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Supplementary Data

In *silico* analysis for gene content in rice genomic regions mapped for the gall midge resistance genes

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Supplementary Table. List of designed primer pairs for amplification of key genes

Gene encoding	Gene region	Gene locus ID	Primer sequence	Tm	Amplicon size
NBS-LRR class resistance protein	*Gm2367*	LOC_Os04g53030.1	F1: ATGGAATGCTGCCACTAAGC	60.24	284
			R1: TCAGTCGTCTGTTGCTGACC	60.03	
			F2: ACTCCCTCCAACACTTGACG	60.15	220
			R2: TCCGGCAAACGTAAGATACC	59.96	
		LOC_Os04g53000.1	F: CTTCTGACATCCCTCGAACG	60.79	222
			R: CTCCGTTGCTACCATTCTGC	60.8	
		LOC_Os04g53060.1	F1: AAAGGATGAGCAGGTGAACG	60.25	257
			R1: TGAGGTTGCAGAGTGATTGC	59.99	
			F2: ACAGTGCCCTGTTCTGAAGG	60.3	220
			R2: TAATGTTCCGTGGGATGACC	60.58	
		LOC_Os04g53160.1	F1: AGGCTGAATGTTCCACAAGG	60.11	296
			R1: TTGAGCGAGAGCTGTCTTCC	60.82	
			F2: CGCTTCAGCTCCTATTGTCC	59.98	241
			R2: TTGACATTCAGCTTGCTTGC	60.14	
		LOC_Os04g52630.1	F: TGTCCAAGTAGCTGGTGTCG	59.9	239
			R: CGAGAACAACAACCCTCTGG	60.68	
	Gm8	LOC_Os08g14830.1	F1: CACTCACTCCCGCTAAGAGC	60.16	226
			R1: CATGTGCTTATGGCAGTTGG	60.13	
			F2: CTGTGAGATTGCAGGTGTGC	60.47	259
			R2: ACGGGATCGGAAAGACTACC	60.33	

		LOC_Os08g14810.1	F1: TGAGACCATGTCGAGTGAGC	59.99	289
			R1: CGAGCATGTCCAAAAGATCC	60.6	
			F2: ATCCGTTCCAGTTGATCTGC	60.08	193
			R2: ATGTGAGACCCTTGGAGAGG	59.1	
	Gm11	LOC_Os12g40860.1	F: TCAGATCTTTCTTCCCTTTCG	58.51	213
			R: CAGGTACGACCCAGACTATCC	58.54	
No apical meristem protein	*Gm2367*	LOC_Os04g52810.1	F1: CTCCAGCCAAGATGGAACC	60.61	298
			R1: CACCAAGGGCAGTAGTCTCC	59.72	
			F2: GCTCTCCCTTGGTAGAACACC	60.12	290
			R2: TTGCACAATCTGATCATCTTCC	60.08	
	Gm4	LOC_Os08g10080.1	F: CTGATGGCCTTCTTCTCTGC	60.1	219
			R: ACTGCCCAATGAGCTAGACC	59.31	
	Gm11	LOC_Os12g41680.1	F: CCAAGTCAAGAAGCCTCACC	59.84	272
			R: TGTGACAATTGGCAGGTAGC	59.72	
SET domain Containing protein	*Gm1*	LOC_Os09g13740.1	F: ACGTCGATGCCACAAACG	61.76	152
			R: CAAACTGTCGAAAAATGCTTGG	61.86	
	Gm8	LOC_Os08g14660.1	F: ATCTTCCATGTTCTGGTTTCG	59.04	203
			R: TCGGGCCATTATCTACAAGG	59.92	
Pentatricopeptide (PPR) repeat containing protein	*Gm2367*	LOC_Os04g52725.1	F: CAAGATGTACGGCAATGTGG	59.99	275
			R: TCGGCATCTCATACAACAGC	59.83	
		LOC_Os04g52290.1	F: GCACCACCCCATAGTAGAGC	59.58	170
			R: TATCTGGAAGGTCGCCTACG	60.23	
	Gm4	LOC_Os08g09270.1	F1: TTGGAAATGCTGTCATCTGG	59.65	292
			R1: GCCTCGACTTTACCATTTCG	59.71	
			F2: AAGGATGCTGCTGATGAAGC	60.51	178
			R2: CCAGGTTCCATTTCTTGAGC	59.67	
	Gm8	LOC_Os08g15000.1	F: GTCGTACAGCACCATCATCG	60.14	165
			R: TCCATGGCCTTATCCATAGC	59.88	
Proline rich protein	*Gm2367*	LOC_Os04g52504.1	F: CAGAAGCACATGTCGAGCAG	60.77	254
			R: CGACTACGGCGGGTATCAG	61.6	
	Gm8	LOC_Os08g15080.1	F1: CTGCTCCCCCATATCATCC	60.25	254
			R1: ACAGGAGCATAGGCAGTTGG	60.28	

			F2: AACGATCCACCCGTTCCA	62.34	199
			R2: GAGCCCCGTGATGAAGATG	61.6	
Disease resistance *RPP13*-like protein	*Gm2367*	LOC_Os04g53050.1	F: TCTGAAAATGAATGCGATGG	59.62	232
			R: GGGTAAGTGAAGTGGCAAGC	59.74	
Disease resistance protein *RPM1*	*Gm4*	LOC_Os08g09430.1	F: CCTGCTTGAGGCTTGTAAGG	60.01	236
			R: GAAGAGCCTGGAGTTGTTCG	59.99	
	Gm8	LOC_Os08g14800.1	F: TTCTGGTGAGCTCCAGTACG	59.03	193
			R: CTTTACTTGAGGGCGAATGG	59.7	
Resistance protein	*Gm8*	LOC_Os08g14850.1	F1: ATCTCAGTGTGGGGAACAGG	59.96	295
			R1: TGGTAACGTCCTCCAAGACC	59.97	
			F2: CATGAACGGGAGAAAAGTGG	60.49	288
			R2: ATTCAATTCCGAATGCAAGC	60.05	
			F3: TCGAGATTGTGTGCAACTCC	59.84	213
			R3: CGTTTTCGTTGCCTTTAAGC	59.89	
Disease resistance protein	*Gm11*	LOC_Os12g39620.3	F: CTGGTTCCAGATGAGCTTCC	59.8	287
			R: TGTTGGTCAGCTCACAGAGG	60.02	

F-forward primer, R-reverse primer, Tm-melting temperature of primer