Supplemental Table 1. EST-SSRs of morning glory automatically extracted and primer-designed by read2Marker

Unigene ID[1]		Core motifs[2]	Repeat (max)[3]	Repeat (total)[4]	fw[5] primer	Length (mer)	fw Tm	rv[6] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig00069		(tct)11	11	11	tcccctcttatcgtcgtcttcttc	24	64.1	gtattggacggtagcggaggagtt	24	65.7	180
Contig00105		(tc)10	10	10	accactcttcctcctctctcccat	24	64.9	atgccttcctcctcctcaataagc	24	65.0	271
Contig00146	*[8]	(ag)6aa(gaa)22gag (gaa)4	22	32	aacaccgcaaattattgtgcctct	24	64.9	tcccattttgggaagaagatagca	24	65.0	200
Contig00156		(ag)10	10	10	gatttcgtcgaacaagtagcaggg	24	65.2	tctcggagatgaaagaggaaatcg	24	65.0	231
Contig00157		(ag)11	11	11	cggagagagaaagaatcagagaatcc	26	64.0	tctcggcttgaacaagaatgtgag	24	64.9	241
Contig00376		(tc)10	10	10	gttgaactttcgatgccctctttt	24	63.9	gtgggggatagtgggtttctctct	24	64.9	189
Contig00513		(ag)11	11	11	acggctcggtactcacaatcaaat	24	65.1	ctgtcagcactctgaacttctggc	24	64.9	224
Contig00546		(ag)11	11	11	gtcttcatcctcgctggcatctt	23	66.1	tcagagctcataacgtatggcgaa	24	65.1	135
Contig00659	*	(ag)15	15	15	ccttcgtgagtgctcaatacagaca	25	64.9	tcggcaatccagtgaacacatagt	24	65.0	130
Contig00709		(tgt)11agt(tgt)3	11	14	ctgcagatccattgtgaattgtcc	24	65.0	gacattggtcgatctatccggaac	24	65.0	142
Contig00762		(ta)3ga(ta)5catatatat (ag)9ga(ag)8at(ag)6atag agagagag(ag)3(gtg)3	9	37	cagatattcgccatctggtctgtg	24	65.1	aactttgagatgacgcctttagcg	24	64.9	248
Contig00798		(tc)4tgaatatataaa(tc)10 (ta)8ttcttcccaaa(ct)3t(ta) 3	10	28	gcagacgatacgtttcctcactcc	24	65.4	ggtcaaccttcactctcacaccaa	24	64.8	299
Contig00935	*	(ac)12tatt(tc)4	12	16	cggtgtgaaagtattgaaaagctcc	25	64.2	cacctatctacctcgttgaaccgc	24	65.1	281
Contig00955		(tc)7(ac)6ag(tc)6(ac)3agt ctct(tg)5	7	27	cgctatatgcttctgtgattctgagc	26	64.5	cggttcttcgaagctgttaagctg	24	65.5	149
Contig00990		(ag)4aaaaagaaaact(ag)6 aaaaagaaaact(gga)3aga aggaactat(ag)9	9	22	aaaaagtcgaccaaccattagcga	24	65.0	tggtcatggtgttgttgctgtaaa	24	64.6	233
Contig01070		(ag)4aa(ag)8ac(ag)9	9	21	tgctttggacagagaaagcgagat	24	65.7	tcaattgaagccttcttctcagcc	24	65.1	296
Contig01077		(ag)11	11	11	cctgcaatcttggagttgaacaca	24	65.6	aagctcagatttttgctttgctgg	24	65.0	135
Contig01115		(ag)11	11	11	gcctaagctttctctctttcgcc	24	64.9	tatttaacaggagcttcaggggca	24	65.1	179
Contig01174	*	(tc)12	12	12	tcaaactccctttcctctcttgct	24	63.9	tagacgaccgcctcttcttgaaac	24	65.0	201
Contig01190		(tc)11	11	11	ctctccatttccaaattccaatcg	24	64.9	tttcttctggtttcgcgagagagt	24	64.8	112
Contig01215	*	(tc)3cccc(tc)14	14	17	ttgactccactccctctgagagtc	24	63.4	aataacagcgcgcagaagaaagag	24	65.1	283
Contig01287		(ag)10	10	10	caaaagcatcagcagaagccagta	24	64.9	gcaagagcaaagaacatgcaaaga	24	64.9	157
Contig01492		(gca)3(cta)10	10	13	cctctcctctgatcgttcttctcg	24	65.0	gcattcaccggctgatttagattc	24	65.0	159
Contig01546		(ag)10	10	10	tccactgtactgttctgagcgcat	24	65.5	ccgacgagttatctcccatcttca	24	65.7	296
Contig01578	*	(ta)12	12	12	gaagtttgcaaaggagcagcaaat	24	64.9	ccaaccacaggggtttatcaaaag	24	64.7	290
Contig01656		(ag)11	11	11	cttgtaaagcaggattgggtctgc	24	65.2	tatccttggaagaagaattgggca	24	65.0	254
Contig01658		(ag)10	10	10	aaggtctcacctttgcaagatttc	24	62.1	cgcaagtatattccctgcaactcc	24	65.0	221
Contig01699	*	(ag)5aa(ag)12	12	17	aaagggaaaaagggattgtgtgct	24	65.1	gagcaacctcagcatcacaaagaa	24	65.0	219
Contig01735		(tc)11	11	11	tctaacctgcgaaggagaggaaga	24	64.8	tccctcccaagacaaaaatcaaga	24	65.1	237
Contig01832		(ag)11	11	11	ttaatcgcatttctcaccctcgat	24	65.0	cccctaaactctcgatccaattcc	24	65.1	151

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig01954	*	(tc)12	12	12	tctcaactcgaatgttaccttcctca	26	64.4	gctttctcttcagctgcgactttc	24	65.1	294
Contig01964		(tc)4t(tct)10	10	14	ctcatcgctctcatactcaaaccg	24	64.4	cagcttaatgcgattgcagagtgt	24	64.8	112
Contig02004		(ta)10	10	10	gatgaatgaaatgatgagggtagag	25	60.2	gaggtcacgtgaagagaatgggat	24	64.9	284
Contig02084	*	(tc)12	12	12	aatcgggacccctttcctatctct	24	65.3	cccactcctctcctccatactcaa	24	65.0	260
Contig02134		(ta)11	11	11	cagccctaaatccctaaaataacca	25	62.5	gacacagcatgcacacactcctc	23	65.5	300
Contig02174	*	(tc)3cacgcaaataac(ag)13at(ag)6	13	22	agaacccaccaggatattttccgt	24	64.9	ccatttcattggcttcttctttgg	24	65.0	225
Contig02220		(tc)10tatacaacga(ac)3a(tc)3atctctcatcc(atc)3	10	19	tcttctctcaaacccaaacccaaa	24	65.1	ccatgacgacctttctcctctgat	24	65.0	272
Contig02235		(ta)11	11	11	ttcatcatcctgaagaggagggtc	24	65.0	tttctttaatttggtcgtctcgcc	24	64.6	160
Contig02271	*	(tc)13	13	13	ccttcctgagcttccaaattccaa	24	66.6	cacttctctcaacacgaggcacat	24	65.0	273
Contig02293	*	(tg)14	14	14	tggaaatgaagctgctggtattga	24	65.0	tacaagggcagtacagcacaaacc	24	64.5	210
Contig02323		(cgc)11	11	11	gtcgcgttttctcaaccaactctt	24	65.0	acggagaatcttcccaagtgagtg	24	65.0	247
Contig02340	*	(ta)14t(ta)4	14	18	aaatcaagcatgtaacctgcgacc	24	65.5	taattgcctggaaagggtgtctgt	24	65.0	209
Contig02363	*	(gaa)14	14	14	tcaaaaatccccaaatcacagg	22	63.1	gaagaccaccatgagaatcggaat	24	64.7	130
Contig02441	*	(ta)18	18	18	ccaacaccaatatccacaaccaga	24	65.0	ccgaattaaaatccacacacgaca	24	65.0	284
Contig02483		(ta)4ca(ta)7tcaaac(at)3t(ta)5ttat(ta)3	7	22	tgcacccaatatcagattgaacga	24	65.7	tggtcacaactcacaacaactgga	24	65.0	241
Contig02501	*	(ta)28	28	28	tggtgtgcctactcccaagtgtta	24	64.9	tatagatggctgcagggtggctta	24	65.9	135
Contig02586	*	(ta)19	19	19	atgatgtcacgatgagattgagcc	24	64.7	ctatcaccaccttagctccatgcc	24	65.1	220
Contig02797	*	(ta)23gtaagttta(tg)3tta(gt)3	23	29	aatgaagtcctcaacgacgtctcc	24	65.0	gtttaaccagacacccaaaaccga	24	65.2	179
Contig02819		(ag)11	11	11	gagttgaatttgggtgtgggagaa	24	65.5	aacggggttgttgaagtgagagag	24	65.0	156
Contig02903	*	(ag)14aa(gaa)9	14	23	cacgagggaaagagataggagcaa	24	65.0	gctttagcagcagcaaaactccat	24	65.0	154
Contig03006	*	(tat)18	18	18	gccattcttgatctgcttgaacct	24	65.0	ccctccatacccgatgaactgtag	24	64.9	169
Contig03049	*	(tc)12tt(tc)3	12	15	ttcagaaagcaccagcaaagatgt	24	64.4	gtgactcccaactgaggaggaaag	24	64.7	154
Contig03077	*	(tc)14	14	14	tcttctctatgctccctccctcct	24	65.0	aatgcaggtggaggatgaaatgtt	24	65.0	245
Contig03096	*	(ta)33	33	33	acacccctccggtctcat	18	60.3	atgccagaaaagcttggaga	20	60.0	172
Contig03155		(tc)9taggaaatctgtt(tc)7(ta)4(tc)4(ta)3ta(ta)5	9	32	gaacactggtctcctctccctctc	24	64.1	cccatcacattcgattcatctcaa	24	65.3	244
Contig03167		(tc)3tttctt(tc)11	11	14	tcctttctagtattattacccagtccc	27	60.3	ctacaagtaaccaaccgggtcagc	24	65.0	166
Contig03182	*	(ta)32	32	32	tgctctcatttgatgccttctttg	24	64.8	ctataagaaccacaggggctccac	24	64.2	231
Contig03199		(tc)11	11	11	gttgacgtgtcccctctctcattt	24	64.9	atttgcaggatagtggatgcctgt	24	65.1	241
Contig03250		(ag)11aa(at)3gggtagaa(ag)5	11	19	catctccgtcgtcatcatatttgg	24	64.7	acacctcctccttcacaaaaccac	24	64.8	133
Contig03277	*	(ta)3ca(ta)29t(ag)14	29	46	gcctggcttctacttctttaaacgc	25	64.6	gagctcaatggttctcaaaaggga	24	64.9	191
Contig03293	*	(ta)23	23	23	ggagcccaaattaacgtacgaaca	24	65.2	gccgctgcttattagcttcttcaa	24	65.0	211
Contig03435		(ag)10	10	10	aaagcgtttggagttgtgcgttat	24	65.0	ggccgactcaagcgatctaactaa	24	64.9	130

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig03625		(ta)5accaatatact(tg)5cgt gtgta(ta)8gaa(ag)8	8	26	acatacccagtcccctaccagtca	24	65.0	tgttcatcatgctgtttggagctt	24	65.2	242
Contig03695		(tc)11tacactgggatt(tc)4	11	15	gtgttgtgttttggtatgcgggtt	24	66.0	caagaagaaagggtggacgaagaa	24	64.9	192
Contig03729	*	(tc)3ttcat(ta)6t(ta)13	13	22	ctcatagggcttcgctcttctctg	24	64.9	tcagccccaccttctcttacactc	24	65.1	222
Contig03759		(ct)3t(tc)10	10	13	tgtaaggcttcgatgagtccacac	24	64.8	ctctctctaaacccctccctctgc	24	65.0	216
Contig03766		(ag)3aaagaaatatatt (ag)10aaa(ag)3	10	16	aagaaggtatagctcgctcgctca	24	64.8	tgacttatgtttcaggctgccaaa	24	65.0	270
Contig03778	*	(taa)15	15	15	gggattgatctgaagaaaccccat	24	65.5	gtcatcgaactcaaataacctccaa	25	62.6	290
Contig03812		(cct)4gaataccatacaa(tg)3 ctggt(gat)5ga(gga)3catg gatt(atg)3catggattatg (gat)3	5	21	gacaaggcagaaacagaggattgtc	25	64.6	tctctctggccttggaatagttgg	24	64.9	264
Contig03821		(tc)3actatatcttccc(tc)11	11	14	tcgctctctttcactacaaacccc	24	64.9	cattcatcgacgattggcagatac	24	64.8	265
Contig03839		(gaa)11	11	11	atccattccaatcataatcgccag	24	65.1	aaaaaccgatgacacatcaatccc	24	65.1	275
Contig03918		(tc)11	11	11	caaagcacagcaaagctactccaa	24	64.9	atccatttggaaataacggggaag	24	65.0	125
Contig03945		(tc)10	10	10	tgctcccattctaaagctctcgtc	24	65.1	atccaaattccctacaatcatgcg	24	65.1	300
Contig04019	*	(tat)15	15	15	cttgttgattgccaacaaaggcta	24	64.5	ttaaggctacagcgtgcaaaatga	24	65.0	222
Contig04023	*	(ag)12	12	12	gtctttgtgtctggattcatcccc	24	65.1	gcctcctcaatgtctccaagctaa	24	65.0	229
Contig04077		(tc)10	10	10	ttattttccttccgttgaaacccc	24	65.1	ttaacatgcccaccaacacgtaag	24	65.0	137
Contig04087	*	(tc)12	12	12	tcttctctatctggagctctcggtc	25	63.7	gagaagcaaatccaagaaaacgga	24	64.8	214
Contig04114		(ag)4aaac(ag)11gaagtgta aagtg(ag)3ggggagaggg (ag)10	11	28	cattggagaaggagaagcacttga	24	64.1	cgtagaagacgagagacggagagg	24	65.0	147
Contig04122		(tc)11tatcgc(tc)5	11	16	tctgtccatctgccaatagagcaa	24	65.3	caacagctttcttcgggtctccta	24	65.0	165
Contig04153		(tc)11	11	11	ctaccacgacccctctgcttctac	24	64.5	cgaaaatgggtattgcagttgaca	24	65.1	297
Contig04156	*	(ag)12	12	12	ccccatcccccaatatacacttct	24	65.1	caaccagaacaacaccaaacaagc	24	64.9	210
Contig04203	*	(ta)5t(ag)10	10	15	cctctccctttagctttcttccca	24	65.1	ttgtctcctcccatttttggtgat	24	64.9	127
Contig04237	*	(tc)13t(tc)6	13	19	cttacactctgtttccagccctcc	24	64.5	tgctaccagaaaacaatggggact	24	65.0	235
Contig04246		(ag)10aaagagaa(ag)3	10	13	ccaagtctctggatcacaacactttat	27	62.9	ttttccaccataacaaccacctcc	24	65.1	287
Contig04324		(tc)3caccactatt(tc)3cc (tc)10ttccgt(tc)4	10	20	acctctccttcgatccgtctttct	24	64.9	aaacttcaacagctcaacgccttc	24	65.1	156
Contig04332		(ta)4ttctccctt(tc)10tt (tc)7tgca(ta)4	10	25	tcctgcacatacagcttctgcaat	24	65.3	gctttgtcctccaccttcatgtct	24	65.0	161
Contig04347		(tc)4ta(tc)10	10	14	tgccactcttacagccttctctcc	24	65.3	catctgacaccaaccttgcaaaag	24	65.0	284
Contig04554		(tc)10	10	10	gcgttgttgacctcactgtctgat	24	64.9	tgcttaagaatcaccggtcgaaat	24	65.0	115
Contig04592	*	(tc)12tgtg(ac)3	12	15	tgtatattaatcagcccaccaccc	24	63.0	acttgggacttgggagtggtgata	24	65.1	120
Contig04638		(tc)10	10	10	gacaaacctcaactcccaagtcct	24	64.0	agttcactgttggtgccattttca	24	65.0	264

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig04657	*	(ag)17	17	17	aatgtgctaaactctccttcgcca	24	65.3	agagcggcaaataccacagaactc	24	65.0	203
Contig04735	*	(ct)3tccta(tc)12	12	15	agtgcgagctctcaactcacaaga	24	65.0	cagtaaggacgcgagactccattt	24	64.9	106
Contig04740		(tc)10	10	10	agcacagtctctctcctctccagg	24	64.8	ctcattcctgctatgggtgctctt	24	65.0	183
Contig04759		(tc)10t(tc)4	10	14	aagacatctgcctcagtgcctctt	24	64.9	tgcaagagattgcgacgaaactac	24	64.8	192
Contig05021	*	(tc)14	14	14	tctcatcaaccaattcaacaccct	24	64.0	gtatggatcatccctcgacagctt	24	64.8	127
Contig05069	*	(tc)12	12	12	gtggtttttgcaagcgacatttg	23	65.8	tgagcttttacccaagaccctcag	24	64.9	242
Contig05098	*	(ag)17	17	17	tcggttcggtttggtatttacagc	24	65.2	acagattgaggctttgttgatcgc	24	65.8	173
Contig05104	*	(ag)14	14	14	gggcagaaaagaaaaagaagaaagc	25	63.8	gccaacaatgctagggaatacagc	24	65.0	249
Contig05140	*	(ag)17(ga)3	17	20	tgcctggactagggagactctgaa	24	65.7	ccgctccataacaagctcgtattc	24	65.1	292
Contig05179		(tc)10	10	10	tatttttcccaaacccaaacgcct	24	67.2	tgacgtaaccgtagcagagtgagc	24	65.0	291
Contig05275	*	(tc)12	12	12	gccacaatcctcgaagaagaagaa	24	65.0	gccatatccaaaggttcccttagc	24	65.0	250
Contig05282	*	(tc)13	13	13	acggcctgacagccagataaataa	24	65.0	aacaacgcagagtcggagagagat	24	64.9	129
Contig05319		(cg)5cacacaca(ta)10	10	15	agagctacccactgccaaattacg	24	64.7	aaatcttgttgatctccctccgtg	24	64.7	138
Contig05326	*	(ag)4gg(ag)13cg(tg)5	13	22	acgaaggagctcaacgctgtagac	24	65.3	atcaacgatagaaaactcggcgaa	24	65.1	225
Contig05370		(ag)5gg(ag)10gcgccgcca (tg)3	10	18	gggtcaagccaccagtttgtaaag	24	65.0	ctctatggcgcaacctcctagaaa	24	64.9	283
Contig05406		(ag)11	11	11	ataggaaagcactcacgacttgcc	24	65.0	actcgttagagacatccttccccc	24	65.0	112
Contig05407	*	(ag)14	14	14	tccttcaccagacacgagtcgtta	24	65.3	cacctcccttcactctctccactc	24	64.9	128
Contig05421	*	(ag)4aa(ag)12	12	16	cgcctatacatacacgctgctctg	24	65.1	tttgtttctcgctctacctcaggg	24	65.0	167
Contig05432	*	(tc)14tgcacgcacaga(ta)3	14	17	gacggtacgccaattttctatgtc	24	63.0	gatcaccatgcaccttctgaattg	24	65.0	238
Contig05448	*	(tc)13	13	13	ctcacaatcacaatcctcttcccc	24	65.2	ttgaatttgccgtaccagatgaga	24	64.9	279
Contig05461	*	(ag)17	17	17	ccgcttctaatctgggctgttcta	24	64.9	cgttgtcccaagcatcacaagata	24	65.4	281
Contig05536	*	(ta)7gctactgt(ag)12	12	19	ttgaatttcccagtttggaccact	24	64.9	accgaactgcccactcatgttatt	24	65.0	270
Contig05575	*	(ag)17	17	17	caagagagagcgaatctttctttaggg	27	64.9	aggtcatcgttgctttcttcttcg	24	65.0	180
Contig05580	*	(ag)14	14	14	ccatccctcttagaaacagcctca	24	64.9	tggatgttcatcgccttcttgtta	24	64.9	249
Contig05600		(ct)3ttctctctttcgt(tc)6(ta) 4a(ta)5atatata(at)3atata tatataca(tc)3	6	24	tttcctcctcaatcacccttaca	24	65.0	caaatttccccacttctccaactg	24	65.0	179
Contig05644	*	(tc)13	13	13	cgctgcttctttcttcctctgttc	24	64.9	caaagagtcgacgaaccttagcgt	24	65.0	268
Contig05652	*	(ag)3tg(ag)13	13	16	gagcgtcctcgatcaacccta	21	63.8	aagcatcggtacctgtgagagacc	24	65.0	235
Contig05704		(ag)10gg(ag)4	10	14	ctcgcgacaggataacgaatcaag	24	66.2	tgcactcacatttcatcgatctca	24	65.1	178
Contig05733	*	(ag)14	14	14	ggacagtctgctctccatttggta	24	63.9	agagacccattgaacatctctcgc	24	65.1	262
Contig05806	*	(tc)12	12	12	tctcccttacacttcacgccaaat	24	65.1	tgggttttatctcaagggagagca	24	65.2	224
Contig05829	*	(tc)16	16	16	ctccatagcttcttcttgggttcg	24	64.5	atcagagacgacgcaaaaaccttc	24	65.0	271
Contig05869		(ag)11	11	11	atgtcatttgctaccggaaaaagc	24	64.5	gagactcgtcaatccccttcttca	24	65.1	149
Contig05911	*	(ta)4tgtatg(ta)3ttgcggag ggggg(ag)17	17	24	cgtcctcgtaaacggaaagtaacg	24	65.0	tacctcttacggagcaaagcctca	24	65.4	242
Contig06021		(tc)10	10	10	ccacccaatcaggagaaagatttg	24	65.0	ggatgaaggtccagcattttcact	24	64.8	124

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig06063	*	(tc)13tttcggtc(ta)3	13	16	ttaacaaaagggagtacggagcga	24	65.1	tggagaaggtagtaggcaacggag	24	64.9	300
Contig06086		(ag)11	11	11	atatccccggaggtagtgtggagt	24	65.1	aagctgcaggtgcagtagtgtgac	24	65.2	264
Contig06087	*	(tc)13	13	13	tgatgattcttgaaggggagcact	24	65.4	agccttagctccttctctcccttg	24	64.6	193
Contig06105		(ag)10atg(ag)3	10	13	atctctctcgatccgtctgcaaat	24	64.7	aatgccatgctcaaggcaatagag	24	65.6	149
Contig06115		(ag)11t(ag)4	11	15	gactgatgggacttcagaaatga	23	60.5	atgagatggctctgctcttcacct	24	64.9	128
Contig06196	*	(ag)16	16	16	ggctggaatgacaggaaatcaatc	24	65.1	cattctctgccacagtcctcctct	24	65.4	276
Contig06352		(tc)10	10	10	ccttcatcctctcttctttaataaccc	27	61.9	aacagcatcaaaggaggcttcatc	24	65.0	225
Contig06422	*	(ag)3aa(ag)14	14	17	tccgccacttcagagcatacataa	24	65.0	tagcaatgagcttttgcttctccc	24	65.0	192
Contig06449	*	(ta)13	13	13	ctttgcctttgttttgggttacga	24	65.2	gagacgcaaccagaaaaggaacat	24	64.9	213
Contig06459	*	(ag)4at(ag)12	12	16	ccagtgtcttccctgcaaagtgta	24	64.7	ttctcttctagctcccccaaaacc	24	65.0	297
Contig06487		(ag)3aaagagaa(ag)10	10	13	cctcattcccatcaaacctcattt	24	64.4	ctcaacacaatcaaaaccccccatt	24	65.1	281
Contig06503		(tc)10	10	10	tctgcctgggtgctttactttctt	24	64.5	acaatatggtttcaggccatggag	24	65.2	297
Contig06566	*	(ag)17	17	17	tcatagctattacagggaaacactgga	27	63.2	tgctgtagatcatcaggaagcacc	24	64.9	157
Contig06574		(tc)10ttctagtccaccc(tc)3	10	13	gcagagtgatgagtgcgacatttt	24	64.9	agctttgcttgctttttcaccaag	24	65.0	212
Contig06590	*	(tc)16	16	16	cttggggttacccttttctccac	24	65.0	gccgctaattcacggaatgtaaaa	24	65.1	288
Contig06640	*	(tg)4gaaatatttttgc(ag)17	17	21	gctgcttccgcaaagttcatattc	24	65.2	tcaacaatcacgaagcaaccactt	24	65.1	117
Contig06657	*	(tc)4cc(tc)12	12	16	cccgcccttctattattcatccat	24	65.2	cttattgattccgtttccgagtgc	24	65.0	168
Contig06713	*	(ag)3atagggggg(ag)12	12	15	ctgccattgaaaagctcagtagcc	24	65.4	ttgatttcgcccttccttcaacta	24	65.1	255
Contig06791		(ta)10	10	10	tcatattgcagagactggcaaagc	24	64.8	accttattgggttcaatgggtgtg	24	65.0	191
Contig06793		(ag)3aaagg(ag)10	10	13	cccatccttccctctctattctcc	24	64.5	acaccaatccacagtcttcccttc	24	64.8	120
Contig06795	*	(ag)6a(ag)12g(ga)3	12	21	tcccataccaattaccaaagacagc	25	64.3	gtccgaacagtaggagtcagccat	24	65.0	280
Contig06796	*	(ag)13	13	13	ggggttttgcttagctcactgaa	23	63.9	gaaagccgcctttatagacagcaa	24	64.8	256
Contig06910		(ta)3cctgtttgcg(ta)11nac ctacntanaa(ta)4	11	18	caccattttctatccgactggagc	24	65.1	ttacgagatttgaatgcgcagaag	24	64.7	163
Contig06934	*	(ac)3ctctccttga(tc)16	16	19	gaaacccgtcaatttcaaagga	22	62.4	accaaatgtgacccaagtggagat	24	65.0	216
Contig06948	*	(ag)3tctcagacc(tc)14	14	17	ccagcctctctacgcataaccatt	24	64.7	tgaccattaaaagatggggaggaa	24	64.8	237
Contig07002	*	(tc)13	13	13	gactctctcgctaaacacagcttagta	27	60.9	cgtgtagacaagaccggtcaaaga	24	64.7	158
Contig07004	*	(tg)6(ag)12	12	18	gacacttttctcctgcacaaacg	24	64.3	cggagatgatcagcaaggaagaat	24	64.9	196
Contig07073		(ag)10	10	10	ttgggtagtggggctttaggaagt	24	65.1	acattcttgatcccaaaatgcagc	24	65.5	259
Contig07082		(tc)11	11	11	gagatggtgttgatggagagcaga	24	65.0	agcggcgtagaagtaaatgcagac	24	64.9	232
Contig07087	*	(ag)8aa(ag)12	12	20	atgagtatggctcccaaatccaac	24	64.4	cctggtctccaaaaacagtaacgg	24	65.0	218
Contig07091		(tc)11	11	11	gcggaacttccacagttccactaa	24	65.7	ataccgtcaagcatctccgatctc	24	64.9	285
Contig07135		(tc)10	10	10	agttccgtccccatttttctttgt	24	65.0	tatgtattgatcagctgtgccgtg	24	64.3	161
Contig07202	*	(ag)17	17	17	ggcctctcgtcttcgtctaaccta	24	64.2	tcccttagcttcgtctgccataag	24	64.9	150
Contig07219	*	(tct)16	16	16	ttgtggtgatggcatcttgattct	24	65.0	tcagatcttcttcgaaatctccgc	24	65.1	186
Contig07258		(tc)9ta(tc)4gcacatttatt (tc)4gcac(ta)3gcacatttat (ag)3gcaca(ta)3(tg)5	9	31	tgcctcctgtgtaaatacttttcctc	26	62.9	gaaattactgctctgcccttccct	24	65.0	221

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig07260		(tgt)11agt(tgt)3	11	14	ctgcagatccattgtgaattgtcc	24	65.0	gacattggtcgatctatccggaac	24	65.0	142
Contig07295		(tc)3t(tct)11	11	14	gttcagtcccacctcttccctctt	24	65.2	tgttgctccatttccccagtttat	24	64.8	297
Contig07342		(ag)4ggagggaggg(ag)10	10	14	tccaccaatataaaatggggagtga	25	64.4	cagagtcgttgtcgatgaagtcgt	24	65.0	285
Contig07368	*	(tc)3tttctccat(tc)17	17	20	aaagcccacaaagctctcatgtgt	24	65.4	gctgtaaccaattgggagcaaaag	24	65.0	255
Contig07440	*	(tc)14	14	14	cgctctacttcgtcgttgtcagaa	24	65.1	tggaagagaagacgacaatggaga	24	64.5	218
Contig07481		(ag)11	11	11	ggcggtttagtgtttgaaatagcc	24	64.0	gggcttcaatttctccttctcctc	24	64.7	260
Contig07492		(tc)10ttcctccc(tc)3(ta)4	10	17	gacttccctgtgaacatcctcgtt	24	64.9	agcagccacatttcatttcatcct	24	65.2	153
Contig07514		(ga)3a(ag)11	11	14	ggcctctctgtaccttctccaaca	24	65.1	tccgtgaaacatgaaaagtcctca	24	65.0	161
Contig07568	*	(ga)3aaa(ag)16	16	19	gactaccctgtgtattgagagtggg	25	62.3	tctccttcaagctctccaccatct	24	64.9	269
Contig07632		(tc)10	10	10	tccttcatcttctccacctcttca	24	63.6	ctcgcgactctatctcattcccag	24	65.6	219
Contig07652		(tc)11	11	11	ttcctccggcttatcattttctca	24	65.1	tgaagactggaaacctacgggaaa	24	65.1	164
Contig07663	*	(ag)12	12	12	gggagtgagggagggagaaagata	24	65.1	tgagggacagaatcctctcaaacc	24	65.0	217
Contig07664	*	(ag)16	16	16	cctaaagttcaagaattgtggagga	25	61.9	ggaagagagagaatggtacccacg	24	64.4	101
Contig07718	*	(ac)3ccctctt(tc)16	16	19	tcttccaaccccacatccttaact	24	64.1	ccgatctccttccacactgaagat	24	65.0	275
Contig07725	*	(ac)5at(ag)15	15	20	cttctggtctccatacgtgagtcg	24	64.4	ttctgattctccattttctccccc	24	65.6	194
Contig07741		(ta)3atccgtaca(ta)3at (tc)3gttcgc(tc)11	11	20	tctctgtctcgcacacacactgtc	24	65.2	agacctctccattctcctcccact	24	64.9	203
Contig07752	*	(tct)17	17	17	atgtgattctttgcaccgtttcct	24	65.1	tccacactgccttcactacccata	24	64.9	150
Contig07772	*	(ag)12	12	12	gtggcctgtggtgtttgaagaaa	23	65.5	cttcaccacagttcgaaacccttt	24	64.7	272
Contig07773		(tc)10	10	10	ctttcaggcttcttcttcacccaa	24	65.0	atgagttcttgctttcgttttcgc	24	64.9	158
Contig07907		(tc)8cccc(tc)5(ac)3a(ta)5	8	21	gctccccttcttccttgttctttc	24	64.7	aaaccccactcagatgactccaaa	24	65.2	283
Contig07974	*	(ta)27	27	27	gtcaaccacaaaagaaagttcgcc	24	65.1	ggcttcttcaattcacgcatcata	24	64.5	293
Contig08117		(ac)5aat(ta)11(tc)4(ta)5t atat(ag)3ta(ag)9	11	37	tggggtatgggttttgtttagctg	24	65.1	ccatgtaaccccaaaactgcaaat	24	65.0	205
Contig08954		(taa)10	10	10	tgggtttaatttcttccttctcccc	25	65.4	gacgctgcaggatagtgtttctga	24	65.0	165
Contig09450		(tc)6cctctctt(tc)7(ta)8ca (ta)4	8	25	cacaaacactcaaaacagtcccct	24	63.7	gctacatctccttgtgcattgtgg	24	65.1	261
Contig09582	*	(tc)17ngaact(tc)4	17	21	ttggaatccagtttgtgctgtgat	24	65.0	gtgtaccgctgtccccgtttt	21	65.4	263
Contig09733		(ta)10	10	10	gctgcaacttttttcagaagcaatg	24	64.4	catctcacctcaacattgccaaac	24	65.0	236
Contig10273	*	(tc)12	12	12	tttgttcacctgataaagcagcca	24	65.0	ctgctttcctggtaaatggattgc	24	65.0	189
Contig10281		(ta)3aa(ac)10	10	13	ttccattcaagctaaagagcagca	24	64.5	aacaaaccatgcaagtacgcagaa	24	64.9	143
Contig10368	*	(ag)13	13	13	gcaagcttcgccatgtacacatac	24	65.0	aaaccaaaaaccgctccttcactt	24	65.2	147
Contig10405	*	(ta)17	17	17	ctgcacagcaaggatttaacaatga	25	64.5	tggagaagaaacatggtttgaagg	24	63.6	263
Contig10408		(tca)11	11	11	tgaggaatcccaaccgtttctcta	24	65.1	tacgcgggagcattcatctaaagt	24	65.1	256
Contig10425	*	(ag)18	18	18	cgtccttgaccttcagttccttgt	24	65.0	gtatccaaccacactgccgcacta	24	67.3	268
Contig10511	*	(ag)17	17	17	tataggatgatgcaaggcagagca	24	65.1	tgccgaggaatgaaaagaggaata	24	65.1	151
Contig10526		(taa)3(caa)8(taa)7ta (taa)4	8	22	ggtttttgtcaaagagcatttccc	24	64.1	tttgtattgtatccctcggtcgct	24	64.9	168

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
Contig10818	*	(tc)13	13	13	gcacctcagattaacaacactttcagg	27	65.2	tccatatctttgccttagctccca	24	65.1	141
Contig10873		(tc)11	11	11	cctccccctagtgtcatttctcct	24	65.0	gaagagatcgccattgttgagtga	24	64.9	119
Contig10901		(ta)10	10	10	gtatgcacgatttccacgaaatga	24	65.1	gaatacgtgtctgaatccgggaag	24	65.0	287
Contig10939		(ac)11	11	11	gcattggacaggaaaagtcgaaat	24	64.6	aggaattaggccttgctgcatctt	24	65.4	216
Contig10987		(cgg)11	11	11	ggtagcgattggcattacatcctc	24	64.9	tatccagcttcttcgatccactcc	24	64.9	214
Contig11104		(taa)11	11	11	cagccattgaagttctcaacacaa	24	63.6	attgcggtgaagtatagcccagaa	24	65.0	295
Contig11406		(ag)11	11	11	gagacagagaaatgctttgggcat	24	65.0	gtcttccacctccaaacccctct	23	66.0	233
Contig11626	*	(ag)15g(gt)3	15	18	gttttgaggtcggacattggaatc	24	64.9	tgcaaccacatgctcactatcctt	24	65.1	162
Contig11928		(tc)11tttaatttt(tc)4	11	15	tcttgcttctcaaggtggttgttg	24	64.8	gagcaagaaataaagctgccac	22	60.4	214
Contig11987	*	(gaa)14gatgatatcc(ag)3	14	17	tgaagaaacttccccaaccacttc	24	64.7	ttggggcctccaaatgtgatatag	24	65.1	293
Contig12093	*	(ta)15	15	15	gctgctctactttcggagctcatc	24	65.0	aatcttgaattgctttgagcctcg	24	64.9	292
Contig12195	*	(ag)3taataa(gaa)19	19	22	ctgattgttcaaaacccacactcg	24	64.9	gcagtcctgtatttgcagatccct	24	64.9	249
Contig12298		(gt)3agtgt(gaa)4gta (gaa)11	11	18	ataaagatgatgcctggggtaggg	24	65.3	gactgcaacatacacacaaagctaa	25	60.6	246
Contig12319		(ag)13	13	13	cagcaaatgtgacaacacagatcg	24	65.0	ttattggtcggagtgggtatggac	24	65.1	290
Contig12423	*	(tc)7tt(tc)22	22	29	tggcgactggtttctctttcttc	24	65.0	tccacagaaggcagagatttttcc	24	64.9	133
Contig12554		(tc)3ctctctcc(tc)10	10	13	tgattgggttgaactgaagatgga	24	64.9	cttctcctctatcccacaacgcac	24	65.4	129
Contig12610		(ag)11	11	11	aaagccctctcagtacccttttgc	24	65.0	cttcttgattcgtggtatgggctc	24	65.1	244
Contig12696		(tc)11	11	11	ggcaacacttccctctcatcaagt	24	65.0	cccactccatccgattaacattct	24	64.4	248
Contig12991		(ta)10	10	10	aatgtaacatgcaagccagccttt	24	65.0	tggagaaaccagagaatggggtta	24	65.0	221
Contig13120		(ta)10	10	10	cattattgccccttggtatggaaa	24	64.8	tggatcggaaagcattctctttgt	24	65.2	281
Contig13139		(ta)11(tg)9	11	20	aataggatgtcaaagacagactactgc	27	60.5	ctcggtaaaatgtcggtccaaaag	24	64.9	186
Contig13200		(ca)3ac(ta)11	11	14	ggtagcagtacaaccccaggatct	24	63.8	gatcgagttcaatcgagaccatga	24	64.8	226
Contig13327		(ag)10	10	10	ggaatgtcaactaccaccaaagaaga	26	63.7	acccatcgtctggaagaacttgag	24	65.0	276
Contig13374	*	(ta)33	33	33	gccatggaggaagattgaagaaga	24	64.9	acaagacatcaactgtggctggag	24	64.9	255
Contig13560	*	(tc)13	13	13	ccactgtgtgtgagaatccagctt	24	64.9	ggaattgcgtttagacttgcatcc	24	65.0	210
Contig13574		(ta)15	15	15	taaagctcacgcacgttaatccac	24	64.5	ttcttgtgggtgcacatctcattt	24	65.0	269
Contig13588		(ag)11	11	11	tgagaattgaagggtgtgtaggca	24	65.0	atgtctgattctctcccccaacc	23	64.8	101
Contig13620	*	(ga)3aacaaagttac(ag)12	12	15	acgtttccagatcaacctgaggag	24	65.0	gatgcagtagattttcacgtcgct	24	63.9	121
Contig13756		(tc)10	10	10	agtagacggatgggtagtggtgga	24	65.1	gaatacactacccttgagccgcag	24	65.2	166
Contig13806		(ta)10	10	10	atatatgatcgccttccatccacg	24	65.1	attggcgtttgatttgcagcttac	24	65.4	173
JMFF003B05	*	(ag)16	16	16	cacaagaaaaacaccacagtaagagag	27	61.7	tcttgtgaggttgttgaaggagca	24	65.4	273
JMFF007H04		(gaa)10	10	10	gaggaggaggagaagccagaagag	24	65.3	ttggtggcagaaggtcttgatgta	24	65.0	293
JMFF007L19		(gat)10	10	10	tatgggtgatgaaggaggaaggaa	24	65.0	tcaacaaagtcgtctgcgtctctc	24	65.2	123
JMFF011H24		(ag)10	10	10	agaaaatcaacaacacccgcctta	24	64.9	aagaatgtggagccaacagagacc	24	65.0	232
JMFF012J03		(tc)11	11	11	ttggaaggcagaaagagtttggac	24	64.9	cttctcctccactaagcctccctc	24	65.0	231
JMFF014I01		(ag)10	10	10	ccagtgtgcgattcactcttctgt	24	65.0	ttgctgttctcttgatcgcagttc	24	65.1	185
JMFF014O01		(gaa)11(gat)3	11	14	cagcagcggtgagttttactctga	24	65.1	ctttcttccgtgtcgtcgtcataa	24	64.6	108

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
JMFF023M20		(tc)11(ta)8	11	19	attcacgttgcccattctcacttt	24	65.1	aaaccgtgctttcaggtttatgga	24	64.9	255
JMFF025H23		(ag)7ac(ag)11	11	18	cacatgaactccctgtgccataat	24	64.3	tgcagaaagaacctttgttgacca	24	65.1	212
JMFF030N04	*	(ag)17	17	17	tgcaaacctgaaaactctcacaca	24	64.2	cagcttttcccacatctctgcaac	24	66.4	215
JMFF035A09		(ag)10ac(ag)9	10	19	tctactctgaagtaaaacaagggagc	26	60.6	tgcagagcacccgacaaatagtaa	24	65.0	156
JMFF039J15	*	(ctc)3tgc(ag)15	15	18	gggtgctctttgattctgcatttc	24	65.3	ggatgagaaactgctaggggggaag	24	65.4	209
JMFF043B04		(ta)11t(ag)8	11	19	agaaaacaaccagcgaactcaagc	24	65.1	agcagccccagaactaaccctaac	24	64.9	228
JMFF043D23	*	(tc)14	14	14	tcttctctatgctccctccctcct	24	65.0	aatgcaggtggaggatgaaatgtt	24	65.0	215
JMFF050I11		(ag)11	11	11	cattcacacccatccatacttcca	24	65.0	aatgtctcctctgttgcccagttc	24	65.0	284
JMFN003E19		(ta)10	10	10	taagctagccatatctccctggca	24	65.2	tgcttggcacagtattcactcaca	24	65.1	256
JMFN006E15		(ta)10	10	10	ctctctcttcaaccaacagccctc	24	64.9	gaaaacgttgcgtattcaaggacc	24	64.9	194
JMFN007K12	*	(ta)30	30	30	ctcttgggcctgttcagtcgatag	24	65.5	ggggaggcatacaaactagtagtaaca	27	62.0	291
JMFN008E02	*	(ag)4aaggcg(ag)3gaaga (ag)13	13	20	gggggaatcgtgacagagttta	22	62.4	ggaaagcttacaccagaaacggaa	24	64.7	173
JMFN016N09	*	(ct)3gcgt(cgc)3cg(ta)25ca catacat(ac)3	25	34	ttaaccttccactccctccaaat	24	65.0	gtcggactcagctctagcctcact	24	64.7	192
JMFN020H15	*	(tat)12	12	12	tagtccgttgtactgggtgctcaa	24	65.0	aagcctcctgctcttgctttcttt	24	65.0	243
JMFN028C18		(ta)11	11	11	taacacgaagacgaaggagaaggc	24	65.0	acaaataatgaaccccgttttccc	24	65.0	289
JMFN029H19	*	(ta)22	22	22	tatcttcttcaccctcccggaatc	24	65.6	ataaaaggtgacgaacagcgacga	24	66.1	271
JMFN032F23	*	(ta)16	16	16	tctgaaaccaatcatcttctcccc	24	64.7	tgagtaatcactgggaaacgacca	24	64.9	263
JMFN033H19	*	(ta)33	33	33	aaacgctcgtcaaagcaaagaaag	24	65.0	taaaggagcgcgcttgacaagtat	24	65.3	207
JMFN035D03	*	(tg)7(ag)14tt(ag)5	14	26	tctccactactttctgagactgagc	25	60.6	ttttccacggttggagaagatgat	24	65.0	241
JMFN041N11		(ta)11	11	11	cgagatcctccaggtctactccaa	24	65.1	tgaactccaataatgttccaactgc	25	63.4	260
JMFS006E03	*	(tc)14	14	14	ctctctctagtgaagaccaccggc	24	64.9	cacccgatctgccgctatactatc	24	65.0	279
JMFS018E02	*	(ta)15	15	15	tgtgatgtcaaaatgtcaggatgc	24	64.3	cttttaatgattgtgccggctgat	24	65.3	143
JMFS019B06		(ag)10	10	10	gattcctagcacctgcgtacatga	24	64.6	ccagtccgtaactagaaggcaagc	24	64.5	292
JMFS028A02	*	(ta)18	18	18	aaaagcaaatgaaaccacgtaccg	24	65.2	tcgaagttggcttcttcaaaggtc	24	65.0	115
JMFS030B05		(ta)10	10	10	accttgaacagaatgcgtttgaca	24	65.1	tcgtgaaagcaagaatctgatcca	24	65.3	262
JMFS030F04	*	(tg)9(ta)26	26	35	ttgaaggggctaggggatatcatt	24	64.9	acatcccaatgccaagtatcgagt	24	65.0	281
JMFS033D01	*	(ta)24tg(ta)5	24	29	caaagcattaattacgtactgtttca	26	58.8	catccatacatgcttgggagt	21	59.8	199
JMFS033D01	*	(ta)18	18	18	gattgtgtgcacccacttgt	20	59.5	cacgcaccttaagcacaaaa	20	59.9	210
JMFS038H06	*	(ta)12	12	12	gctagcttcgcgcttcataaggta	24	65.0	gaaaccttcgattccttcccatct	24	64.8	194
JMFS047H07		(tg)10	10	10	gagagttgatcagttgggggagaa	24	65.0	ttctcgtgggcattagtgagaaca	24	65.2	231
JMFS049C04	*	(ac)14aagtc(ta)4	14	18	atatcacctgaagcctcaacggaa	24	65.1	tgcagaatcattcgaccatttcag	24	65.5	254
JMFS051D07	*	(ta)14	14	14	cggccgacctcttaatctcctact	24	65.0	gtacctctttggccgtcatgaaac	24	65.1	176
JMFS052D04		(taa)11	11	11	ttccggtacaaaatacggaagtcg	24	65.2	tttaacttggcctcatcgtcacct	24	65.1	265
JMFS056F10		(tc)10	10	10	ccaccaaacacacacaaattcaca	24	64.9	gactgaaactttggggaaaaaggg	24	65.1	299
JMFS077C11		(tc)10(ta)7ca(ta)3	10	20	accaaaagctcctcctggtttctc	24	65.2	atcacccatgaaggcctagtcaag	24	64.7	247
JMFS079F08	*	(ta)17	17	17	cggccggccataactacttatttt	24	65.1	tgctgagtgaaccacttgatgaca	24	65.3	267

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
JMFS084E02		(ag)3aagtctagccag(ga)3c t(ag)10aagccac(tc)4	10	20	ctcttctcacccgtctccctctct	24	65.7	cagcgaattagaagcagcagatca	24	65.0	213
JMFS099H12		(tc)11tgtgtaca(ta)4	11	15	gctctcgcctttactccgttttct	24	65.2	ctctggtagtgcaccatcctcctt	24	65.0	124
JMFS102F01		(ta)4catatatatg(ta)11	11	15	cttggatctcgagtttcagaggga	24	65.2	atggaaattaatctcagacgccga	24	65.0	287
JMFS130G01		(tc)10	10	10	ccctactgaaaatcaagctcccgt	24	65.7	catagcaatcccaactcttctcgg	24	65.2	188
JMFS140D08	*	(ta)38	38	38	aagaagaactactccgtattattgaa	26	56.3	caacggagtgcaatttttcc	20	60.5	160
JMFS147F08	*	(ta)24	24	24	tggtgaacaaatcgatacacga	22	61.3	tttcgtggaaattaagtcccgagt	24	64.1	251
JMFS155F04	*	(ac)14a(ta)14	14	28	tcatatggaaactggtgtctccca	24	64.8	attgttttcgggacagacaaggaa	24	65.0	233
JMFS160E10		(ta)11	11	11	tgtttgttttgttcctgtacgcca	24	65.6	gccaaaagcaagtgtttggatttc	24	65.0	271
JMFS169B07		(tc)10	10	10	ccaccaaacacacacaaattcaca	24	64.9	gactgaaactttggggaaaaaggg	24	65.1	299
JMSF001H23	*	(tc)12	12	12	tctctctcttcaagcagacaagaaaac	27	62.8	catcgaaatttctgcagagcagg	23	65.4	101
JMSF002G14	*	(tct)14	14	14	gtttatggttaaaatgggcgagca	24	65.0	ggcttggaagaaggatcaacttca	24	64.9	265
JMSF004D24		(ag)10	10	10	tttggacacttctgggcagatttt	24	65.1	aagatcgatgccaagtgaagcagt	24	65.5	219
JMSF005H09	*	(tct)13	13	13	tttgtgtcgagaagatttgggtca	24	65.0	ctcctgttcaaaacctccagcttc	24	64.6	254
JMSF007E13	*	(gaa)17	17	17	atcatgcgactttcaatgttgagg	24	64.5	gaatattagattccatggcgggtg	24	64.6	153
JMSF007I11		(ag)4aagctccagctg(ag)10	10	14	ggtgagagaaagagagagggaaaaa	25	62.6	ttctcctgttcttgaaggtggagg	24	65.1	231
JMSF011J06		(tc)5t(tc)10	10	15	gtaaaaggaaaagctgtcttccgc	24	63.6	tgcagggaaagaaaaagaaaccct	24	65.3	169
JMSF011O24		(tc)10	10	10	gtccgtccctcctaagattcctgt	24	65.0	atccgatcaaaatcacacccttgt	24	64.9	182
JMSF011P24		(tc)11	11	11	ggtaactttcccggcatttcaag	23	64.9	cgtcttcagagcggttgaggtact	24	65.2	194
JMSF012J19		(ta)3c(tc)11	11	14	aaaacaatccatttcctcgggttc	24	65.3	cgcaaaggacttgcttgaagagtt	24	65.1	140
JMSF013E02		(tc)11	11	11	ggactttaaacccctcttctccct	24	63.2	gtctttgattgttcaacgtggtgg	24	64.8	181
JMSF015H22	*	(ag)17	17	17	agtctttcaagaatcaacgcggag	24	65.0	aactgtttaccgacatcgctctct	24	62.6	137
JMSF018H02	*	(ag)12	12	12	gaggcagctgctttgctttgtatt	24	65.0	gctttcccttctctctccatctcc	24	65.0	211
JMSF022B15	*	(gaa)12	12	12	atgaccttctctgctcaggaatcg	24	65.2	aacaatgagtttcggctgtccaat	24	65.1	212
JMSF024B19		(tc)11	11	11	ccaaacccactttcctccttctct	24	65.0	attcagggttcggctatctgtcaa	24	65.1	142
JMSF024F16	*	(ag)12	12	12	ccaccctctctaccaatccctctt	24	65.0	atctcctcgttgtcctccatcaat	24	64.3	149
JMSF025B15		(tc)10	10	10	atactctccccctcagcctttgtc	24	65.1	ataacagaagcagatctggggtcc	24	63.9	201
JMSF025G18		(tc)10	10	10	cttacctgattcccattcccttcc	24	65.0	gatcaccagcttccaccctaacc	23	65.2	266
JMSF026B01	*	(tc)13	13	13	caggagcataggactataggaggc	24	61.7	tatgggtgggaaatcagaggagaa	24	65.0	219
JMSF029A07	*	(tc)15cg(tg)3	15	18	acatcctcgtgctcctctaacacc	24	65.0	cttgtacttgtgcaaccatccagc	24	65.1	293
JMSF033C08	*	(tc)20	20	20	agatgcagaaatgtggacaacgaa	24	65.1	tatgagaatcatcatcaggtcccg	24	64.4	294
JMSF033G03	*	(ag)16	16	16	aataccaaaaccccaaccagcttt	24	64.8	cggatagagagaggaggaaggagg	24	64.9	300
JMSF034E11		(tc)10	10	10	gatggcggataacttttcaagcct	24	65.6	agcattgaacattctgggtggatt	24	65.0	283
JMSF036F05		(tc)10	10	10	aactggggttgttccctttcctaa	24	65.0	catgacctttgagtgtctgggatg	24	65.1	244
JMSF037E17		(tc)10	10	10	gatctccaaaccctctcccct	22	66.0	ataacagaagcagatctggggtcc	24	63.9	174
JMSF043D02		(ac)10	10	10	tggatgctaaatccctcaaccatc	24	65.3	gcctattgaagccaacggatacac	24	64.9	272
JMSF046J01	*	(tc)16	16	16	acggagcatatctatacactgaagc	25	60.1	tccggttaaactcagggaaagaaa	24	64.1	172
JMSF049E09		(ag)10	10	10	gtatctacatgcgtcccttccagg	24	65.0	atatccatacaggcgtgcacacaa	24	65.6	176

Supplemental Table 1. (continued)

Unigene ID[1]		Core motifs[2]	Repeat (max)	Repeat (total)	fw[3] primer	Length (mer)	fw Tm	rv[4] primer	Length (mer)	rv Tm	Product size(bp)[7]
JMSF050D24		(ag)10	10	10	ggaccagtggcacgtatgtgagta	24	65.4	cttcagaattcgccattttcgtct	24	64.8	134
JMSF052L14		(tc)11	11	11	ataacccactctgggcctgtcttt	24	65.3	ccaaaagcaaccatcttttacgc	24	64.8	209
JMSF052N08		(ag)3ctgtgattt(ag)9gtat (ag)4ga(ag)3gaag(ag)3	9	22	caatccatagaagctctgcttgcc	24	65.4	gtcaatagaaacggaatcgctgct	24	64.8	255
JMFF015E19		(ac)4c(tc)9tt(tc)3aacatcc attca(ta)4aacatccattcat (at)3	9	23	ccgcacagtgatgtttcttcatct	24	64.8	ctgggtaaatctcgctctgacacc	24	65.4	284
JMFF038C14		(tc)10tagtctc(ta)7	10	17	ttgacaatgcaacactttcccaag	24	65.3	ggagatacctcacccttgcctctt	24	65.1	218
JMFF041I11	*	(ta)12	12	12	attctcttccgcttttggcttagg	24	65.0	ctcttcctttccagcgtaaccctt	24	65.0	171
JMFF042K01		(ag)10	10	10	gcaataaattgggtccagcaaaga	24	65.3	ccctataggtgaaatgtgccttgc	24	64.9	186
JMFF043B04	*	(tc)8(ta)12	12	20	agcagccccagaactaaccctaac	24	64.9	agaaaacaaccagcgaactcaagc	24	65.1	228
JMFF047C24	*	(ta)15	15	15	tcctaccctcatgcatcccactat	24	64.9	gatttagcccttgcattcagatca	24	63.6	165
JMFF048M13		(tc)10	10	10	ataagtaacgggaaaagctggcct	24	64.3	cattgaactcattcctgcaagacg	24	65.2	262
JMFF051M10	*	(ta)22	22	22	tacaaagggttcagaaatgcacca	24	64.8	aatcctcttcgtgctcgacttcat	24	64.7	216
JMSF003D07		(taa)12	12	12	gcaaccacatgcccataaaatgta	24	64.8	gagtcgttggaggatgcaactttt	24	64.9	195
JMSF008P12	*	(tct)18	18	18	aaaccttccactccatttgatggc	24	66.4	accaaaaagagaactcaggggtcc	24	65.0	262
JMSF013M07		(ag)10	10	10	gaagcattgcatcgatttcatcac	24	64.9	tctttgagcagagcagactccaga	24	65.1	232
JMSF028C15		(tc)11	11	11	acgcaacataaccctcagcaattt	24	64.9	gtgcttaattcgccctgtaaacca	24	65.3	270
JMSF028N19		(ta)12	12	12	tgtcctacattcatcatacatctgc	25	60.3	gaaatactggcagaaggcgtgact	24	65.0	155
JMSF034E21	*	(ag)16	16	16	caaatcaggttcataacagcagga	24	62.5	caagcgtttcccatcactgaaaat	24	65.4	229
JMSF036G19	*	(ag)14	14	14	cttcggagcatttggagaaacagt	24	64.9	ctgcaatggagtggaaactcaaga	24	64.8	205
JMSF044O11	*	(ag)21	21	21	ggtctgcagttctcacttcaatgc	24	64.6	ttgtgtgataaaggcagcagcagt	24	65.3	297
JMSF050P17		(tg)10	10	10	gacagtgaagcaggacagagtttcc	25	64.8	gtaacaggaagtcggctgtgttga	24	64.8	224
JMSF051O02		(tct)10	10	10	agaaatcaccacccaaaacacagc	24	65.5	agtctgagtgttgttcatccacgg	24	64.8	144
JMSF053A15		(ta)10ttagcnggagatg(ta)4	10	14	ataaccggcagacacaccagaagt	24	65.2	atgttcaaggccctcaagaatctg	24	64.8	241

[1] Unigene ID is based on the Japanese morning glory cDNA Database (http://ipomoeanil.nibb.ac.jp/).

[2] Core motif of SSR. Alphabets in the parentheses show motif DNA sequence. Numbers after parentheses show repeat number of motifs. DNA sequences between parentheses are interval sequences between motifs.

[3] Repeat max shows the largest number of repeat in the core motif.

[4] Repeat total shows the sum of repeat number in the motif.

[5] fw is forward.

[6] rv is reverse.

[7] PCR product size using I. nil var 'Tokyo Kokei Standard' as a template.

[8] Asterisk show unigenes of which primers were synthesized and examined polymorphism among morning glories.

Supplemental Table 2. Japanese morning glory EST-SSRs of which primers were not automatically designed

Unigene ID[1)]	Core motifs[2)]	Repeat (max)[3)]	Repeat (total)[4)]
JMFF001I14	(taa)10	10	10
JMFF004A14	(gt)3aagcatttct(ag)13	13	16
JMFF004F14	(tc)16	16	16
JMFF005L02	(ta)23	23	23
JMFF006B16	(tc)11c(tc)5	11	16
JMFF006C02	(ta)11	11	11
JMFF006D23	(ac)3tcc(tc)5cc(tc)12tga tcctaagc(ca)3	12	23
JMFF006E08	(ag)16	16	16
JMFF006G15	(ag)3tg(ag)11	11	14
JMFF006M10	(tc)10	10	10
JMFF006N18	(tc)16	16	16
JMFF007C16	(ag)14	14	14
JMFF007K18	(ag)10	10	10
JMFF008H24	(ag)10	10	10
JMFF009K23	(ag)17gg(ag)3aatactcna t(ta)3	17	23
JMFF010C01	(ctt)3caatccc(tc)20	20	23
JMFF010G22	(ag)13	13	13
JMFF010O04	(ga)3ttgaaaagc(ag)10	10	13
JMFF012H22	(tc)14cgacc(tc)3	14	17
JMFF013B12	(tc)10	10	10
JMFF013P16	(ga)3ctgagaaac(ag)15	15	18
JMFF014D05	(tc)13ttctcct(tct)4	13	17
JMFF014O06	(tc)3c(tc)11	11	14
JMFF015H22	(tc)19	19	19
JMFF015M18	(ta)6t(ac)6gttgtgt(tg)3 (ta)3gtt(ta)3g(ac)3gtt (ta)3gt(ta)4	6	31
JMFF017C16	(tc)24	24	24
JMFF017J24	(tc)13	13	13
JMFF017P18	(ta)10	10	10
JMFF018E20	(ac)5aa(ac)3aaaaaa (ac)4aaaaaa(at)3aa(at) 3(ta)4a(ag)3	5	25
JMFF018K23	(ag)28ng(ag)5	28	33
JMFF018L19	(tc)11	11	11
JMFF019C15	(tc)12	12	12
JMFF020E12	(ctt)3caatccc(tc)16nc (tc)3	16	22
JMFF023D24	(ag)23	23	23
JMFF023O23	(tc)5cccccc(tc)10	10	15
JMFF028P02	(ag)4aa(ag)15aaaaagc (gt)3	15	22
JMFF029E14	(ag)4aagttc(ag)18	18	22
JMFF030O17	(tc)10	10	10
JMFF030O19	(tc)10	10	10
JMFF031H10	(tc)7ctctctctccc(tc)19tn nnnnnnnt(tc)6	19	32
JMFF031H10	(ag)5aa(ag)25gg(ag)3n ng(ag)7	25	40
JMFF031K12	(ag)12tggtagagg(ga)3	12	15
JMFF033G10	(ag)22nggg(ag)3tttnata ntgnn(ct)3	22	28
JMFF033I02	(tc)10	10	10
JMFF035J15	(tc)14	14	14
JMFF038N12	(ag)3atagagggaga(ta)5 aat(ag)22	22	30
JMFF038P22	(ag)13g(ag)3	13	16
JMFF039J24	(tc)17	17	17
JMFF041J19	(tc)12tttctcttatt(tc)3	12	15
JMFF043L09	(tc)10	10	10

Unigene ID	Core motifs	Repeat (max)	Repeat (total)
JMFF044P02	(ac)9a(ta)19	19	28
JMFF045G10	(tc)10cctcgctt(tc)4	10	14
JMFF046D22	(tc)12	12	12
JMFF046E05	(tc)11	11	11
JMFF046I15	(ag)11	11	11
JMFF046I19	(caa)3gcgttacaagatc (gat)3gcg(ta)7gcg(ta)4t gtt(ta)8	8	25
JMFF050D23	(tc)12	12	12
JMFN002G05	(gca)3(ta)17ca(ta)8	17	28
JMFN004B10	(taa)16acttcca(ta)4	16	20
JMFN007B08	(ta)11	11	11
JMFN007I24	(ta)10ccattaaataac(at)3 gcatgtct(ta)3gcatg(ta)4	10	20
JMFN007O13	(gaa)10	10	10
JMFN008E18	(tc)11ttca(tc)4	11	15
JMFN012M21	(ag)6a(ag)12gg(ga)3	12	21
JMFN013H23	(ac)10	10	10
JMFN014G16	(ta)15ga(ta)17	17	32
JMFN015L03	(tc)5gcttta(tc)10tata g(ac)3aaa(ta)3aaata (ta)3aaatatata(tc)4	10	28
JMFN032K07	(taa)10	10	10
JMFN033G17	(ta)15	15	15
JMFN033N17	(ta)5a(ta)5atata(tat)3a atgttg(taa)8(ta)3	8	24
JMFN034O22	(ta)20	20	20
JMFN035N10	(ag)3aa(ag)11	11	14
JMFN039L21	(ta)29t(ac)3t(tc)4	29	36
JMFN043B04	(ta)22	22	22
JMFN046N16	(tc)10	10	10
JMFS003H02	(tc)10	10	10
JMFS011C04	(ta)10	10	10
JMFS015H04	(tat)11at(tat)7t(tta)3ttt att(taa)7	11	28
JMFS017H03	(ac)4gaag(ta)3gaagtata taaaa(ta)5gaagtata (ta)7tacacaccaa(ta)17	17	36
JMFS024H10	(ac)5agac(ag)5ggacag (ac)15(ag)8	15	33
JMFS028B01	(ta)18	18	18
JMFS033C08	(gaa)3at(tat)25	25	28
JMFS034D10	(ag)10(gt)3	10	13
JMFS037C09	(tc)13	13	13
JMFS040E04	(ta)19	19	19
JMFS042G08	(tc)10	10	10
JMFS044A12	(ta)24aacattttaactt(ta) 3	24	27
JMFS067F07	(ta)17tgtatcttag(cca)3	17	20
JMFS070A09	(ag)4ggagat(ag)10	10	14
JMFS070D02	(ta)18	18	18
JMFS073C03	(ta)27	27	27
JMFS075C06	(tc)13	13	13
JMFS081H11	(tat)17	17	17
JMFS097H04	(ag)11	11	11
JMFS098A08	(tc)17	17	17
JMFS107E03	(tc)12	12	12
JMFS108A11	(tg)5cgtgtgta(ta)8gaa (ag)8	8	21
JMFS119H10	(tc)10	10	10
JMFS128D03	(tat)26	26	26

Supplemental Table 2. (continued)

Unigene ID	Core motifs	Repeat (max)	Repeat (total)
JMFS130C01	(tc)3ccttt(tc)10	10	13
JMFS135C09	(tc)10tatctcta(tc)3	10	13
JMFS147D10	(ag)14	14	14
JMFS149D03	(tc)11accc(ca)3acacagct gagg(ag)3	11	17
JMFS156F04	(ta)5ca(tc)12	12	17
JMFS157F06	(tat)18	18	18
JMFS161F12	(ag)10	10	10
JMFS164G02	(tc)13	13	13
JMSF001C08	(ag)4gggg(ag)13at(ta)4	13	21
JMSF001G22	(tc)14	14	14
JMSF002G16	(ag)12	12	12
JMSF002J14	(ag)17aanatggtgatgg (ag)3	17	20
JMSF004D19	(tc)13	13	13
JMSF005D09	(ag)19ananac(ag)14	19	33
JMSF005D23	(tc)10cctacgcga(tc)3	10	13
JMSF005F05	(tc)15(ta)9	15	24
JMSF005I19	(tct)10	10	10
JMSF008K04	(ag)22	22	22
JMSF009B24	(tc)15tgtt(ta)3	15	18
JMSF010J21	(tc)11	11	11
JMSF011N01	(tct)11	11	11
JMSF012J06	(ag)10	10	10
JMSF014E16	(tc)14	14	14
JMSF016D10	(tc)19	19	19
JMSF017G11	(ag)11	11	11
JMSF020C17	(tc)11	11	11
JMSF020D11	(tc)3ttcat(tc)4tt(tc)7ccc (ct)3a(ta)3at(ta)4	7	24
JMSF022O04	(gaa)10	10	10
JMSF022P15	(ta)11	11	11
JMSF023C09	(tc)13(ta)12	13	25
JMSF023J12	(tc)3tg(tc)17	17	20
JMSF024M02	(tc)19	19	19
JMSF024P18	(ta)11	11	11
JMSF025D11	(tc)15(ta)10	15	25
JMSF025N13	(tc)12	12	12
JMSF025N24	(ta)12	12	12
JMSF026O12	(tc)25tnaagagannac (tg)3	25	28
JMSF027I16	(tc)11	11	11
JMSF027M09	(tc)17	17	17
JMSF029A15	(ag)14	14	14
JMSF030D21	(ta)10	10	10
JMSF032C06	(tc)4ttcatt(tc)5ta(tc)4 (ta)5t(ta)3tatat(ac)4	5	25
JMSF033L05	(ag)17	17	17
JMSF035A16	(ag)25	25	25
JMSF035I21	(tc)15	15	15
JMSF035J23	(ac)17tg(tc)5ttctn(tc)4	17	26
JMSF035P21	(tc)19	19	19
JMSF036N13	(ag)13ac(ag)3	13	16
JMSF037G06	(ag)4g(ag)3atagagat (ag)9gggg(ag)4cgcgaagc ga(ag)4	9	24
JMSF037J03	(ag)10	10	10
JMSF037O07	(tc)4tt(tc)11ttgctcgctt (tc)3	11	18
JMSF038C05	(tc)15	15	15
JMSF038I09	(ag)9a(ag)10tcatt(ta)3	10	22
JMSF038K06	(ag)11atgc(ag)3	11	14
JMSF038L03	(tc)17	17	17
JMSF038O01	(tc)3ta(tc)4tacatc(ta) 10	10	17
JMSF039A01	(tc)10	10	10
JMSF039A11	(tc)17	17	17
JMSF039F23	(ag)14	14	14
JMSF039I10	(ag)13	13	13
JMSF039K04	(ag)18ggagaa(ag)4	18	22
JMSF040H05	(ag)5aa(ag)24ng(ag)3a ng(ag)6	24	38
JMSF041L10	(ag)3atagggggagagg (ag)12	12	15
JMSF042D11	(ag)14	14	14
JMSF042G08	(tc)12	12	12
JMSF042G23	(ag)12	12	12
JMSF042J06	(ag)13	13	13
JMSF042N06	(tc)4c(tc)16	16	20
JMSF042O23	(ag)14g(ag)3	14	17
JMSF043F18	(ag)12	12	12
JMSF043H12	(tc)17	17	17
JMSF043J01	(ag)10	10	10
JMSF043L06	(tc)14	14	14
JMSF045C14	(tg)10t(ga)3	10	13
JMSF045G03	(tc)10	10	10
JMSF047D03	(ac)3t(ag)17	17	20
JMSF047N15	(ta)10	10	10
JMSF047O16	(tc)16tgntgttt(ta)3	16	19
JMSF048F05	(tc)12	12	12
JMSF048I12	(ac)3ccctcaac(tc)16	16	19
JMSF049C21	(tc)13g(tc)3	13	16
JMSF049H09	(ag)3(at)3agagagagat (ag)11	11	17
JMSF050C15	(tc)5ccccatctcc(tc)20	20	25
JMSF050H09	(tc)10	10	10
JMSF051B24	(tc)12tt(tc)4	12	16
JMSF051C03	(ag)10	10	10
JMSF051C08	(ta)10	10	10
JMSF051M17	(ag)19	19	19
JMSF052C07	(ag)19	19	19
JMSF052M04	(ag)15	15	15
JMSF052M14	(ag)14atacacaatt(ac)4	14	18

[1] Unigene ID is based on the Japanese morning glory cDNA Database (http://ipomoeanil.nibb.ac.jp/).

[2] Core motif of SSR. Alphabets in the parentheses show motif DNA sequence. Numbers after parentheses show repeat number of motifs. DNA sequences between parentheses are interval sequences between motifs.

[3] Repeat max shows the largest number of repeat in the core motif.

[4] Repeat total shows the sum of repeat number in the motif.