Appendix The SSR primers used in this study

Locus	Chromosome	Primer name	DNA sequence (5′-3′)	An. temp (℃)	Fragment length (bp)
Xgwm136	1A	Gwm136F	5′-GAC AGC ACC TTG CCC TTT G-3′	60	278-321
		Gwm136R	5′-CAT CGG CAA CAT GCT CAT C-3′		
Xgwm357	1A	Gwm357F	5′-TAT GGT CAA AGT TGG ACC TCG-3′	55	120-123
		Gwm357R	5′-AGG CTG CAG CTC TTC TTC AG-3′		
Xwmc254	1A	Wmc254F	5′-AGTAATCTGGTCCTCTCTTCTTCT-3′	51	193
		Wmc254R	5′-AGGTAATCTCCGAGTGCACTTCAT-3′		
Xgwm99	1A	Gwm99F	5′-AAG ATG GAC GTA TGC ATC ACA-3′	60	117-120
		Gwm99R	5′-GCC ATA TTT GAT GAC GCA TA-3′		
Xgwm550	1B	Gwm550F	5′-CCC ACA AGA ACC TTT GAA GA-3′	55	156-158
		Gwm550R	5′-CAT TGT GTG TGC AAG GCA C-3′		
Xwmc51	1B	Wmc51F	5′-TTATCTTGGTGTCTCATGTCAG-3′	61	405
		Wmc51R	5′-TCGCAAGATCATCAGAACAGTA-3′		
Xwmc156	1B	Wmc156F	5′-GCCTCTAGGGAGAAAACTAACA-3′	51	211
		Wmc156R	5′-TCAAGATCATATCCTCCCCAAC-3′		
Xgwm403	1B	Gwm403F	5′-CGA CAT TGG CTT CGG TG-3′	55	140
		Gwm403R	5′-ATA AAA CAG TGC GGT CCA GG-3′		
Xgwm268	1B	Gwm268F	5′-AGG GGA TAT GTT GTC ACT CCA-3′	55	198-204
		Gwm268R	5′-TTA TGT GAT TGC GTA CGT ACC C-3′		
Xgwm140	1B	Gwm140F	5′-ATG GAG ATA TTT GGC CTA CAA C-3′	55	223-233
		Gwm140R	5′-CTT GAC TTC AAG GCG TGA CA-3′		
Xwmc147	1D	Wmc147F	5′-AGAACGAAAGAAGCGCGCTGAG-3′	61	152
		Wmc147R	5′-ATGTGTTTCTTATCCTGCGGGC-3′		

Xgwm337	1D	Gwm337F	5′-CCT CTT CCT CCC TCA CTT AGC-3′	55	182-191
		Gwm337R	5′-TGC TAA CTG GCC TTT GCC-3′		
Xgwm458	1D	Gwm458F	5′-AAT GGC AAT TGG AAG ACA TAG C-3′	60	115-119
		Gwm458R	5′-TTC GCA ATG TTG ATT TGG C-3′		
Xgwm642	1D	Gwm642F	5′-ACG GCG AGA AGG TGC TC-3′	60	179-187
		Gwm642R	5′-CAT GAA AGG CAA GTT CGT CA-3′		
Xgdm126	1D	Gdm126F	5′-TCCATCATATCCGTAGCACA-3′	60	185-189
		Gdm126R	5′-CGTGGTTGATTTCAGGAGGT-3′		
Xgdm111	1D	Gdm111F	5′-CACTCACCCCAAACCAAAGT-3′	60	193-199
		Gdm111R	5′-GATGCAATCGGGTCGTTAGT-3′		
Xgwm636	2A	Gwm636F	5′-CGG TAG TTT TTA GCA AAG AG-3′	50	84-112
		Gwm636R	5′-CCT TAC AGT TCT TGG CAG AA-3′		
Xgwm359	2A	Gwm359F	5′-CTA ATT GCA ACA GGT CAT GGG-3′	55	212
		Gwm359R	5′-TAC TTG TGT TCT GGG ACA ATG G-3′		
Xwmc177	2A	Wmc177F	5′-AGGGCTCTCTTTAATTCTTGCT-3′	51	184
		Wmc177R	5′-GGTCTATCGTAATCCACCTGTA-3′		
Xwmc261	2A	Wmc261F	5′-GATGTGCATGTGAATCTCAAAAGTA-3′		
		Wmc261R	5′-AAAGAGGGTCACAGAATAACCTAAA-3′		
Xgwm356	2A	Gwm356F	5′-AGC GTT CTT GGG AAT TAG AGA-3′	55	216
		Gwm356R	5′-CCA ATC AGC CTG CAA CAA C-3′		
Xwmc257	2B	Wmc257F	5′-GGCTACACATGCATACCTCT-3′	51	329
		Wmc257R	5′-CGTAGTGGGTGAATTTCGGA-3′		
Xwmc213	2B	Wmc213F	5′-ATTTTCTCAAACACACCCCG-3′	51	184
		Wmc213R	5′-TAGCAGATGTTGACAATGGA-3′		
Xgwm148	2B	Gwm148F	5′-GTG AGG CAG CAA GAG AGA AA-3′	60	165-167

		Gwm148R	5′-CAA AGC TTG ACT CAG ACC AAA-3′		
Xgwm388	2B	Gwm388F	5′-CTA CAA TTC GAA GGA GAG GGG-3′	60	168-174
		Gwm388R	5′-CAC CGC GTC AAC TAC TTA AGC-3′		
Xgwm501	2B	Gwm501F	5′-GGC TAT CTC TGG CGC TAA AA-3′	60	176
		Gwm501R	5′-TCC ACA AAC AAG TAG CGC C-3′		
Xgwm526	2B	Gwm526F	5′-CAA TAG TTC TGT GAG AGC TGC G-3′	55	138-148
		Gwm526R	5′-CCA ACC CAA ATA CAC ATT CTC A-3′		
Xgwm261	2D	Gwm261F	5′-CTC CCT GTA CGC CTA AGG C-3′	55	164-194
		Gwm261R	5′-CTC GCG CTA CTA GCC ATT G-3′		
Xgwm102	2D	Gwm102F	5′-TCT CCC ATC CAA CGC CTC-3′	60	145-153
		Gwm102R	5′-TGT TGG TGG CTT GAC TAT TG-3′		
Xgwm157	2D	Gwm157F	5′-GTC GTC GCG GTA AGC TTG-3′	60	106-110
		Gwm157R	5′-GAG TGA ACA CAC GAG GCT TG-3′		
Xwmc41	2D	Wmc41F	5′-TCCCTCTTCCAAGCGCGGATAG-3′	61	163
		Wmc41R	5′-GGAGGAAGATCTCCCGGAGCAG-3′		
Xwmc167	2D	Wmc167F	5′-AGTGGTAATGAGGTGAAAGAAG-3′	51	185
		Wmc167R	5′-TCGGTCGTATATGCATGTAAAG-3′		
Xgwm369	3A	Gwm369F	5′-CTG CAG GCC ATG ATG ATG-3′	60	184
		Gwm369R	5′-ACC GTG GGT GTT GTG AGC-3′		
Xgwm5	3A	Gwm5F	5′-GCC AGC TAC CTC GAT ACA ACT C-3′	50	158-171
		Gwm5R	5′-AGA AAG GGC CAG GCT AGT AGT-3′		
Xwmc264	3A	Wmc264F	5′-CTCCATCTATTGAGCGAAGGTT-3′	61	133
		Wmc264R	5′-CAAGATGAAGCTCATGCAAGTG-3′		
Xwmc169	3A	Wmc169F	5′-TACCCGAATCTGGAAAATCAAT-3′	61	167
		Wmc169R	5′-TGGAAGCTTGCTAACTTTGGAG-3′		

Xgwm162	3A	Gwm162F	5′-AGT GGA TCG ACA AGG CTC TG-3′	60	202-208
		Gwm162R	5′-AGA AGA AGC AAA GCC TTC CC-3′		
Xgwm389	3B	Gwm389F	5′-ATC ATG TCG ATC TCC TTG ACG-3′	60	117-128
		Gwm389R	5′-TGC CAT GCA CAT TAG CAG AT-3′		
Xgwm493	3B	Gwm493F	5′-TTC CCA TAA CTA AAA CCG CG-3′	60	171-179
		Gwm493R	5′-GGA ACA TCA TTT CTG GAC TTT G-3′		
Xgwm285	3B	Gwm285F	5′-ATG ACC CTT CTG CCA AAC AC-3′	60	222-227
		Gwm285R	5′-ATC GAC CGG GAT CTA GCC-3′		
Xgwm108	3B	Gwm108F	5′-CGA CAA TGG GGT CTT AGC AT-3′	60	135-137
		Gwm108R	5′-TGC ACA CTT AAA TTA CAT CCG C-3′		
Xwmc326	3B	Wmc326F	5′-GGAGCATCGCAGGACAGA-3′	61	186
		Wmc326R	5′-GGACGAGGACGCCTGAAT-3′		
Xgwm247	3B	Gwm247F	5′-GCA ATC TTT TTT CTG ACC ACG-3′	55	229-250
		Gwm247R	5′-ATG TGC ATG TCG GAC GC-3′		
Xgwm161	3D	Gwm161F	5′-GAT CGA GTG ATG GCA GAT GG-3′	60	145-154
		Gwm161R	5′-TGT GAA TTA CTT GGA CGT GG-3′		
Xgwm183	3D	Gwm183F	5′-GTC TTC CCA TCT CGC AAG AG-3′	55	105
		Gwm183R	5′-CTC GAC TCC CAT GTG GAT G-3′		
Xgwm645	3D	Gwm645F	5′-TGA CCG GAA AAG GGC AGA-3′	55	145-161
		Gwm645R	5′-GCC CCT GCA GGA GTT TAA GT-3′		
Xgwm383	3D	Gwm383F	5′-ACG CCA GTT GAT CCG TAA AC-3′	60	188-199
		Gwm383R	5′-GAC ATC AAT AAC CGT GGA TGG-3′		
Xgdm38	3D	Gdm38F	5′-CAAAATGAAGCATGAAGAGG-3′	55	130-137
		Gdm38R	5′-CAGCACATAGCTTTGGTCTT-3′		
Xgwm601	4A	Gwm601F	5′-ATC GAG GAC GAC ATG AAG GT-3′	60	142-152

		Gwm601R	5′-TTA AGT TGC TGC CAA TGT TCC-3′		
Xgwm610	4A	Gwm610F	5′-CTG CCT TCT CCA TGG TTT GT-3′	60	162-172
		Gwm610R	5′-AAT GGC CAA AGG TTA TGA AGG-3′		
Xgwm637	4A	Gwm637F	5′-AAA GAG GTC TGC CGC TAA CA-3′	60	157-159
		Gwm637R	5′-TAT ACG GTT TTG TGA GGG GG-3′		
Xwmc232	4A**L**	Wmc232F	5′-GAGATTTGTTCATTTCATCTTCGCA-3′	51	108
		Wmc232R	5′-TATATTAAAGGTTAGAGGTAGTCAG-3′		
Xwmc219	4A	Wmc219F	5′-TGCTAGTTTGTCATCCGGGCGA-3′	61	204
		Wmc219R	5′-CAATCCCGTTCTACAAGTTCCA-3′		
Xgwm368	4B	Gwm368F	5′-CCA TTT CAC CTA ATG CCT GC-3′	60	159-271
		Gwm368R	5′-AAT AAA ACC ATG AGC TCA CTT GC-3′		
Xwmc238	4B	Wmc238F	5′-TCTTCCTGCTTACCCAAACACA-3′	61	224
		Wmc238R	5′-TACTGGGGGATCGTGGATGACA-3′		
Xgwm149	4B	Gwm149F	5′-CAT TGT TTT CTG CCT CTA GCC-3′	55	152-161
		Gwm149R	5′-CTA GCA TCG AAC CTG AAC AAG-3′		
Xwmc47	4B (7A)	Wmc47F	5′-GAAACAGGGTTAACCATGCCAA-3′	61	141
		Wmc47R	5′-ATGGTGCTGCCAACAACATACA-3′		
Xgwm6	4B	Gwm6F	5′-CGT ATC ACC TCC TAG CTA AAC TAG-3′	55	196-207
		Gwm6R	5′-AGC CTT ATC ATG ACC CTA CCT T-3′		
Xwmc52	4D	Wmc52F	5′-TCCAATCAATCAGGGAGGAGTA-3′	61	192
		Wmc52R	5′-GAACGCATCAAGGCATGAAGTA-3′		
Xwmc331	4D	Wmc331F	5′-CCTGTTGCATACTTGACCTTTTT-3′	61	128
		Wmc331R	5′-GGAGTTCAATCTTTCATCACCAT-3′		
Xgwm194	4D	Gwm194F	5′-GAT CTG CTC TAC TCT CCT CC-3′	50	131-136
		Gwm194R	5′-CGA CGC AGA ACT TAA ACA AG-3′		

Xgwm624	4D	Gwm624F	5′-TTG ATA TTA AAT CTC TCT ATG TG-3′	50	129
		Gwm624R	5′-AAT TTT ATT TGA GCT ATG CG-3′		
Xgwm304	5A	Gwm304F	5′-AGG AAA CAG AAA TAT CGC GG-3′	55	204-208
		Gwm304R	5′-AGG ACT GTG GGG AAT GAA TG-3′		
Xgwm293	5A	Gwm293F	5′-TAC TGG TTC ACA TTG GTG CG-3′	55	205
		Gwm293R	5′-TCG CCA TCA CTC GTT CAA G-3′		
Xwmc215	5A	Wmc215F	5′-CATGCATGGTTGCAAGCAAAAG-3′	61	207
		Wmc215R	5′-CATCCCGGTGCAACATCTGAAA-3′		
Xwmc327	5A	Wmc327F	5′-TGCGGTACAGGCAAGGCT-3′	61	183
		Wmc327R	5′-TAGAACGCCCTCGTCGGA-3′		
Xgwm126	5A	Gwm126F	5′-CAC ACG CTC CAC CAT GAC-3′	60	196
		Gwm126R	5′-GTT GAG TTG ATG CGG GAG G-3′		
Xgwm291	5A	Gwm291F	5′-CAT CCC TAC GCC ACT CTG C-3′	60	158-160
		Gwm291R	5′-AAT GGT ATC TAT TCC GAC CCG-3′		
Xgwm234	5B	Gwm234F	5′-GAG TCC TGA TGT GAA GCT GTT G-3′	55	229-250
		Gwm234R	5′-CTC ATT GGG GTG TGT ACG TG-3′		
Xgwm443	5B	Gwm443F	5′-GGG TCT TCA TCC GGA ACT CT-3′	55	209
		Gwm443R	5′-CCA TGA TTT ATA AAT TCC ACC-3′		
Xgwm544	5B	Gwm544F	5′-TAG AAT TCT TTA TGG GGT CTG C-3′	55	175-197
		Gwm544R	5′-AGG ATT CCA ATC CTT CAA AAT T-3′		
Xgwm213	5B	Gwm213F	5′-TGC CTG GCT CGT TCT ATC TC-3′	60	162-198
		Gwm213R	5′-CTA GCT TAG CAC TGT CGC CC-3′		
Xgwm499	5B	Gwm499F	5′-ACT TGT ATG CTC CAT TGA TTG G-3′	60	131-177
		Gwm499R	5′-GGG GAG TGG AAA CTG CAT AA-3′		
Xgwm604	5B	Gwm604F	5′-TAT ATA GTT CAA TAT GAC CCG-3′	50	127-133

		Gwm604R	5′-ATC TTT TGA ACC AAA TGT G-3′		
Xwmc27	5B	Wmc27F	5′-AATAGAAACAGGTCACCATCCG-3′	61	389
		Wmc27R	5′-TAGAGCTGGAGTAGGGCCAAAG-3′		
Xwmc233	5D	Wmc233F	5′-GACGTCAAGAATCTTCGTCGGA-3′	61	260
		Wmc233R	5′-ATCTGCTGAGCAGATCGTGGTT-3′		
Xgwm358	5D	Gwm358F	5′-AAA CAG CGG ATT TCA TCG AG-3′	55	162-164
		Gwm358R	5′-TCC GCT GTT GTT CTG ATC TC-3′		
Xgwm174	5D	Gwm174F	5′-GGG TTC CTA TCT GGT AAA TCC C-3′	55	204-233
		Gwm174R	5′-GAC ACA CAT GTT CCT GCC AC-3′		
Xwmc97	5D	Wmc97F	5′-GTCCATATATGCAAGGAGTC-3′	51	184
		Wmc97R	5′-GTACTCTATCGCAAAACACA-3′		
Xwmc161	5D	Wmc161F	5′-ACCTTCTTTGGGATGGAAGTAA-3′	61	110
		Wmc161R	5′-GTACTGAACCACTTGTAACGCA-3′		
Xgwm459	6A	Gwm459F	5′-ATG GAG TGG TCA CAC TTT GAA-3′	55	118-126
		Gwm459R	5′-AGC TTC TCT GAC CAA CTT CTC G-3′		
Xgwm334	6A	Gwm334F	5′-AAT TTC AAA AAG GAG AGA GA-3′	50	110-114
		Gwm334R	5′-AAC ATG TGT TTT TAG CTA TC-3′		
Xwmc163	6A	Wmc163F	5′-TTACACCCATCAGGGTGGTCTT-3′	61	306
		Wmc163R	5′-GTCTATCCATACGACAAA-3′		
Xgwm570	6A	Gwm570F	5′-TCG CCT TTT ACA GTC GGC-3′	60	143-149
		Gwm570R	5′-ATG GGT AGC TGA GAG CCA AA-3′		
Xgwm169	6A	Gwm169F	5′-ACC ACT GCA GAG AAC ACA TAC G-3′	60	193-220
		Gwm169R	5′-GTG CTC TGC TCT AAG TGT GGG-3′		
Xgwm613	6B	Gwm613F	5′-CCG ACC CGA CCT ACT TCT CT-3′	60	114-118
		Gwm613R	5′-TTG CCG TCG TAG ACT GG-3′		

Xgwm518	6B	Gwm518F	5′-AAT CAC AAC AAG GCG TGA CA-3′	55	154-166
		Gwm518R	5′-CAG GGT GGT GCA TGC AT-3′		
Xwmc104	6B	Wmc104F	5′-TCTCCCTCATTAGAGTTGTCCA-3′	61	140
		Wmc104R	5′-ATGCAAGTTTAGAGCAACACCA-3′		
Xgwm626	6B	Gwm626F	5′-GAT CTA AAA TGT TAT TTT CTC TC-3′	50	101-128
		Gwm626R	5′-TGA CTA TCA GCT AAA CGT GT-3′		
Xgwm219	6B	Gwm219F	5′-GAT GAG CGA CAC CTA GCC TC-3′	60	153-184
		Gwm219R	5′-GGG GTC CGA GTC CAC AAC-3′		
Xgwm469	6D	Gwm469F	5′-CAA CTC AGT GCT CAC ACA ACG-3′	60	170-172
		Gwm469R	5′-CGA TAA CCA CTC ATC CAC ACC-3′		
Xgwm325	6D	Gwm325F	5′-TTT CTT CTG TCG TTC TCT TCC C-3′	60	133-138
		Gwm325R	5′-TTT TTA CGC GTC AAC GAC G-3′		
Xgdm98	6D	Gdm98F	5′-CCATCCATGAAATGGCG-3′	60	146-153
		Gdm98R	5′-GCCCTTCACTAGCCTTCATG-3′		
Xwmc168	7A	Wmc168F	5′-AACACAAAAGATCCAACGACAC-3′	51	319
		Wmc168R	5′-CAGTATAGAAGGATTTTGAGAG-3′		
Xgwm60	7A	Gwm60F	5′-TGT CCT ACA CGG ACC ACG T-3′	60	190-224
		Gwm60R	5′-GCA TTG ACA GAT GCA CAC G-3′		
Xgwm260	7A	Gwm260F	5′-GCC CCC TTG CAC AAT C-3′	55	165-169
		Gwm260R	5′-CGC AGC TAC AGG AGG CC-3′		
Xgwm276	7A	Gwm276F	5′-ATT TGC CTG AAG AAA ATA TT-3′	55	101-109
		Gwm276R	5′-AAT TTC ACT GCA TAC ACA AG-3′		
Xwmc273	7A	Wmc273F	5′-AGTTATGTATTCTCTCGAGCCTG-3′	51	179
		Wmc273R	5′-GGTAACCACTAGAGTATGTCCTT-3′		
Xgwm537	7B	Gwm537F	5′-ACA TAA TGC TTC CTG TGC ACC-3′	60	203-207

		Gwm537R	5′-GCC ACT TTT GTG TCG TTC CT-3′		
Xgwm46	7B	Gwm46F	5′-GCA CGT GAA TGG ATT GGA C-3′	60	179-186
		Gwm46R	5′-TGA CCC AAT AGT GGT GGT CA-3′		
Xgwm43	7B	Gwm43F	5′-CAC CGA CGG TTT CCC TAG AGT-3′	60	176-184
		Gwm43R	5′-GGT GAG TGC AAA TGT CAT GTG-3′		
Xgwm302	7B	Gwm302F	5′-GCA AGA AGC AAC AGC AGT AAC-3′	60	277-286
		Gwm302R	5′-CAG ATG CTC TTC TCT GCT GG-3′		
Xgwm344	7B	Gwm344F	5′-CAA GGA AAT AGG CGG TAA CT-3′	55	121
		Gwm344R	5′-ATT TGA GTC TGA AGT TTG CA-3′		
Xwmc276	7B	Wmc276F	5′-GACATGTGCACCAGAATAGC-3′	51	292
		Wmc276R	5′-AGAAGAACTATTCGACTCCT-3′		
Xgwm295	7D	Gwm295F	5′-GTG AAG CAG ACC CAC AAC AC-3′	60	254-258
		Gwm295R	5′-GAC GGC TGC GAC GTA GAG-3′		
Xgwm44	7D	Gwm44F	5′-GTT GAG CTT TTC AGT TCG GC-3′	60	176-178
		Gwm44R	5′-ACT GGC ATC CAC TGA GCT G-3′		
Xgwm437	7D	Gwm437F	5′-GAT CAA GAC TTT TGT ATC TCT C-3′	50	109-111
		Gwm437R	5′-GAT GTC CAA CAG TTA GCT TA-3′		
Xgwm428	7D	Gwm428F	5′-CGA GGC AGC GAG GAT TT-3′	60	133-137
		Gwm428R	5′-TTC TCC ACT AGC CCC GC-3′		
Xgwm37	7D	Gwm37F	5′-ACT TCA TTG TTG ATC TTG CAT G-3′	60	189
		Gwm37R	5′-CGA CGA ATT CCC AGC TAA AC-3′		
Xgwm265	2A	Gwm265F	5’-TGT TGC GGA TGG TCA CTA TT-3’		
		Gwm265R	5’-GAG TAC ACA TTT GGC CTC TGC-3’		
Xgwm47.2	2A	Gwm47.2F	5’-TTG CTA CCA TGC ATG ACC AT-3’	60	166
		Gwm47.2R	5’-TTC ACC TCG ATT GAG GTC CT-3’		

Xgdm93	2A	Gdm-93F	5’-AAAAGCTGCTGGAGCATACA-3’		
		Gdm-93R	5’-GGAGCATGGCTACATCCTTC-3’		
Xwmc181	2AL/2DL	Wmc-181F	5’-TCCTTGACCCCTTGCACTAACT-3’	61	260
		Wmc-181R	5’-ATGGTTGGGAGCACTAGCTTGG-3’		
Xbarc10	2B/4B/5A/7B	Xbarc10R	GCGTGCCACTGTAACCTTTAGAAGA	52	283
		Xbarc10F	GCGAGTTGGAATTATTTGAATTAAACAAG		
Xbarc66	1DL/2B/7D	Xbarc66R	CGCGATCGATCTCCCGGTTTGCT	55	112
		Xbarc66F	GGGAAGAGGACCAAGGCCACTA		
Xbarc124	2A/2B/2D	Xbarc124R	TGCACCCCTTCCAAATCT	52	214
		Xbarc124F	TGCGAGTCGTGTGGTTGT		
Xbarc140	2B/5BL/5D	Xbarc140R	CGCCAACACCTACCATT	52	133
		Xbarc140F	TTCTCCGCACTCACAAAC		
Xbarc183	2B/6D	Xbarc183R	CCCGGGACCACCAGTAAGT	58	166
		Xbarc183F	GGATGGGGAATTGGAGATACAGAG		
Xgwm129	2B/5A	Xgwm129R	TCAGTGGGCAAGCTACACAG	50	217-233
		Xgwm129F	AAAACTTAGTAGCCGCGT		
Xgwm130	2B/7A/7D	Xgwm130R	AGCTCTGCTTCACGAGGAAG	60	121-126
		Xgwm130F	CTCCTCTTTATATCGCGTCCC		
Xgwm210	2A/2BS/2DS	Xgwm210R	TGCATCAAGAATAGTGTGGAAG	60	182,303
		Xgwm210F	TGAGAGGAAGGCTCACACCT		
Xgwm299	2B/3B	Xgwm299R	ACTACTTAGGCCTCCCGCC	55	206-215
		Xgwm299F	TGACCCACTTGCAATTCATC		
Xgwm382	2A/2BL/2D	Xgwm382R	GTCAGATAACGCCGTCCAAT	60	86,184
		Xgwm382F	CTACGTGCACCACCATTTTG		
Xgwm547	2B/3B	Xgwm547R	GTTGTCCCTATGAGAAGGAACG	60	171

		Xgwm547F	TTCTGCTGCTGTTTTCATTTAC		
Xgwm630	2A/2B	Xgwm630R	GTGCCTGTGCCATCGTC	60	120
		Xgwm630F	CGAAAGTAACAGCGCAGTGA		
Xwmc25	2BS/2DS	Xwmc25R	TCTGGCCAGGATCAATATTACT	51	166
		Xwmc25F	TAAGATACATAGATCCAACACC		
Xwmc83	2B/6B/7A	Xwmc83R	TGGAGGAAACACAATGGATGCC	61	160
		Xwmc83F	GAGTATCGCCGACGAAAGGGAA		
Xwmc149	2B/2D/5B	Xwmc149R	ACAGACTTGGTTGGTGCCGAGC	61	230
		Xwmc149F	ATGGGCGGGGGTGTAGAGTTTG		
Xwmc154	2BS	Xwmc154R	ATGCTCGTCAGTGTCATGTTTG	61	147
		Xwmc154F	AAACGGAACCTACCTCACTCTT		
Xwmc332	2B	Xwmc332R	CATTTACAAAGCGCATGAAGCC	61	169
		Xwmc332F	GAAAACTTTGGGAACAAGAGCA		
Xwmc361	2B	Xwmc361R	AATGAAGATGCAAATCGACGGC	61	216
		Xwmc361F	ATTCTCGCACTGAAAACAGGGG		
Xwmc441	2B	Xwmc441R	TCCAGTAGAGCACCTTTCATT	51	158
		Xwmc441F	ATCACGAAGATAAACAAACGG		
Xwmc602	2A/2B	Xwmc602R	TACTCCGCTTTGATATCCGTCC	61	168
		Xwmc602F	GTTTGTTGTTGCCATCACATTC		
Xwmc627	2B/3A	Xwmc627R	GATCCGAGAAGGGCAATGGTAG	61	124
		Xwmc627F	AGCAACAGCAGCGTACCATAAA		
Xwmc661	2B	Xwmc661R	CCACCATGGTGCTAATAGTGTC	61	226
		Xwmc661F	AGCTCGTAACGTAATGCAACTG		
Xwmc764	2B	Xwmc764R	CCTCGAACCTGAAGCTCTGA	61	180
		Xwmc764F	TTCGCAAGGACTCCGTAACA		

Xwmc817	2B/2D	Xwmc817R	TGACGGGGATGATGATAACG	61	199
		Xwmc817F	CGGTGAGATGAGAAAGGAAAAC		
Xcfa2278	2B	Xcfa2278R	GCCTCTGCAAGTCTTTACCG	60	151
		Xcfa2278F	AAGTCGGCCATCTTCTTCCT		
Xbarc45	2B/3A	Xbarc45R	CCCAGATGCAATGAAACCACAAT	52	182
		Xbarc45F	GCGTAGAACTGAAGCGTAAAATTA		
Xbarc91	2BS/4D	Xbarc91R	TTCCCATAACGCCGATAGTA	50	129
		Xbarc91F	GCGTTTAATATTAGCTTCAAGATCAT		
Xbarc98	2B/4D	Xbarc98R	CCGTCCTATTCGCAAACCAGATT	55	150
		Xbarc98F	GCGGATATGTTCTCTAACTCAAGCAATG		
Xbarc167	2BS	Xbarc167R	AAAGGCCCATCAACATGCAAGTACC	50	255
		Xbarc167F	CGCAGTATTCTTAGTCCCTCAT		
Xbarc200	2BS	Xbarc200R	GCGATATGATTTGGAGCTGATTG	52	168
		Xbarc200F	GCGATGACGTTAGATGCGGAATTGT		
Xgwm122	2A/2B	Xgwm122R	GGGTGGGAGAAAGGAGATG	60	131-147
		Xgwm122F	AAACCATCCTCCATCCTGG		
Xgwm429	2B	Xgwm429R	TTGTACATTAAGTTCCCATTA	50	209-211
		Xgwm429F	TTTAAGGACCTACATGACAC		
Xwmc175	2B/2D/3A	Xwmc175R	GCTCAGTCAAACCGCTACTTCT	61	253
		Xwmc175F	CACTACTCCAATCTATCGCCGT		
Xwmc317	2B	Xwmc317R	TGCTAGCAATGCTCCGGGTAAC	61	139
		Xwmc317F	TCACGAAACCTTTTCCTCCTCC		
Xwmc344	2B	Xwmc344R	ATTTCAGTCTAATTAGCGTTGG	51	246
		Xwmc344F	AACAAAGAACATAATTAACCCC		
Xwmc382	2A/2B	Xwmc382R	CATGAATGGAGGCACTGAAACA	61	217

		Xwmc382F	CCTTCCGGTCGACGCAAC		
Xwmc477	2B	Xwmc477R	CGTCGAAAACCGTACACTCTCC	61	167
		Xwmc477F	GCGAAACAGAATAGCCCTGATG		
Xwmc498	2B	Xwmc498R	CGATGAAGAGAGCCATCAAAA	61	136
		Xwmc498F	TGACATTCCGGTAGGTCAGTT		
Xbarc13	2BS	Xbarc13R	GCAGGAACAACCACGCCATCTTAC	52	142
		Xbarc13F	GCGTCGCAATTTGAAGAAAATCATC		
Xbarc160	2BS	Xbarc160R	GGTTGTTCCTAGGAAATTTCTATAATAACTG	50	107
		Xbarc160F	GCGACTTTCATGATCAAGATGGCATC		
Xgwm55	2B/6D	Xgwm55R	GCATCTGGTACACTAGCTGCC	60	118-122(2B)
		Xgwm55F	TCATGGATGCATCACATCCT		128-132(6D)
Xgwm120	2B/5A	Xgwm120R	GATCCACCTTCCTCTCTCTC	60	162-174(2B)
		Xgwm120F	GATTATACTGGTGCCGAAAC		
Xgwm132	2B/6A/6BS	Xgwm132R	TACCAAATCGAAACACATCAGG	60	116-118
		Xgwm132F	CATATCAAGGTCTCCTTCCCC		
Xgwm257	2BS	Xgwm257R	AGAGTGCATGGTGGGACG	60	190-192
		Xgwm257F	CCAAGACGATGCTGAAGTCA		
Xgwm374	1B/2BS	Xgwm374R	ATAGTGTGTTGCATGCTGTGTG	60	192-210
		Xgwm374F	TCTAATTAGCGTTGGCTGCC		
Xwmc265	2BS	Xwmc265R	GTGGATAACATCATGGTCAAC	51	263
		Xwmc265F	TACTTCGCACTAGATGAGCCT		
Xwmc272	2BS	Xwmc272R	TCAGGCCATGTATTATGCAGTA	51	140
		Xwmc272F	ACGACCAGGATAGCCAATTCAA		
Xwmc356	2B	Xwmc356R	GCCGTTGCCCAATGTAGAAG	61	217
		Xwmc356F	CCAGAGAAACTCGCCGTGTC		

Xwmc474	2A/2B	Xwmc474R	ATGCTATTAAACTAGCATGTGTCG	51	120
		Xwmc474F	AGTGGAAACATCATTCCTGGTA		
Xwmc592	2B	Xwmc592R	GGTGGCATGAACTTTCACCTGT	61	280
		Xwmc592F	TGTGTGGTGCCCATTAGGTAGA		
Xwmc770	2B	Xwmc770R	TGTCAGACTTCCTTTGATCCCC	61	130
		Xwmc770F	AAGACCATGTGACGTCCAGC		
Xcfd11	2B/2D	Xcfd11R	GGATTTGCCTTGGATTTGAA	60	167
		Xcfd11F	TTGCATCTCACGCACCTAAG		
Xcfd73	2B/2D	Xcfd73R	GATAGATCAATGTGGGCCGT	60	242
		Xcfd73F	AACTGTTCTGCCATCTGAGC		