	(AG)17	0.44	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	Bmac0273e	73.18	4	(AC)20(AG)20	0.63	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	HVM30c	73.25	1	(CA)8	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
7H	RFLP	*ABG701	7H_07.1 74.52	-	-	-	-	-
7H	SSR	HVM30b	75.67	1	(CA)8	nd	VPISU (MA Saghai Maroof)	Liu et al. 1996
7H	SSR	Bmag0900	75.68	3	(GA)25	0.79	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS2193c	77.38	3	(GT)14	0.51	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBMS164	78.22	3	(GT)16	0.48	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBMS254	78.22	3	(GT)12	0.94	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	Bmag0341	78.22	3, 6	(AG)14	0.62	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1237	78.32	1	(CT)22	0.67	WUR (R. Niks)	Marcel et al. 2006
7H	SSR	Bmag0110a	78.86	5, 6	(AG)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0183	78.88	6	(CT)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0359	78.88	5, 6	(AG)25	0.52	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS041	78.98	3	(GT)25	0.93	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	Bmag0109	79.06	6	(AG)17AA(AG)8	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0189	79.06	6	(CT)21	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0217	79.06	6	(AG)19	0.69	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0321	79.24	1, 6	(AG)17(AC)16	0.70	SCRI (R. Waugh)	Ramsay et al. 2000

7H	SSR	Bmag0516	79.31	6	(TC)8(TATC)7 (TC)19	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GMS056	79.74	6	(GA)11	nd	IPK (D. Struss)	Struss and Plieske 1998
7H	SSR	Bmac0162	80.32	6	(AC)15(CT)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0579	80.32	6	(AC)8	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1492	80.32	5	(CCG)8(GAG)7	0.57	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	EBmac0785	80.57	6	(TA)9(GT)22	0.55	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	EBmac0827	80.57	6	(CA)15TG(TA)7	0.66	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0224	80.74	1, 6	(AC)5/(AC)5	0.20	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0273a	80.78	1, 3, 6	(AC)20(AG)20	0.63	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS003	80.80	3, 5	(AG)14	0.67	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	RFLP	*ABC455	7H_07.2 80.89	-	-	-	-	-
7H	SSR	GBM1516	81.21	4	(CT)9	0.69	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	Bmac0303a	81.53	4	(AG)13(AC)21	0.68	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0031	81.75	5, 6	(AC)28	0.37	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0010a	81.77	6	(CT)19	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0047c	81.78	6	(AC)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0297a	81.78	6	(AC)9(AC)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0011	81.78	5, 6	(AG)25	0.43	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0121a	81.78	6	(AG)21/(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0228b	81.78	6	(AG)13	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0047d	81.80	4	(AC)16	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1115	81.85	4	(CGG)5	0.57	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	Bmac0167	82.26	5, 6	AC)20	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0192a	82.26	6	(AC)25	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmac0582	82.56	6	(AC)12	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0369	83.31	6	(CT)16	0.81	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0571b	83.56	6	(GA)25	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS111	83.80	3	(CA)15	0.74	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GMS046	84.04	3, 6	(GA)13	0.51	IPK (D. Struss)	Struss and Plieske 1998

7H	SSR	Bmag0507		84.10	1, 3, 6	(AG)23	0.69	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0746		84.12	3	(GA)22	0.66	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS063b		84.28	3, 5	(AC)11	0.60	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBM1494		84.28	3	(TCG)1	0.41	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	Bmag0571c		85.64	6	(GA)25	0.64	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1359		85.80	4	(CCT)7	0.49	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	GBMS120		86.23	5	(AT)35	0.83	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBM1303		86.43	1	(AAT)22	0.44	WUR (R. Niks)	Marcel et al. 2006
7H	RFLP	*Amy2	7H_08.1	86.47	-	-	-	-	-
7H	SSR	Bmag0385		88.17	6	(AG)18(TG)10	0.18	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1472		88.46	2	(AT)7	0.44	WUR (R. Niks)	Marcel et al. 2006
7H	SSR	GBM1297		88.56	2	(AAG)6	0.44	WUR (R. Niks)	Marcel et al. 2006
7H	SSR	GBM1058		89.62	3	(CTG)6	0.28	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	GBM1396		90.46	1	(AGAC)5	0.44	WUR (R. Niks)	Marcel et al. 2006
7H	AFLP	*E36M50-344	7H_08.2	90.59	-	-	-	-	-
7H	SSR	EBmac0764		90.66	6	(GT)16	0.84	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1428		91.17	1	(TGC)6n(TGC)5	0.44	WUR (R. Niks)	Marcel et al. 2006
7H	SSR	Bmac0064		91.68	6	(AC)21	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBMS141		93.04	3, 5	(CA)16	0.79	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBM1174		93.86	3	(CGG)6	0.24	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	GBM1102		94.23	4	(CT)10	0.24	IPK (A. Graner)	Varshney et al. 2006
7H	AFLP	*E45M55-315	7H_09.1	95.30	-	-	-	-	-
7H	SSR	GBM1419		95.75	3, 4	(CTCAT)5	0.61	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	Bmag0120		97.00	1, 3, 4, 5, 6	(AG)15	0.86	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0482b		98.85	6	(AG)17	0.61	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1006		100.10	3	(AGC)9	0.50	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	Bmag0174b		100.86	6	(AG)9	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*cMWG696	7H_09.2	101.53	-	-	-	-	-
7H	SSR	GBM5225		101.73	1	(AG)6	nd	WUR (R. Niks)	Marcel et al. 2006
7H	RFLP	*ABC310B	7H_10.1	106.06	-	-	-	-	-

7H	RFLP	*RisP103	7H_10.2	110.30	-	-	-	-	-
7H	SSR	GBMS088		111.32	3, 5	(GT)8(GC)6n4(GT)6	0.44	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	HvAMY2		112.44	6	(GCT)5	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABC305	7H_11.1	113.85	-	-	-	-	-
7H	AFLP	*E33M58-375	7H_11.2	120.60	-	-	-	-	-
7H	SSR	GBM1362		123.22	1	(GCC)7	0.67	WUR (R. Niks)	Marcel et al. 2006
7H	SSR	EBmac0755		125.21	5, 6	(AC)16	0.72	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABG461A	7H_12.1	126.52	-	-	-	-	-
7H	SSR	Bmac0035		129.19	6	(AT)10(AC)29	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*ABG652	7H_12.2	131.21	-	-	-	-	-
7H	SSR	GBMS112		133.79	5	(CA)20(AT)23	0.07	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	GBM1017		133.79	5	(ATGT)6	0.28	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	HVM11b		135.09	6	(GGA)3,(GGA), (GAA)2	nd	VPISU (MA Saghai Maroof)	Saghai Maroof et al. 1994
7H	SSR	GBM1065		135.11	4	(ATGC)5	0.28	IPK (A. Graner)	Thiel et al. 2003
7H	SSR	Bmac0156	7H_12.3	136.42	1, 2, 3, 6	(AC)22(AT)5	0.89	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	GBM1456		136.79	5	(CGG)6	0.24	IPK (A. Graner)	Varshney et al. 2006
7H	SSR	HVM49		139.66	6	(CA)12	nd	VPISU (MA Saghai Maroof)	Li et al. 2003
7H	AFLP	*E35M54-180	7H_12.4	140.17	-	-	-	-	-
7H	SSR	EBmac0565c		141.74	6	(AT)7(AC)15	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	RFLP	*MWG2062	7H_12.5	145.81	-	-	-	-	-
7H	SSR	Bmag0004b		146.28	6	(AG)14	nd	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	Bmag0135		147.51	1, 3, 6	(AG)10GG(AG)12	0.87	SCRI (R. Waugh)	Ramsay et al. 2000
7H	SSR	HVM05		148.22	4, 6	-	-	VPISU (MA Saghai Maroof)	Liu et al. 1996
7H	SSR	scssr04056		148.22	4	(CT)5	0.81	SCRI (R. Waugh)	Ramsay et al. 2004
7H	SSR	HVPRP		148.95	6	(GT)6(AT)6	nd	MPIZ (M. Heun)	Becker and Heun 1995
7H	RFLP	*Tha1	7H_12.6	151.60	-	-	-	-	-
7H	SSR	GBMS183		154.36	3	(GT)5(CT)3(GT)8	0.57	IPK (M Röder, Martin Ganal)	Li et al. 2003
7H	SSR	HvID		157.12	6	(AC)16(AT)10	nd	SCRI (R. Waugh)	Ramsay et al. 2000

^aThe BIN markers, as defined by Marcel et al (2006) are in blue colour. The loci preceded by an asterisk are BIN markers, which are not microsatellites.

The remaining loci are microsatellite markers.

^bMap(s) on which the marker has been mapped:

1 = L94 x Vada, 2 = SusPtrit x Vada, 3 = Steptoe x Morex, 4 = OWBrec x OWBdom, 5 = Igri x Franka, 6 = Lina x H. spontaneum

^cPIC (Polymorphism information content) value, nd= not determined or not available