

Supplemental File 3.B				
Term_ID	Description	Frequency	Log10 p-value	Representative
GO:0000003	reproduction	0.21%	-1.5086	3
GO:0002376	immune system process	0.63%	-0.6576	2376
GO:0008152	metabolic process	82.18%	-8.2757	8152
	response to endogenous stimulus	0.11%	-10.4949	9719
GO:0009987	cellular process	65.99%	-3.6021	9987
GO:0010876	lipid localization	0.10%	-9.9208	10876
GO:0006869	lipid transport	0.09%	-3.6778	10876
GO:0019748	secondary metabolic process	0.18%	-5.1249	19748
GO:0022414	reproductive process	0.12%	-1.585	22414
	multicellular organismal process			
GO:0032501	developmental process	0.79%	-4.2676	32501
GO:0032502	growth	1.39%	-4.284	32502
GO:0040007	response to stimulus	0.08%	-0.7959	40007
GO:0050896	localization	8.82%	-15.4685	50896
GO:0051179	multi-organism process	17.86%	-1.4202	51179
GO:0051704	biological regulation	2.77%	-2.3768	51704
GO:0065007		14.92%	-1.699	65007
GO:0065008	regulation of biological quality	2.71%	-3.1024	65008
GO:0050794	regulation of cellular process	13.66%	-0.7696	65008
GO:0050789	regulation of biological process	14.47%	-0.5528	65008
	cellular modified amino acid biosynthetic process			
GO:0042398	primary metabolic process	0.71%	-3.7696	42398
GO:0044238	cell wall modification	51.93%	-3.8861	44238
GO:0042545	biosynthetic process	0.02%	-1.1192	42545
GO:0009058	nitrogen compound metabolic process	30.33%	-2.3665	9058
GO:0006807	multicellular organismal development	38.65%	-2.1308	6807
GO:0007275		0.46%	-3.699	7275
GO:0007389	pattern specification process	0.04%	-3.2218	7275
GO:0003002	regionalization	0.03%	-3.9208	7275
GO:0048513	organ development	0.23%	-1.4202	7275
	developmental process			
GO:0003006	involved in reproduction	0.08%	-1.4318	7275
GO:0016049	cell growth	0.04%	-1.3098	7275
GO:0048589	developmental growth	0.03%	-1.0362	7275
GO:0022622	root system development	0.01%	-0.9208	7275
GO:0048827	phyllome development	0.02%	-0.9208	7275
GO:0048367	shoot system development	0.03%	-1.0862	7275
	regulation of post-embryonic development			
GO:0048580		0.01%	-0.4559	7275

GO:0048366	leaf development	0.01%	-1.0969	7275	
GO:0009826	unidimensional cell growth	0.01%	-1.5229	7275	
GO:0048364	root development	0.01%	-0.9208	7275	
	anatomical structure				
GO:0048856	development	1.24%	-3.1427	7275	
GO:0009791	post-embryonic development	0.05%	-4	7275	
	reproductive structure				
GO:0048608	development	0.06%	-1.4318	7275	
GO:0048869	cellular developmental process	1.06%	-1.6198	7275	
GO:0009908	flower development	0.02%	-1.7447	7275	
	developmental growth				
GO:0060560	involved in morphogenesis	0.02%	-1.5229	7275	
	xylem and phloem pattern				
GO:0010051	formation	0.00%	-3.4202	7275	
GO:0009887	organ morphogenesis	0.08%	-0.6198	7275	
GO:0009965	leaf morphogenesis	0.00%	-0.8861	7275	
GO:0000902	cell morphogenesis	0.84%	-0.9208	7275	
	anatomical structure				
GO:0009653	morphogenesis	1.01%	-1.0555	7275	
GO:0048731	system development	0.35%	-1.4202	7275	
GO:0010016	shoot system morphogenesis	0.01%	-1.4089	7275	
	cellular component				
GO:0032989	morphogenesis	0.85%	-0.7212	7275	
GO:0008219	cell death	0.28%	-0.7447	8219	
GO:0012501	programmed cell death	0.27%	-0.6021	8219	
GO:0016265	death	0.28%	-0.7447	16265	
GO:0015979	photosynthesis	0.34%	-0.7447	15979	
	cellular carbohydrate				
GO:0044262	metabolic process	1.84%	-3.2676	44262	
	carbohydrate biosynthetic				
GO:0016051	process	1.54%	-1.2147	44262	
GO:0044042	glucan metabolic process	0.24%	-1.585	44262	
	cellular carbohydrate				
GO:0034637	biosynthetic process	0.74%	-0.6198	44262	
	polysaccharide metabolic				
GO:0005976	process	1.08%	-1.3565	44262	
	sulfur compound metabolic				
GO:0006790	process	1.67%	-2.2076	6790	
GO:0016137	glycoside metabolic process	0.03%	-1.3665	16137	
	carbohydrate metabolic				
GO:0005975	process	5.98%	-4.5376	5975	
	cellular aromatic compound				
GO:0006725	metabolic process	33.05%	-6.3188	6725	
GO:0006629	lipid metabolic process	3.09%	-4.7447	6629	
GO:0042440	pigment metabolic process	0.49%	-1.0044	42440	

GO:0044248	cellular catabolic process	7.95%	-0.6383	44248
GO:0044237	cellular metabolic process	53.87%	-2.2007	44237
	carboxylic acid biosynthetic process			
GO:0046394		4.62%	-3.7696	46394
	monocarboxylic acid metabolic process			
GO:0032787		2.31%	-1.5528	46394
	cellular amino acid metabolic process			
GO:0006520		6.44%	-2.699	46394
	organic acid biosynthetic process			
GO:0016053		4.67%	-3.7696	46394
GO:0043436	oxoacid metabolic process	9.21%	-3.7696	46394
GO:0008202	steroid metabolic process	0.04%	-1.6576	46394
	carboxylic acid metabolic process			
GO:0019752		9.04%	-3.7696	46394
	process			
GO:0044255	cellular lipid metabolic process	2.58%	-0.5376	46394
	fatty acid metabolic process			
GO:0006631		0.87%	-0.7212	46394
	fatty acid biosynthetic process			
GO:0006633	sulfur compound biosynthetic process	0.63%	-0.9208	46394
GO:0044272		1.34%	-1.2218	46394
	aspartate family amino acid metabolic process			
GO:0009066		0.86%	-1.5686	46394
	sulfur amino acid metabolic process			
GO:0000096		0.60%	-1.6576	46394
	cellular amino acid			
GO:0008652		3.70%	-2.4202	46394
GO:0008610	lipid biosynthetic process	2.21%	-2.1675	46394
GO:0006720	isoprenoid metabolic process	0.47%	-0.699	46394
GO:0006721	terpenoid metabolic process	0.28%	-1.0915	46394
GO:0042430	indole-containing compound metabolic process	0.25%	-2.3768	42430
	cellular amine metabolic process			
GO:0044106		0.48%	-2.6383	44106
GO:0009309	amine biosynthetic process	0.29%	-2.1308	44106
GO:0009308	amine metabolic process	0.52%	-2.8861	9308
GO:0034641	cellular nitrogen compound metabolic process	33.43%	-5.4559	34641
GO:0046483	heterocycle metabolic process	33.33%	-2.4318	46483
GO:0033036	macromolecule localization	1.97%	-2.8861	33036
GO:0009699	phenylpropanoid biosynthetic process	0.00%	-2.7212	9699
	phenylpropanoid metabolic process			
GO:0009698		0.01%	-2.1938	9699

GO:0006575	cellular modified amino acid metabolic process	0.98%	-3.2924	6575
GO:0010817	regulation of hormone levels cellular ketone metabolic process	0.03%	-2.2924	10817
GO:0042180		0.41%	-3.6778	42180
GO:0006066	alcohol metabolic process	0.58%	-0.4437	6066
GO:0009725	response to hormone hormone-mediated signaling pathway	0.08% 0.05%	-10.699 -3.2441	9725 9725
GO:0009753	response to jasmonic acid	0.01%	-1.2441	9725
GO:0009751	response to salicylic acid	0.01%	-1.3872	9725
GO:0009737	response to abscisic acid	0.01%	-1.3565	9725
GO:0009739	response to gibberellin	0.00%	-2.4089	9725
GO:0009733	response to auxin	0.01%	-5.5528	9725
GO:0009723	response to ethylene	0.01%	-3.699	9725
GO:0032870	cellular response to hormone stimulus	0.06%	-3.2441	9725
GO:0070887	cellular response to chemical stimulus	0.50%	-2.0862	9725
GO:0009873	ethylene-activated signaling pathway	0.00%	-1.8539	9725
GO:0009414	response to water deprivation	0.01%	-2.1308	9725
GO:0009415	response to water	0.01%	-2.0044	9725
GO:0010033	response to organic substance response to inorganic substance	0.29%	-8.8239	9725
GO:0010035		0.27%	-1.2007	9725
GO:0009416	response to light stimulus response to temperature stimulus	0.08% 0.15%	-5.5229 -3.1549	9416 9416
GO:0009266		0.09%	-5.3768	9416
GO:0009314	response to radiation	0.01%	-1.5686	9416
GO:0009642	response to light intensity	0.01%		
GO:0009639	response to red or far red light	0.01%	-1.7696	9416
GO:0009651	response to salt stress	0.01%	-2.7959	9416
GO:0006970	response to osmotic stress	0.03%	-2.8861	9416
GO:0009409	response to cold	0.02%	-3.699	9416
GO:0009617	response to bacterium	0.09%	-3.0315	9617
GO:0051707	response to other organism	0.44%	-2.7212	9617
GO:0045087	innate immune response defense response, incompatible interaction	0.14% 0.01%	-0.7696 -0.9208	9617 9617
GO:0009814				
GO:0050832	defense response to fungus	0.01%	-1.3188	9617
GO:0009620	response to fungus	0.01%	-0.7696	9617
GO:0006955	immune response	0.38%	-0.6576	9617
GO:0042742	defense response to bacterium	0.08%	-2.1675	9617

	aromatic compound biosynthetic process	15.56%	-4.284	19438
GO:0019438	response to chemical	1.60%	-10.4949	42221
GO:0042221				
GO:0051716	cellular response to stimulus	6.26%	-3.1427	42221
	intracellular signal transduction	2.72%	-1.9586	42221
GO:0035556	phosphorelay signal transduction system	2.13%	-1.5376	42221
GO:0000160				
GO:0009605	response to external stimulus	1.38%	-1.0555	42221
GO:0006950	response to stress	4.12%	-7.1249	42221
GO:0007165	signal transduction	3.80%	-1.6021	42221
GO:0042445				
GO:0006082	hormone metabolic process	0.02%	-1.9208	42445
GO:0009628	organic acid metabolic process	9.36%	-3.7696	6082
GO:0009607	response to abiotic stimulus	0.31%	-8.7447	9628
GO:0046686	response to biotic stimulus	0.47%	-2.8861	9607
GO:0010038	response to cadmium ion	0.00%	-1.0915	46686
GO:0006952	response to metal ion	0.07%	-0.6383	46686
	defense response	0.57%	-3.2218	6952
GO:0048583	regulation of response to stimulus	0.69%	-0.5376	48583
GO:0044271	cellular nitrogen compound biosynthetic process	15.79%	-3.0315	44271
GO:0018130	heterocycle biosynthetic process	16.15%	-1.1192	44271
GO:0044249				
GO:0006810	cellular biosynthetic process	28.21%	-1.2291	44271
	transport	17.38%	-0.7696	6810
GO:0051234				
GO:0048878	establishment of localization	17.47%	-0.7696	6810
	chemical homeostasis	0.26%	-2.1427	48878
GO:0090066	regulation of anatomical structure size	0.04%	-1.6383	48878
GO:0032535	regulation of cellular component size	0.03%	-1.6383	48878
GO:0042592	homeostatic process	0.97%	-1.699	48878
GO:0008361	regulation of cell size	0.01%	-1.6576	48878