

Supplemental File 5.B. UP Dataset				
Term_ID	Description	Frequency	Log10 p-value	Representative
GO:0002376	immune system process	0.63%	-9	2376
GO:0006952	defense response	0.57%	-17.7959	6952
GO:0007623	circadian rhythm	0.01%	-1.585	7623
GO:0009987	cellular process	65.99%	-1.0315	9987
GO:0010876	lipid localization	0.10%	-6.7959	10876
GO:0012501	programmed cell death	0.27%	-8.5229	12501
	host programmed cell death			
GO:0034050	induced by symbiont	0.01%	-0.8239	12501
GO:0008219	cell death	0.28%	-8.5229	12501
	plant-type hypersensitive			
GO:0009626	response	0.01%	-0.8239	12501
GO:0006915	apoptotic process	0.25%	-6.4949	12501
	negative regulation of molecular			
GO:0044092	function	0.39%	-0.6576	44092
	negative regulation of catalytic			
GO:0043086	activity	0.24%	-0.4685	44092
GO:0048511	rhythmic process	0.02%	-1.585	48511
GO:0050896	response to stimulus	8.82%	-16.2441	50896
GO:0051179	localization	17.86%	-0.4685	51179
GO:0051704	multi-organism process	2.77%	-8.5229	51704
GO:0065004	protein-DNA complex assembly	0.03%	-0.3188	65004
GO:0042430	indole-containing compound metabolic process	0.25%	-1.9208	42430
GO:0009791	post-embryonic development	0.05%	-1.3468	9791
GO:0016265	death	0.28%	-8.5229	16265
	cellular carbohydrate metabolic			
GO:0044262	process	1.84%	-1.6198	44262
GO:0016143	S-glycoside metabolic process	0.00%	-2.0706	16143
GO:0008037	cell recognition	0.02%	-0.6576	8037
	sulfur compound metabolic			
GO:0006790	process	1.67%	-0.4949	6790
GO:0009404	toxin metabolic process	0.05%	-2.5376	9404
GO:0019760	glucosinolate metabolic process	0.00%	-2.0706	9404
GO:0019758	glycosinolate biosynthetic process	0.00%	-1.3565	9404
GO:0019757	glycosinolate metabolic process	0.00%	-2.0706	9404
GO:0019761	glucosinolate biosynthetic process	0.00%	-1.3565	9404
GO:0016144	S-glycoside biosynthetic process	0.00%	-1.3565	9404

GO:0019748	secondary metabolic process	0.18%	-0.8239	19748
GO:0044248	cellular catabolic process	7.95%	-0.8239	44248
GO:0005975	carbohydrate metabolic process	5.98%	-0.3768	5975
GO:0042364	water-soluble vitamin biosynthetic process	1.22%	-0.3565	42364
GO:0009110	vitamin biosynthetic process	1.22%	-0.3098	42364
GO:0006304	DNA modification	0.36%	-0.3665	6304
GO:0034641	cellular nitrogen compound metabolic process	33.43%	-1.0969	34641
GO:0043412	macromolecule modification	5.09%	-0.585	43412
GO:0042435	indole-containing compound biosynthetic process	0.20%	-1.0969	42435
GO:0019751	polyol metabolic process	0.38%	-0.3098	19751
GO:0016137	glycoside metabolic process	0.03%	-0.8239	16137
GO:0046483	heterocycle metabolic process	33.33%	-0.3565	46483
GO:0033036	macromolecule localization	1.97%	-1.0969	33036
GO:0016138	glycoside biosynthetic process	0.02%	-0.301	16138
GO:0015833	peptide transport	0.31%	-0.4949	15833
GO:0006857	oligopeptide transport	0.07%	-0.4949	15833
GO:0018130	heterocycle biosynthetic process	16.15%	-0.7959	18130
GO:0006259	DNA metabolic process	6.34%	-0.4202	6259
GO:0052482	defense response by cell wall thickening	0.00%	-3.1024	52482
GO:0052543	callose deposition in cell wall	0.00%	-2.8539	52482
GO:0052544	defense response by callose deposition in cell wall	0.00%	-3.1024	52482
GO:0009719	response to endogenous stimulus	0.11%	-0.6198	9719
GO:0010033	response to organic substance	0.29%	-1.7959	10033
GO:0006812	cation transport	3.98%	-0.3279	6812
GO:0009628	response to abiotic stimulus	0.31%	-1.585	9628
GO:0006955	immune response	0.38%	-9	6955
GO:0002682	regulation of immune system process	0.40%	-0.8239	6955
GO:0045087	innate immune response	0.14%	-8.7447	6955
GO:0050776	regulation of immune response	0.27%	-0.8239	6955
GO:0051707	response to other organism	0.44%	-8.1871	51707
GO:0009814	defense response, incompatible interaction	0.01%	-1.8239	51707

	defense response to fungus, incompatible interaction	0.00%	-1.0132	51707
GO:0009817	defense response to fungus	0.01%	-1.9208	51707
GO:0050832	response to fungus	0.01%	-3.2007	51707
GO:0009620	response to bacterium	0.09%	-6.284	51707
GO:0009617				
GO:0042742	defense response to bacterium	0.08%	-4.5686	51707
GO:0052545	callose localization	0.00%	-3.4949	52545
GO:0009607	response to biotic stimulus	0.47%	-7.6778	9607
GO:0042545	cell wall modification	0.02%	-0.7959	42545
GO:0006970	response to osmotic stress	0.03%	-0.3872	6970
	cellular nitrogen compound biosynthetic process	15.79%	-0.3372	44271
GO:0009751	response to salicylic acid	0.01%	-1.3565	9751
GO:0009753	response to jasmonic acid	0.01%	-0.3372	9751
GO:0033037	polysaccharide localization	0.05%	-3.4949	33037
GO:0006950	response to stress	4.12%	-15.4685	6950
GO:0051716	cellular response to stimulus	6.26%	-3.6778	6950
GO:0048583	regulation of response to stimulus	0.69%	-0.9208	48583
GO:0006869	lipid transport	0.09%	-0.4685	6869
	sulfur compound biosynthetic process	1.34%	-0.6021	44272
GO:0010029	regulation of seed germination	0.00%	-0.699	10029
GO:0006468	protein phosphorylation	1.21%	-0.3565	6468
GO:0009875	pollen-pistil interaction	0.01%	-0.8861	9875
GO:0048544	recognition of pollen	0.01%	-0.6576	9875
GO:0080134	regulation of response to stress	0.37%	-1.3468	80134
GO:0031347	regulation of defense response	0.31%	-0.9208	80134
GO:0048584	positive regulation of response to stimulus	0.32%	-0.6383	80134
	regulation of innate immune response	0.12%	-0.4685	80134
GO:0045088				
GO:0009605	response to external stimulus	1.38%	-0.6021	9605
GO:0031497	chromatin assembly	0.02%	-0.3188	31497
	cellular carbohydrate biosynthetic process	0.74%	-0.301	34637
GO:0034637				
GO:0042221	response to chemical	1.60%	-4	42221
GO:0009816	defense response to bacterium, incompatible interaction	0.00%	-1.0555	9816
GO:0005976	polysaccharide metabolic process	1.08%	-0.6198	5976
GO:0009651	response to salt stress	0.01%	-0.3665	9651

GO:0006855	drug transmembrane transport	0.16%	-1.6198	6855
GO:0015893	drug transport	0.19%	-1.5528	6855
	defense response by callose			
GO:0052542	deposition	0.00%	-3.699	52542
GO:0042493	response to drug	0.21%	-1.5229	42493
GO:0052386	cell wall thickening	0.00%	-2.7696	52386
GO:0010193	response to ozone	0.00%	-0.9586	10193
GO:0003002	regionalization	0.03%	-0.3565	3002
GO:0033554	cellular response to stress	2.34%	-4.6383	33554
GO:0006281	DNA repair	1.95%	-0.585	33554
	cellular response to DNA damage			
GO:0006974	stimulus	1.98%	-0.4949	33554
GO:0007165	signal transduction	3.80%	-1.0969	33554
GO:0009407	toxin catabolic process	0.00%	-2.5376	9407