

Table S2. The overview of TD genes significantly enriched in metabolic pathways associated with flavor and biotic stress.

K number	annotation	all count	TD genes
monoterpeneoid biosynthesis (map00902)			
K07385	TPS-Cin; 1,8-cineole synthase [EC:4.2.3.108]	3	3
K15095	(+)-neomenthol dehydrogenase [EC:1.1.1.208]	12	9
K18108	(-)alpha-terpineol synthase [EC:4.2.3.111]	11	6
sesquiterpenoid and triterpenoid biosynthesis pathways (map00909)			
K00511	SQLE, ERG1; squalene monooxygenase [EC:1.14.14.17]	5	2
K14181	TPS1; valencene/7-epi-alpha-selinene synthase [EC:4.2.3.73 4.2.3.86]	7	6
K15803	GERD; (-)-germacrene D synthase [EC:4.2.3.75]	35	24
K15813	LUP4; beta-amyrin synthase [EC:5.4.99.39]	30	17
isoflavanoid biosynthesis (map00943)			
K13260	CYP81E1_7; isoflavone/4'-methoxyisoflavone 2'-hydroxylase [EC:1.14.14.90 1.14.14.89]	5	5
flavone and flavonol biosynthesis (map00944)			
K05280	CYP75B1; flavonoid 3'-monooxygenase [EC:1.14.14.82]	2	2

K13083	CYP75A; flavonoid 3',5'-hydroxylase [EC:1.14.14.81]	15	12
K13272	AOMT, CROMT2; flavonoid O-methyltransferase [EC:2.1.1.267]	4	4
stilbenoid, diarylheptanoid and gingerol biosynthesis (map00945)			
K00588	caffeooyl-CoA O-methyltransferase [EC:2.1.1.104]	5	2
K13065	HCT; shikimate O-hydroxycinnamoyltransferase [EC:2.3.1.133]	7	3
K13232	stilbene synthase [EC:2.3.1.95]	6	6
K16040	ROMT; trans-resveratrol di-O-methyltransferase [EC:2.1.1.240]	19	14
tropane, piperidine and pyridine alkaloid biosynthesis (map00960)			
K00276	AOC3, AOC2, tynA; primary-amine oxidase [EC:1.4.3.21]	9	3
K00815	TAT; tyrosine aminotransferase [EC:2.6.1.5]	5	4
K08081	TR1; tropinone reductase I [EC:1.1.1.206]	22	21
K15849	PAT, AAT; bifunctional aspartate aminotransferase and glutamate/aspartate-prephenate aminotransferase [EC:2.6.1.1 2.6.1.78 2.6.1.79]	7	2
plant hormone signal transduction (map04075)			
K13416	BAK1; brassinosteroid insensitive 1-associated receptor kinase 1	7	2

	[EC:2.7.10.1 2.7.11.1]		
K13449	PR1; pathogenesis-related protein 1	13	12
K14484	IAA; auxin-responsive protein IAA	22	8
K14488	SAUR; SAUR family protein	56	40
K14491	ARR-B; two-component response regulator ARR-B family	13	4
K14492	ARR-A; two-component response regulator ARR-A family	11	6
K14504	TCH4; xyloglucan:xyloglucosyl transferase TCH4 [EC:2.4.1.207]	10	9
K14516	ERF1; ethylene-responsive transcription factor 1	6	4
plant-pathogen interaction (map04626)			
K01373	CTSF; cathepsin F [EC:3.4.22.41]	10	3
K05391	CNGC; cyclic nucleotide gated channel, plant	22	2
K13416	BAK1; brassinosteroid insensitive 1-associated receptor kinase 1 [EC:2.7.10.1 2.7.11.1]	7	2
K13447	RBOH; respiratory burst oxidase [EC:1.6.3.- 1.11.1.-]	7	2
K13448	CML; calcium-binding protein CML	37	2
K13449	PR1; pathogenesis-related protein 1	13	12

K13457	RPM1, RPS3; disease resistance protein RPM1	33	20
K13459	RPS2; disease resistance protein RPS2	63	37
K15397	KCS; 3-ketoacyl-CoA synthase [EC:2.3.1.199]	27	9
K18875	EDS1; enhanced disease susceptibility 1 protein	4	3