

Table 4 Partial DEGs of tea plant in response to blister blight

Functional classification	Gene ID	Gene annotation	Expression pattern		
			KB	GB	
Resistance gene	Novel11524	TMV resistance protein N-like	Up	Up	
	CSA036702	TMV resistance protein N	Up	Up	
	CSA014110	TMV resistance protein N	Up	Up	
	CSA006743	TMV resistance protein N	-	Up	
	CSA000007	TMV resistance protein N	Up	Up	
	CSA008324	TMV resistance protein N	Up	Up	
	CSA035925	TMV resistance protein N	Up	Up	
	CSA017636	disease resistance protein	Up	-	
	Novel07148	disease resistance protein	-	Up	
	Novel02360	disease resistance gene NBS-LRR family protein	Up	-	
	Novel01686	probable disease resistance RPP8-like protein 2	Up	-	
	CSA000901	Probable disease resistance protein	Up	-	
	CSA008325	Disease resistance protein RPP5	Up	Up	
	Novel06987	Disease resistance family protein/LRR family protein, putative	-	Up	
	CSA000360	Putative late blight resistance protein homolog R1B-17	Up	-	
	CSA028034	Hypersensitive-induced response protein 2	-	Up	
	CSA028036	Hypersensitive-induced response protein 1	Up	Up	
	Hydrolases	CSA012225	Endochitinase B	Up	-
		CSA018884	Endochitinase B	Up	Up
		CSA011958	Galactose oxidase	Up	-
CSA003124		Glucan 1,3-beta-glucosidase A	Up	Up	
CSA014169		Beta-galactosidase	Up	-	
CSA012186		Probable beta-D-xylosidase 2	Up	Up	
CSA029765		Probable glucan 1,3-beta-glucosidase A	-	Up	
CSA030401		Alpha-amylase	Up	-	
CSA029747		Beta-amylase	-	Up	
Cytoderm reinforcement gene		CSA017670	Basic endochitinase	-	Up
		Novel11173	basic chitinase 2-2	-	Up
		CSA000501	Caffeoyl-CoA O-methyltransferase	Up	Up
		CSA034169	Caffeoyl-CoA O-methyltransferase	-	Up
	CSA009706	Caffeoyl-CoA O-methyltransferase	Up	-	
	CSA015962	Caffeic acid 3-O-methyltransferase	Up	-	
	CSA028429	Caffeic acid 3-O-methyltransferase	Up	Up	
	CSA035990	Caffeic acid 3-O-methyltransferase	Up	-	
	CSA014974	Caffeic acid 3-O-methyltransferase 1	Up	Up	
	CSA012015	Long-chain-fatty-acid--AMP ligase	-	Up	
Oxidases	Novel07528	Carbonic anhydrase 2-like	Up	-	
	CSA014862	Cationic peroxidase 2	Up	Up	
	CSA028229	Lon protease homolog 2, peroxisomal	Up	-	
	CSA032576	Glutathione reductase, cytosolic	-	Up	
	CSA013247	Laccase-7	-	Up	
	Novel01345	Laccase-14-like	Up	-	
	Secondary metabolites	CSA000829	Leucoanthocyanidin dioxygenase	-	Up
CSA035727		Dihydroflavonol-4-reductase	-	Up	
CSA028450		Phenylalanine ammonia-lyase	Up	Up	
CSA013010		(+)-neomenthol dehydrogenase	-	Up	
CSA013009		(+)-neomenthol dehydrogenase	-	Up	
CSA001659		(-)-alpha-terpineol synthase	Up	-	

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Secondary metabolites	CSA008212	(-)-alpha-terpineol synthase	Up	-
	CSA030297	Geraniol 8-hydroxylase	Up	-
	CSA024355	Geraniol 8-hydroxylase	Up	-
	CSA006319	Geraniol 8-hydroxylase	Up	-
	CSA002616	Geraniol 8-hydroxylase	Up	Up
	CSA031137	Hyoscyamine 6-dioxygenase	-	Up
	CSA028450	Phenylalanine ammonia-lyase	Up	Up
	CSA022025	1 Phenylalanine ammonia-lyase 1	Up	Up
Plant hormones	CSA024317	1-aminocyclopropane-1-carboxylate oxidase 2	Up	Up
	CSA012876	1-aminocyclopropane-1-carboxylate oxidase 3	Up	Up
	Novel08377	abscisic acid receptor PYL4-like	Up	Up
	CSA004349	IAA-amino acid hydrolase ILR1-like 6	-	Up
	CSA028002	IAA-amino acid hydrolase ILR1-like 3	-	Up
	CSA013605	Probable indole-3-acetic acid-amido synthetase GH3.1	Up	-
Chloroplast	CSA014503	1-hydroxy-tetrahydrodipicolinate synthase, chloroplastic	Down	Down
	CSA014505	4-hydroxy-tetrahydrodipicolinate synthase, chloroplastic	Down	Down
	CSA003272	AS1 3-oxoacyl-[acyl-carrier-protein] synthase I, chloroplastic	Down	Down
	CSA008681	FabG 3-oxoacyl-[acyl-carrier-protein] reductase FabG	Down	Down
	CSA010419	Beta-amylase 3, chloroplastic	Down	Down
	CSA010420	Beta-amylase 3, chloroplastic	Down	Down
	CSA033012	Beta-amylase 1, chloroplastic	Down	Down
	CSA007941	Biotin carboxylase 1, chloroplastic	Down	-
CSA012866	Glucose-1-phosphate adenylyl transferase large subunit, chloroplastic/amyloplastic	Down	Down	
Transcription factors	CSA029390	WRKY transcription factor 40	-	Up
	CSA010816	WRKY transcription factor WRKY24-like	Up	Up
	Novel01053	Transcription factor TCP8 [Vitis vinifera]	Up	-
	CSA020213	Transcription factor MYB86	Up	-
	CSA005995	Transcription factor MYB44	-	Up
	CSA026034	Transcription factor MYB1R1	Up	-
	CSA032197	Transcription factor bHLH123	Down	Down
	CSA020917	Transcription factor AS1	Down	Down
	CSA023709	NAC domain-containing protein 14	Up	Up
	CSA019024	Ethylene-responsive transcription factor ERF025	Down	-
	Novel10290	Ethylene response factor 4	Up	-
	Novel03435	ERF transcription factor	Down	-
CSA035201	Ethylene-responsive transcription factor ERF109	Down	-	
Heat shock proteins	CSA020590	18.2 kD class I heat shock protein	Down	-
	CSA014883	18.2 kD class I heat shock protein	Down	Down
	CSA001908	18.2 kD class I heat shock protein	Down	-
	CSA025136	18.2 kD class I heat shock protein	Down	-
	CSA022334	18.2 kD class I heat shock protein	Down	-
	Novel02695	18.1 kD class I heat shock protein-like	Down	-
	CSA012121	18.1 kD class I heat shock protein	Down	-
	CSA017988	18.1 kD class I heat shock protein	Down	-
	CSA035105	18.1 kD class I heat shock protein	Down	Down
	CSA022078	18.1 kD class I heat shock protein (Fragment)	Down	Down
CSA016145	17.9 kD class II heat shock protein	Down	-	

Continued Table 4

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Heat shock proteins	CSA010838	17.9 kD class II heat shock protein	Down	-
	CSA005991	17.9 kD class II heat shock protein	Down	Down
	CSA032421	17.6 kD class I heat shock protein 3	Down	-
	CSA012981	17.3 kD class I heat shock protein	Down	Down
Aquaporins	CSA011041	Aquaporin TIP2-1	Down	Down
	CSA030470	Aquaporin TIP2-1	Down	-
	CSA018029	Aquaporin PIP2-7	Down	-
	CSA017501	Aquaporin PIP2-4	Down	Down
	CSA015939	Aquaporin PIP2-4	Down	Down
ABC transporters	CSA013191	ABC transporter I family member 17	Down	-
	CSA024835	ABC transporter I family member 17	Down	Down
	CSA023084	ABC transporter G family member 36	Up	Up
	CSA003570	ABC transporter G family member 32	-	Down
	CSA034470	ABC transporter G family member 22	Down	Down
	CSA026737	ABC transporter B family member 11	Up	Up
	CSA026738	ABC transporter B family member 11	Up	Up
	CSA007951	ABC transporter A family member 7	Up	Up
	CSA026373	ABC transporter A family member 2	-	Up
Ion transporters	CSA004440	Zinc transporter 3	-	Up
	CSA003672	Zinc transporter 1	Up	Up
	CSA011639	Putative glycerol-3-phosphate transporter 1	-	Up
	CSA011131	Probable inorganic phosphate transporter 1-9	-	Up
	CSA018957	Phosphate transporter PHO1 homolog 1	-	Up
	CSA014753	Oligopeptide transporter 3	Up	-
	CSA020400	Lysine histidine transporter 1	Up	Up
	CSA004895	Inorganic phosphate transporter 1-4	Up	Up
	CSA034045	High affinity nitrate transporter 2.5	Up	Up
	CSA004739	Cationic amino acid transporter 1	Up	-