

Table S2. GO Slim annotation of each module.

GO Slim ID and assigned modules	GO Slim Term and GO IDs associated to GO Slim T	No. GO Terms and GO Terms significantly enriched
Slim id: GO:0000003	reproduction	6
module_263	GO:0048700	acquisition of desiccation tolerance
module_293	GO:0048481	ovule development
module_293	GO:0048437	floral organ development
module_293	GO:0048438	floral whorl development
module_293	GO:0048440	carpel development
module_293	GO:0048467	gynoecium development
Slim id: GO:0005975	carbohydrate metabolic process	50
module_170	GO:0019253	reductive pentose-phosphate cycle
module_170	GO:0019685	photosynthesis, dark reaction
module_272	GO:0006096	glycolysis
module_355	GO:0010289	homogalacturonan biosynthetic process
module_355	GO:0000271	polysaccharide biosynthetic process
module_355	GO:0005976	polysaccharide metabolic process
module_355	GO:0016051	carbohydrate biosynthetic process
module_355	GO:0033692	cellular polysaccharide biosynthetic process
module_355	GO:0034637	cellular carbohydrate biosynthetic process
module_355	GO:0044264	cellular polysaccharide metabolic process
module_355	GO:0045488	pectin metabolic process
module_355	GO:0045489	pectin biosynthetic process
module_413	GO:0005998	xylulose catabolic process
module_413	GO:0005996	monosaccharide metabolic process
module_413	GO:0005997	xylulose metabolic process
module_413	GO:0016052	carbohydrate catabolic process
module_413	GO:0019323	pentose catabolic process
module_413	GO:0044275	cellular carbohydrate catabolic process
module_413	GO:0046365	monosaccharide catabolic process
module_521	GO:0010253	UDP-rhamnose biosynthetic process
module_521	GO:0019299	rhamnose metabolic process
module_521	GO:0019300	rhamnose biosynthetic process
module_521	GO:0019319	hexose biosynthetic process
module_521	GO:0033478	UDP-rhamnose metabolic process
module_548	GO:0030244	cellulose biosynthetic process
module_548	GO:0030243	cellulose metabolic process
module_563	GO:0030244	cellulose biosynthetic process
module_563	GO:0000271	polysaccharide biosynthetic process
module_563	GO:0005976	polysaccharide metabolic process
module_563	GO:0030243	cellulose metabolic process
module_563	GO:0033692	cellular polysaccharide biosynthetic process
module_563	GO:0034637	cellular carbohydrate biosynthetic process
module_563	GO:0044264	cellular polysaccharide metabolic process
module_589	GO:0019252	starch biosynthetic process
module_589	GO:0005982	starch metabolic process
module_589	GO:0010021	amylopectin biosynthetic process
module_603	GO:0030244	cellulose biosynthetic process
module_603	GO:0009250	glucan biosynthetic process
module_603	GO:0030243	cellulose metabolic process
module_72	GO:0005975	carbohydrate metabolic process
module_94	GO:0005986	sucrose biosynthetic process
module_94	GO:0005984	disaccharide metabolic process
module_94	GO:0005985	sucrose metabolic process
module_94	GO:0009311	oligosaccharide metabolic process
module_94	GO:0009312	oligosaccharide biosynthetic process
module_94	GO:0016051	carbohydrate biosynthetic process
module_94	GO:0016137	glycoside metabolic process
module_94	GO:0016138	glycoside biosynthetic process
module_94	GO:0034637	cellular carbohydrate biosynthetic process
module_94	GO:0046351	disaccharide biosynthetic process
Slim id: GO:0006091	generation of precursor metabolites and energy	21
module_118	GO:0042550	photosystem I stabilization
module_118	GO:0042548	regulation of photosynthesis, light reaction
module_118	GO:0043467	regulation of generation of precursor metabolites and energy
module_180	GO:0015980	energy derivation by oxidation of organic compounds
module_180	GO:0045333	cellular respiration
module_272	GO:0006096	glycolysis
module_303	GO:0009765	photosynthesis, light harvesting
module_303	GO:0006091	generation of precursor metabolites and energy
module_303	GO:0009768	photosynthesis, light harvesting in photosystem I
module_303	GO:0019684	photosynthesis, light reaction
module_317	GO:0009769	photosynthesis, light harvesting in photosystem II
module_317	GO:0009765	photosynthesis, light harvesting
module_317	GO:0006091	generation of precursor metabolites and energy
module_317	GO:0019684	photosynthesis, light reaction
module_323	GO:0009767	photosynthetic electron transport chain
module_323	GO:0006091	generation of precursor metabolites and energy
module_323	GO:0019684	photosynthesis, light reaction
module_323	GO:0022900	electron transport chain
module_429	GO:0009765	photosynthesis, light harvesting
module_429	GO:0019684	photosynthesis, light reaction
module_86	GO:0006119	oxidative phosphorylation
Slim id: GO:0006139	nucleobase, nucleoside, nucleotide and nucleic acid	26
module_12	GO:0006556	S-adenosylmethionine biosynthetic process
module_12	GO:0009119	ribonucleoside metabolic process
module_12	GO:0042278	purine nucleoside metabolic process
module_12	GO:0046128	purine ribonucleoside metabolic process
module_12	GO:0046500	S-adenosylmethionine metabolic process
module_222	GO:0006364	rRNA processing
module_222	GO:0006396	RNA processing
module_222	GO:0016072	rRNA metabolic process
module_222	GO:0034470	ncRNA processing
module_222	GO:0034660	ncRNA metabolic process
module_266	GO:0006355	regulation of transcription, DNA-dependent
module_266	GO:0051252	regulation of RNA metabolic process
module_293	GO:0006418	tRNA aminoacylation for protein translation
module_293	GO:0006399	tRNA metabolic process
module_293	GO:0006431	methionyl-tRNA aminoacylation
module_293	GO:0034660	ncRNA metabolic process
module_293	GO:0043039	tRNA aminoacylation
module_371	GO:0016070	RNA metabolic process
module_473	GO:0006396	RNA processing
module_491	GO:0006418	tRNA aminoacylation for protein translation
module_491	GO:0043039	tRNA aminoacylation
module_521	GO:0010253	UDP-rhamnose biosynthetic process
module_521	GO:0009226	nucleotide-sugar biosynthetic process
module_521	GO:0033478	UDP-rhamnose metabolic process
module_553	GO:0006139	nucleobase, nucleoside, nucleotide and nucleic acid metabolic process
module_553	GO:0090304	nucleic acid metabolic process
Slim id: GO:0006259	DNA metabolic process	7
module_447	GO:0015074	DNA integration
module_553	GO:0006268	DNA unwinding involved in replication
module_553	GO:0006270	DNA-dependent DNA replication initiation

module_553	GO:0006259	DNA metabolic process	
module_553	GO:0006260	DNA replication	
module_553	GO:0006261	DNA-dependent DNA replication	
module_554	GO:0006260	DNA replication	
Slim id: GO:0006350	transcription		1
module_266	GO:0006355	regulation of transcription, DNA-dependent	
Slim id: GO:0006412	translation		18
module_113	GO:0006413	translational initiation	
module_237	GO:0006412	translation	
module_285	GO:0006412	translation	
module_290	GO:0006412	translation	
module_290	GO:0006414	translational elongation	
module_293	GO:0006418	tRNA aminoacylation for protein translation	
module_293	GO:0006431	methionyl-tRNA aminoacylation	
module_313	GO:0006412	translation	
module_380	GO:0006412	translation	
module_41	GO:0006412	translation	
module_410	GO:0006412	translation	
module_414	GO:0006412	translation	
module_443	GO:0006412	translation	
module_480	GO:0006412	translation	
module_482	GO:0006412	translation	
module_491	GO:0006418	tRNA aminoacylation for protein translation	
module_529	GO:0006412	translation	
module_569	GO:0006412	translation	
Slim id: GO:0006464	protein modification process		18
module_141	GO:0006468	protein amino acid phosphorylation	
module_271	GO:0018401	peptidyl-proline hydroxylation to 4-hydroxy-L-proline	
module_271	GO:0018208	peptidyl-proline modification	
module_271	GO:0019511	peptidyl-proline hydroxylation	
module_391	GO:0006468	protein amino acid phosphorylation	
module_403	GO:0017006	protein-tetrapyrrole linkage	
module_403	GO:0018298	protein-chromophore linkage	
module_404	GO:0006468	protein amino acid phosphorylation	
module_404	GO:0006464	protein modification process	
module_404	GO:0043687	post-translational protein modification	
module_567	GO:0043687	post-translational protein modification	
module_567	GO:0006464	protein modification process	
module_567	GO:0006468	protein amino acid phosphorylation	
module_581	GO:0006468	protein amino acid phosphorylation	
module_581	GO:0043687	post-translational protein modification	
module_592	GO:0006468	protein amino acid phosphorylation	
module_592	GO:0006464	protein modification process	
module_592	GO:0043687	post-translational protein modification	
Slim id: GO:0006519	cellular amino acid and derivative metabolic process		39
module_12	GO:0006556	S-adenosylmethionine biosynthetic process	
module_12	GO:0000097	sulfur amino acid biosynthetic process	
module_12	GO:0046500	S-adenosylmethionine metabolic process	
module_142	GO:0006656	phosphatidylcholine biosynthetic process	
module_142	GO:0006576	cellular biogenic amine metabolic process	
module_142	GO:0042439	ethanolamine and derivative metabolic process	
module_142	GO:0046470	phosphatidylcholine metabolic process	
module_236	GO:0009698	phenylpropanoid metabolic process	
module_236	GO:0006519	cellular amino acid and derivative metabolic process	
module_236	GO:0006575	cellular amino acid derivative metabolic process	
module_236	GO:0009699	phenylpropanoid biosynthetic process	
module_236	GO:0009812	flavonoid metabolic process	
module_236	GO:0009813	flavonoid biosynthetic process	
module_236	GO:0042398	cellular amino acid derivative biosynthetic process	
module_249	GO:0006558	L-phenylalanine metabolic process	
module_249	GO:0009698	phenylpropanoid metabolic process	
module_249	GO:0006519	cellular amino acid and derivative metabolic process	
module_249	GO:0009072	aromatic amino acid family metabolic process	
module_271	GO:0018401	peptidyl-proline hydroxylation to 4-hydroxy-L-proline	
module_271	GO:0019471	4-hydroxyproline metabolic process	
module_293	GO:0006418	tRNA aminoacylation for protein translation	
module_293	GO:0006431	methionyl-tRNA aminoacylation	
module_293	GO:0006520	cellular amino acid metabolic process	
module_293	GO:0043038	amino acid activation	
module_293	GO:0043039	tRNA aminoacylation	
module_296	GO:0006552	leucine catabolic process	
module_413	GO:0006573	valine metabolic process	
module_419	GO:0051555	flavonol biosynthetic process	
module_419	GO:0051552	flavone metabolic process	
module_419	GO:0051553	flavone biosynthetic process	
module_419	GO:0051554	flavonol metabolic process	
module_491	GO:0006418	tRNA aminoacylation for protein translation	
module_491	GO:0043038	amino acid activation	
module_491	GO:0043039	tRNA aminoacylation	
module_502	GO:0046274	lignin catabolic process	
module_502	GO:0046271	phenylpropanoid catabolic process	
module_540	GO:0006552	leucine catabolic process	
module_557	GO:0030418	nicotianamine biosynthetic process	
module_557	GO:0030417	nicotianamine metabolic process	
Slim id: GO:0006629	lipid metabolic process		28
module_118	GO:0019375	galactolipid biosynthetic process	
module_118	GO:0006643	membrane lipid metabolic process	
module_118	GO:0006664	glycolipid metabolic process	
module_118	GO:0009247	glycolipid biosynthetic process	
module_118	GO:0019374	galactolipid metabolic process	
module_118	GO:0046467	membrane lipid biosynthetic process	
module_142	GO:0006656	phosphatidylcholine biosynthetic process	
module_142	GO:0006644	phospholipid metabolic process	
module_142	GO:0006650	glycerophospholipid metabolic process	
module_142	GO:0008654	phospholipid biosynthetic process	
module_142	GO:0045017	glycerolipid biosynthetic process	
module_142	GO:0046470	phosphatidylcholine metabolic process	
module_142	GO:0046474	glycerophospholipid biosynthetic process	
module_142	GO:0046486	glycerolipid metabolic process	
module_265	GO:0006633	fatty acid biosynthetic process	
module_265	GO:0006631	fatty acid metabolic process	
module_265	GO:0008610	lipid biosynthetic process	
module_265	GO:0044255	cellular lipid metabolic process	
module_315	GO:0010025	wax biosynthetic process	
module_315	GO:0010166	wax metabolic process	
module_433	GO:0016119	carotene metabolic process	
module_456	GO:0045337	farnesyl diphosphate biosynthetic process	
module_456	GO:0016090	prenol metabolic process	
module_456	GO:0016091	prenol biosynthetic process	
module_456	GO:0016093	polyprenol metabolic process	
module_456	GO:0016094	polyprenol biosynthetic process	
module_456	GO:0045338	farnesyl diphosphate metabolic process	

module_476	GO:0010143	cutin biosynthetic process	
Slim id: GO:0006810	transport		8
module_261	GO:0046865	terpenoid transport	
module_261	GO:0046864	isoprenoid transport	
module_375	GO:0015712	hexose phosphate transport	
module_375	GO:0008645	hexose transport	
module_375	GO:0015749	monosaccharide transport	
module_538	GO:0015743	malate transport	
module_538	GO:0006835	dicarboxylic acid transport	
module_538	GO:0015740	C4-dicarboxylate transport	
Slim id: GO:0006811	ion transport		2
module_342	GO:0015700	arsenite transport	
module_544	GO:0015706	nitrate transport	
Slim id: GO:0006950	response to stress		16
module_277	GO:0009408	response to heat	
module_277	GO:0042542	response to hydrogen peroxide	
module_277	GO:0000302	response to reactive oxygen species	
module_277	GO:0006950	response to stress	
module_316	GO:0016068	type I hypersensitivity	
module_316	GO:0002437	inflammatory response to antigenic stimulus	
module_316	GO:0002438	acute inflammatory response to antigenic stimulus	
module_316	GO:0002524	hypersensitivity	
module_316	GO:0002526	acute inflammatory response	
module_319	GO:0006979	response to oxidative stress	
module_333	GO:0009870	defense response signaling pathway, resistance gene-dependent	
module_343	GO:0009408	response to heat	
module_343	GO:0006950	response to stress	
module_406	GO:0009631	cold acclimation	
module_406	GO:0009414	response to water deprivation	
module_448	GO:0001666	response to hypoxia	
Slim id: GO:0006996	organelle organization		36
module_167	GO:0006334	nucleosome assembly	
module_167	GO:0006325	chromatin organization	
module_167	GO:0006333	chromatin assembly or disassembly	
module_167	GO:0006996	organelle organization	
module_167	GO:0031497	chromatin assembly	
module_167	GO:0034728	nucleosome organization	
module_167	GO:0051276	chromosome organization	
module_286	GO:0006334	nucleosome assembly	
module_286	GO:0006325	chromatin organization	
module_286	GO:0006333	chromatin assembly or disassembly	
module_286	GO:0006996	organelle organization	
module_286	GO:0031497	chromatin assembly	
module_286	GO:0034728	nucleosome organization	
module_286	GO:0051276	chromosome organization	
module_400	GO:0006334	nucleosome assembly	
module_400	GO:0006325	chromatin organization	
module_400	GO:0006333	chromatin assembly or disassembly	
module_400	GO:0006996	organelle organization	
module_400	GO:0031497	chromatin assembly	
module_400	GO:0034728	nucleosome organization	
module_400	GO:0051276	chromosome organization	
module_408	GO:0051225	spindle assembly	
module_56	GO:0006334	nucleosome assembly	
module_56	GO:0006325	chromatin organization	
module_56	GO:0006333	chromatin assembly or disassembly	
module_56	GO:0006996	organelle organization	
module_56	GO:0031497	chromatin assembly	
module_56	GO:0034728	nucleosome organization	
module_56	GO:0051276	chromosome organization	
module_598	GO:0006334	nucleosome assembly	
module_598	GO:0006325	chromatin organization	
module_598	GO:0006333	chromatin assembly or disassembly	
module_598	GO:0006996	organelle organization	
module_598	GO:0031497	chromatin assembly	
module_598	GO:0034728	nucleosome organization	
module_598	GO:0051276	chromosome organization	
Slim id: GO:0007005	mitochondrion organization		1
module_485	GO:0007005	mitochondrion organization	
Slim id: GO:0007010	cytoskeleton organization		1
module_408	GO:0051225	spindle assembly	
Slim id: GO:0007049	cell cycle		3
module_168	GO:0007049	cell cycle	
module_408	GO:0051225	spindle assembly	
module_408	GO:0007049	cell cycle	
Slim id: GO:0007275	multicellular organismal development		9
module_263	GO:0048700	acquisition of desiccation tolerance	
module_293	GO:0048481	ovule development	
module_293	GO:0048437	floral organ development	
module_293	GO:0048438	floral whorl development	
module_293	GO:0048440	carpel development	
module_293	GO:0048467	gynoecium development	
module_293	GO:0048569	post-embryonic organ development	
module_589	GO:0010444	guard mother cell differentiation	
module_589	GO:0010440	stomatal lineage progression	
Slim id: GO:0008150	biological_process		361
module_113	GO:0006413	translational initiation	
module_118	GO:0042550	photosystem I stabilization	
module_118	GO:0019375	galactolipid biosynthetic process	
module_118	GO:0006643	membrane lipid metabolic process	
module_118	GO:0006664	glycolipid metabolic process	
module_118	GO:0009247	glycolipid biosynthetic process	
module_118	GO:0010109	regulation of photosynthesis	
module_118	GO:0019374	galactolipid metabolic process	
module_118	GO:0042548	regulation of photosynthesis, light reaction	
module_118	GO:0043467	regulation of generation of precursor metabolites and energy	
module_118	GO:0046467	membrane lipid biosynthetic process	
module_12	GO:0006556	S-adenosylmethionine biosynthetic process	
module_12	GO:0000097	sulfur amino acid biosynthetic process	
module_12	GO:0046500	S-adenosylmethionine metabolic process	
module_125	GO:0009853	photorespiration	
module_125	GO:0043094	cellular metabolic compound salvage	
module_128	GO:0006878	cellular copper ion homeostasis	
module_128	GO:0030005	cellular di-, tri-valent inorganic cation homeostasis	
module_128	GO:0055070	copper ion homeostasis	
module_141	GO:0006468	protein amino acid phosphorylation	
module_142	GO:0006656	phosphatidylcholine biosynthetic process	
module_142	GO:0006576	cellular biogenic amine metabolic process	

module_142	GO:0006644	phospholipid metabolic process
module_142	GO:0006650	glycerophospholipid metabolic process
module_142	GO:0008654	phospholipid biosynthetic process
module_142	GO:0042439	ethanolamine and derivative metabolic process
module_142	GO:0045017	glycerolipid biosynthetic process
module_142	GO:0046470	phosphatidylcholine metabolic process
module_142	GO:0046474	glycerophospholipid biosynthetic process
module_142	GO:0046486	glycerolipid metabolic process
module_167	GO:0006334	nucleosome assembly
module_167	GO:0006323	DNA packaging
module_167	GO:0022607	cellular component assembly
module_167	GO:0031497	chromatin assembly
module_167	GO:0034621	cellular macromolecular complex subunit organization
module_167	GO:0034622	cellular macromolecular complex assembly
module_167	GO:0034728	nucleosome organization
module_167	GO:0044085	cellular component biogenesis
module_167	GO:0065003	macromolecular complex assembly
module_167	GO:0065004	protein-DNA complex assembly
module_167	GO:0071103	DNA conformation change
module_170	GO:0019253	reductive pentose-phosphate cycle
module_170	GO:0015979	photosynthesis
module_170	GO:0019685	photosynthesis, dark reaction
module_180	GO:0006084	acetyl-CoA metabolic process
module_202	GO:0033014	tetrapyrrole biosynthetic process
module_202	GO:0033013	tetrapyrrole metabolic process
module_222	GO:0006364	rRNA processing
module_222	GO:0006396	RNA processing
module_222	GO:0016072	rRNA metabolic process
module_222	GO:0022613	ribonucleoprotein complex biogenesis
module_222	GO:0034470	ncRNA processing
module_222	GO:0034660	ncRNA metabolic process
module_222	GO:0042254	ribosome biogenesis
module_236	GO:0009698	phenylpropanoid metabolic process
module_236	GO:0006725	cellular aromatic compound metabolic process
module_236	GO:0009699	phenylpropanoid biosynthetic process
module_236	GO:0009812	flavonoid metabolic process
module_236	GO:0009813	flavonoid biosynthetic process
module_236	GO:0019438	aromatic compound biosynthetic process
module_236	GO:0042398	cellular amino acid derivative biosynthetic process
module_237	GO:0034645	cellular macromolecule biosynthetic process
module_249	GO:0006558	L-phenylalanine metabolic process
module_249	GO:0009698	phenylpropanoid metabolic process
module_249	GO:0019438	aromatic compound biosynthetic process
module_249	GO:0006725	cellular aromatic compound metabolic process
module_249	GO:0009072	aromatic amino acid family metabolic process
module_249	GO:0043648	dicarboxylic acid metabolic process
module_259	GO:0006511	ubiquitin-dependent protein catabolic process
module_259	GO:0019941	modification-dependent protein catabolic process
module_259	GO:0043632	modification-dependent macromolecule catabolic process
module_259	GO:0044248	cellular catabolic process
module_259	GO:0044257	cellular protein catabolic process
module_259	GO:0044265	cellular macromolecule catabolic process
module_259	GO:0051603	proteolysis involved in cellular protein catabolic process
module_261	GO:0046865	terpenoid transport
module_261	GO:0046864	isoprenoid transport
module_263	GO:0048700	acquisition of desiccation tolerance
module_265	GO:0006633	fatty acid biosynthetic process
module_265	GO:0006631	fatty acid metabolic process
module_265	GO:0016053	organic acid biosynthetic process
module_265	GO:0032787	monocarboxylic acid metabolic process
module_265	GO:0044255	cellular lipid metabolic process
module_265	GO:0046394	carboxylic acid biosynthetic process
module_266	GO:0006355	regulation of transcription, DNA-dependent
module_266	GO:0051252	regulation of RNA metabolic process
module_271	GO:0018401	peptidyl-proline hydroxylation to 4-hydroxy-L-proline
module_271	GO:0019471	4-hydroxyproline metabolic process
module_272	GO:0006096	glycolysis
module_277	GO:0042542	response to hydrogen peroxide
module_277	GO:0006457	protein folding
module_277	GO:0000302	response to reactive oxygen species
module_277	GO:0010035	response to inorganic substance
module_286	GO:0006334	nucleosome assembly
module_286	GO:0006323	DNA packaging
module_286	GO:0022607	cellular component assembly
module_286	GO:0031497	chromatin assembly
module_286	GO:0034621	cellular macromolecular complex subunit organization
module_286	GO:0034622	cellular macromolecular complex assembly
module_286	GO:0034728	nucleosome organization
module_286	GO:0044085	cellular component biogenesis
module_286	GO:0065003	macromolecular complex assembly
module_286	GO:0065004	protein-DNA complex assembly
module_286	GO:0071103	DNA conformation change
module_286	GO:0042254	ribosome biogenesis
module_290	GO:0034645	cellular macromolecule biosynthetic process
module_290	GO:0006414	translational elongation
module_290	GO:0009987	cellular process
module_290	GO:0022613	ribonucleoprotein complex biogenesis
module_290	GO:0044085	cellular component biogenesis
module_290	GO:0044237	cellular metabolic process
module_290	GO:0044249	cellular biosynthetic process
module_290	GO:0044260	cellular macromolecule metabolic process
module_290	GO:0044267	cellular protein metabolic process
module_293	GO:0006418	tRNA aminoacylation for protein translation
module_293	GO:0048481	ovule development
module_293	GO:0006399	tRNA metabolic process
module_293	GO:0006431	methionyl-tRNA aminoacylation
module_293	GO:0006520	cellular amino acid metabolic process
module_293	GO:0034660	ncRNA metabolic process
module_293	GO:0043038	amino acid activation
module_293	GO:0043039	tRNA aminoacylation
module_293	GO:0044106	cellular amine metabolic process
module_293	GO:0048437	floral organ development
module_293	GO:0048438	floral whorl development
module_293	GO:0048440	carpel development
module_293	GO:0048467	gynoecium development
module_293	GO:0048569	post-embryonic organ development
module_296	GO:0006552	leucine catabolic process
module_303	GO:0009765	photosynthesis, light harvesting
module_303	GO:0015979	photosynthesis
module_303	GO:0009768	photosynthesis, light harvesting in photosystem I
module_303	GO:0019684	photosynthesis, light reaction
module_313	GO:0044267	cellular protein metabolic process
module_313	GO:0034645	cellular macromolecule biosynthetic process
module_313	GO:0044237	cellular metabolic process
module_313	GO:0044249	cellular biosynthetic process
module_313	GO:0044260	cellular macromolecule metabolic process
module_313	GO:0010025	wax biosynthetic process

module_315	GO:0010166	wax metabolic process
module_316	GO:0016068	type I hypersensitivity
module_316	GO:0002250	adaptive immune response
module_316	GO:0002437	inflammatory response to antigenic stimulus
module_316	GO:0002438	acute inflammatory response to antigenic stimulus
module_316	GO:0002443	leukocyte mediated immunity
module_316	GO:0002449	lymphocyte mediated immunity
module_316	GO:0002460	adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains
module_316	GO:0002524	hypersensitivity
module_316	GO:0016064	immunoglobulin mediated immune response
module_316	GO:0019724	B cell mediated immunity
module_317	GO:0009769	photosynthesis, light harvesting in photosystem II
module_317	GO:0009765	photosynthesis, light harvesting
module_317	GO:0015979	photosynthesis
module_317	GO:0019684	photosynthesis, light reaction
module_319	GO:0006979	response to oxidative stress
module_323	GO:0009767	photosynthetic electron transport chain
module_323	GO:0015979	photosynthesis
module_323	GO:0019684	photosynthesis, light reaction
module_333	GO:0009870	defense response signaling pathway, resistance gene-dependent
module_355	GO:0010289	homogalacturonan biosynthetic process
module_355	GO:0033692	cellular polysaccharide biosynthetic process
module_355	GO:0034637	cellular carbohydrate biosynthetic process
module_355	GO:0044264	cellular polysaccharide metabolic process
module_355	GO:0045489	pectin biosynthetic process
module_356	GO:0009652	thigmotropism
module_356	GO:0009606	tropism
module_357	GO:0055062	phosphate ion homeostasis
module_357	GO:0030002	cellular anion homeostasis
module_357	GO:0030319	cellular di-, tri-valent inorganic anion homeostasis
module_357	GO:0030643	cellular phosphate ion homeostasis
module_357	GO:0055061	di-, tri-valent inorganic anion homeostasis
module_357	GO:0055081	anion homeostasis
module_361	GO:0010477	response to sulfur dioxide
module_371	GO:0016070	RNA metabolic process
module_380	GO:0034645	cellular macromolecule biosynthetic process
module_380	GO:0044249	cellular biosynthetic process
module_380	GO:0044260	cellular macromolecule metabolic process
module_380	GO:0044267	cellular protein metabolic process
module_391	GO:0006468	protein amino acid phosphorylation
module_400	GO:0006334	nucleosome assembly
module_400	GO:0006323	DNA packaging
module_400	GO:0022607	cellular component assembly
module_400	GO:0031497	chromatin assembly
module_400	GO:0034621	cellular macromolecular complex subunit organization
module_400	GO:0034622	cellular macromolecular complex assembly
module_400	GO:0034728	nucleosome organization
module_400	GO:0044085	cellular component biogenesis
module_400	GO:0065003	macromolecular complex assembly
module_400	GO:0065004	protein-DNA complex assembly
module_400	GO:0071103	DNA conformation change
module_403	GO:0007600	sensory perception
module_403	GO:0010161	red light signaling pathway
module_403	GO:0003008	system process
module_403	GO:0050877	neurological system process
module_403	GO:0071491	cellular response to red light
module_404	GO:0006468	protein amino acid phosphorylation
module_404	GO:0006793	phosphorus metabolic process
module_404	GO:0006796	phosphate metabolic process
module_404	GO:0016310	phosphorylation
module_406	GO:0009961	response to 1-aminocyclopropane-1-carboxylic acid
module_406	GO:0009414	response to water deprivation
module_406	GO:0009737	response to abscisic acid stimulus
module_406	GO:0009415	response to water
module_408	GO:0007018	microtubule-based movement
module_408	GO:0051225	spindle assembly
module_408	GO:0007017	microtubule-based process
module_41	GO:0042254	ribosome biogenesis
module_41	GO:0022613	ribonucleoprotein complex biogenesis
module_41	GO:0034645	cellular macromolecule biosynthetic process
module_41	GO:0044249	cellular biosynthetic process
module_41	GO:0044260	cellular macromolecule metabolic process
module_41	GO:0044267	cellular protein metabolic process
module_410	GO:0042254	ribosome biogenesis
module_410	GO:0022613	ribonucleoprotein complex biogenesis
module_410	GO:0034645	cellular macromolecule biosynthetic process
module_410	GO:0044237	cellular metabolic process
module_410	GO:0044249	cellular biosynthetic process
module_410	GO:0044260	cellular macromolecule metabolic process
module_410	GO:0044267	cellular protein metabolic process
module_413	GO:0005998	xylulose catabolic process
module_413	GO:0006573	valine metabolic process
module_413	GO:0005996	monosaccharide metabolic process
module_413	GO:0005997	xylulose metabolic process
module_413	GO:0019323	pentose catabolic process
module_413	GO:0044275	cellular carbohydrate catabolic process
module_419	GO:0046365	monosaccharide catabolic process
module_419	GO:0051555	flavonol biosynthetic process
module_419	GO:0051552	flavone metabolic process
module_419	GO:0051553	flavone biosynthetic process
module_419	GO:0051554	flavonol metabolic process
module_421	GO:0006796	phosphate metabolic process
module_421	GO:0006793	phosphorus metabolic process
module_429	GO:0009765	photosynthesis, light harvesting
module_429	GO:0019684	photosynthesis, light reaction
module_433	GO:0016119	carotene metabolic process
module_448	GO:0001666	response to hypoxia
module_448	GO:0070482	response to oxygen levels
module_456	GO:0045337	farnesyl diphosphate biosynthetic process
module_456	GO:0016090	prenol metabolic process
module_456	GO:0016091	prenol biosynthetic process
module_456	GO:0016093	polyprenol metabolic process
module_456	GO:0016094	polyprenol biosynthetic process
module_456	GO:0045338	farnesyl diphosphate metabolic process
module_467	GO:0006457	protein folding
module_467	GO:0006779	porphyrin biosynthetic process
module_467	GO:0044237	cellular metabolic process
module_467	GO:0006778	porphyrin metabolic process
module_467	GO:0033013	tetrapyrrole metabolic process
module_467	GO:0033014	tetrapyrrole biosynthetic process
module_467	GO:0044267	cellular protein metabolic process
module_471	GO:0043086	negative regulation of catalytic activity
module_471	GO:0007186	G-protein coupled receptor protein signaling pathway
module_471	GO:0044092	negative regulation of molecular function
module_473	GO:0006396	RNA processing
module_476	GO:0010143	cutin biosynthetic process
module_480	GO:0034645	cellular macromolecule biosynthetic process

module_480	GO:0044249	cellular biosynthetic process
module_480	GO:0044260	cellular macromolecule metabolic process
module_480	GO:0044267	cellular protein metabolic process
module_491	GO:0006418	tRNA aminoacylation for protein translation
module_491	GO:0043038	amino acid activation
module_491	GO:0043039	tRNA aminoacylation
module_502	GO:0046274	lignin catabolic process
module_502	GO:0046271	phenylpropanoid catabolic process
module_521	GO:0010253	UDP-rhamnose biosynthetic process
module_521	GO:0009226	nucleotide-sugar biosynthetic process
module_521	GO:0019299	rhamnose metabolic process
module_521	GO:0019300	rhamnose biosynthetic process
module_521	GO:0019319	hexose biosynthetic process
module_521	GO:0033478	UDP-rhamnose metabolic process
module_529	GO:0034645	cellular macromolecule biosynthetic process
module_529	GO:0044249	cellular biosynthetic process
module_529	GO:0044260	cellular macromolecule metabolic process
module_529	GO:0044267	cellular protein metabolic process
module_538	GO:0051453	regulation of intracellular pH
module_538	GO:0030004	cellular monovalent inorganic cation homeostasis
module_538	GO:0030641	regulation of cellular pH
module_540	GO:0006552	leucine catabolic process
module_543	GO:0019379	sulfate assimilation, phosphoadenylyl sulfate reduction by phosphoadenylyl-sulfate reductase (thioredoxin)
module_543	GO:0019419	sulfate reduction
module_544	GO:0010167	response to nitrate
module_548	GO:0009834	secondary cell wall biogenesis
module_548	GO:0030244	cellulose biosynthetic process
module_548	GO:0009832	plant-type cell wall biogenesis
module_548	GO:0042546	cell wall biogenesis
module_553	GO:0006268	DNA unwinding involved in replication
module_553	GO:0006270	DNA-dependent DNA replication initiation
module_553	GO:0006260	DNA replication
module_553	GO:0006261	DNA-dependent DNA replication
module_553	GO:0032392	DNA geometric change
module_553	GO:0032508	DNA duplex unwinding
module_553	GO:0034641	cellular nitrogen compound metabolic process
module_553	GO:0034645	cellular macromolecule biosynthetic process
module_553	GO:0044260	cellular macromolecule metabolic process
module_553	GO:0071103	DNA conformation change
module_554	GO:0006260	DNA replication
module_557	GO:0030418	nicotianamine biosynthetic process
module_557	GO:0030417	nicotianamine metabolic process
module_56	GO:0006334	nucleosome assembly
module_56	GO:0006323	DNA packaging
module_56	GO:0022607	cellular component assembly
module_56	GO:0031497	chromatin assembly
module_56	GO:0034621	cellular macromolecular complex subunit organization
module_56	GO:0034622	cellular macromolecular complex assembly
module_56	GO:0034728	nucleosome organization
module_56	GO:0044085	cellular component biogenesis
module_56	GO:0065003	macromolecular complex assembly
module_56	GO:0065004	protein-DNA complex assembly
module_56	GO:0071103	DNA conformation change
module_563	GO:0030244	cellulose biosynthetic process
module_563	GO:0009832	plant-type cell wall biogenesis
module_563	GO:0033692	cellular polysaccharide biosynthetic process
module_563	GO:0034637	cellular carbohydrate biosynthetic process
module_563	GO:0042546	cell wall biogenesis
module_563	GO:0044264	cellular polysaccharide metabolic process
module_567	GO:0006468	protein amino acid phosphorylation
module_567	GO:0006793	phosphorus metabolic process
module_567	GO:0006796	phosphate metabolic process
module_567	GO:0016310	phosphorylation
module_567	GO:0044267	cellular protein metabolic process
module_569	GO:0034645	cellular macromolecule biosynthetic process
module_569	GO:0044267	cellular protein metabolic process
module_581	GO:0006468	protein amino acid phosphorylation
module_581	GO:0006793	phosphorus metabolic process
module_581	GO:0006796	phosphate metabolic process
module_581	GO:0016310	phosphorylation
module_589	GO:0019252	starch biosynthetic process
module_589	GO:0010444	guard mother cell differentiation
module_589	GO:0005982	starch metabolic process
module_589	GO:0010021	amylopectin biosynthetic process
module_589	GO:0010440	stomatal lineage progression
module_592	GO:0006468	protein amino acid phosphorylation
module_592	GO:0006793	phosphorus metabolic process
module_592	GO:0006796	phosphate metabolic process
module_592	GO:0016310	phosphorylation
module_598	GO:0006334	nucleosome assembly
module_598	GO:0006323	DNA packaging
module_598	GO:0022607	cellular component assembly
module_598	GO:0031497	chromatin assembly
module_598	GO:0034621	cellular macromolecular complex subunit organization
module_598	GO:0034622	cellular macromolecular complex assembly
module_598	GO:0034728	nucleosome organization
module_598	GO:0044085	cellular component biogenesis
module_598	GO:0065003	macromolecular complex assembly
module_598	GO:0065004	protein-DNA complex assembly
module_598	GO:0071103	DNA conformation change
module_603	GO:0030244	cellulose biosynthetic process
module_603	GO:0009250	glucan biosynthetic process
module_606	GO:0006465	signal peptide processing
module_606	GO:0006518	peptide metabolic process
module_67	GO:0008535	respiratory chain complex IV assembly
module_72	GO:0009739	response to gibberellin stimulus
module_82	GO:0019915	lipid storage
module_86	GO:0006119	oxidative phosphorylation
module_94	GO:0005986	sucrose biosynthetic process
module_94	GO:0005984	disaccharide metabolic process
module_94	GO:0005985	sucrose metabolic process
module_94	GO:0016137	glycoside metabolic process
module_94	GO:0016138	glycoside biosynthetic process
module_94	GO:0034637	cellular carbohydrate biosynthetic process
module_94	GO:0046351	disaccharide biosynthetic process

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module_118	GO:0042550	metabolic process
module_118	GO:0019375	photosystem I stabilization
module_118	GO:0006643	galactolipid biosynthetic process
module_118	GO:0006664	membrane lipid metabolic process
module_118	GO:0009247	glycolipid metabolic process
module_118	GO:0010109	glycolipid biosynthetic process
module_118	GO:0019374	regulation of photosynthesis
module_118	GO:0019374	galactolipid metabolic process
module_118	GO:0042548	regulation of photosynthesis, light reaction
module_118	GO:0043467	regulation of generation of precursor metabolites and energy
module_118	GO:0046467	membrane lipid biosynthetic process

module_12	GO:0006556	S-adenosylmethionine biosynthetic process
module_12	GO:0000097	sulfur amino acid biosynthetic process
module_12	GO:0009119	ribonucleoside metabolic process
module_12	GO:0042278	purine nucleoside metabolic process
module_12	GO:0046128	purine ribonucleoside metabolic process
module_12	GO:0046500	S-adenosylmethionine metabolic process
module_125	GO:0009853	photorespiration
module_125	GO:0043094	cellular metabolic compound salvage
module_141	GO:0006468	protein amino acid phosphorylation
module_142	GO:0006656	phosphatidylcholine biosynthetic process
module_142	GO:0006576	cellular biogenic amine metabolic process
module_142	GO:0006644	phospholipid metabolic process
module_142	GO:0006650	glycerophospholipid metabolic process
module_142	GO:0008654	phospholipid biosynthetic process
module_142	GO:0019637	organophosphate metabolic process
module_142	GO:0042439	ethanolamine and derivative metabolic process
module_142	GO:0045017	glycerolipid biosynthetic process
module_142	GO:0046470	phosphatidylcholine metabolic process
module_142	GO:0046474	glycerophospholipid biosynthetic process
module_142	GO:0046486	glycerolipid metabolic process
module_170	GO:0019253	reductive pentose-phosphate cycle
module_170	GO:0015979	photosynthesis
module_170	GO:0015977	carbon fixation
module_170	GO:0019685	photosynthesis, dark reaction
module_170	GO:0071704	organic substance metabolic process
module_180	GO:0006084	acetyl-CoA metabolic process
module_202	GO:0033014	tetrapyrrole biosynthetic process
module_202	GO:0033013	tetrapyrrole metabolic process
module_222	GO:0006364	rRNA processing
module_222	GO:0006396	RNA processing
module_222	GO:0016072	rRNA metabolic process
module_222	GO:0034470	ncRNA processing
module_222	GO:0034660	ncRNA metabolic process
module_236	GO:0009698	phenylpropanoid metabolic process
module_236	GO:0006725	cellular aromatic compound metabolic process
module_236	GO:0009699	phenylpropanoid biosynthetic process
module_236	GO:0009812	flavonoid metabolic process
module_236	GO:0009813	flavonoid biosynthetic process
module_236	GO:0019438	aromatic compound biosynthetic process
module_236	GO:0042398	cellular amino acid derivative biosynthetic process
module_237	GO:0009059	macromolecule biosynthetic process
module_237	GO:0010467	gene expression
module_237	GO:0034645	cellular macromolecule biosynthetic process
module_249	GO:0006558	L-phenylalanine metabolic process
module_249	GO:0009698	phenylpropanoid metabolic process
module_249	GO:0019438	aromatic compound biosynthetic process
module_249	GO:0006725	cellular aromatic compound metabolic process
module_249	GO:0009072	aromatic amino acid family metabolic process
module_249	GO:0043648	dicarboxylic acid metabolic process
module_249	GO:0044281	small molecule metabolic process
module_259	GO:0006511	ubiquitin-dependent protein catabolic process
module_259	GO:0009057	macromolecule catabolic process
module_259	GO:0019941	modification-dependent protein catabolic process
module_259	GO:0030163	protein catabolic process
module_259	GO:0043632	modification-dependent macromolecule catabolic process
module_259	GO:0044248	cellular catabolic process
module_259	GO:0044257	cellular protein catabolic process
module_259	GO:0044265	cellular macromolecule catabolic process
module_259	GO:0051603	proteolysis involved in cellular protein catabolic process
module_265	GO:0006633	fatty acid biosynthetic process
module_265	GO:0006631	fatty acid metabolic process
module_265	GO:0016053	organic acid biosynthetic process
module_265	GO:0032787	monocarboxylic acid metabolic process
module_265	GO:0044255	cellular lipid metabolic process
module_265	GO:0046394	carboxylic acid biosynthetic process
module_266	GO:0006355	regulation of transcription, DNA-dependent
module_266	GO:0051252	regulation of RNA metabolic process
module_271	GO:0018401	peptidyl-proline hydroxylation to 4-hydroxy-L-proline
module_271	GO:0019471	4-hydroxyproline metabolic process
module_272	GO:0006096	glycolysis
module_277	GO:0006457	protein folding
module_285	GO:0010467	gene expression
module_290	GO:0034645	cellular macromolecule biosynthetic process
module_290	GO:0010467	gene expression
module_290	GO:0009059	macromolecule biosynthetic process
module_290	GO:0006414	translational elongation
module_290	GO:0008152	metabolic process
module_290	GO:0043170	macromolecule metabolic process
module_290	GO:0044237	cellular metabolic process
module_290	GO:0044249	cellular biosynthetic process
module_290	GO:0044260	cellular macromolecule metabolic process
module_290	GO:0044267	cellular protein metabolic process
module_293	GO:0006418	tRNA aminoacylation for protein translation
module_293	GO:0006399	tRNA metabolic process
module_293	GO:0006431	methionyl-tRNA aminoacylation
module_293	GO:0006520	cellular amino acid metabolic process
module_293	GO:0034660	ncRNA metabolic process
module_293	GO:0043038	amino acid activation
module_293	GO:0043039	tRNA aminoacylation
module_293	GO:0044106	cellular amine metabolic process
module_296	GO:0006552	leucine catabolic process
module_303	GO:0009765	photosynthesis, light harvesting
module_303	GO:0015979	photosynthesis
module_303	GO:0009768	photosynthesis, light harvesting in photosystem I
module_303	GO:0019684	photosynthesis, light reaction
module_313	GO:0044267	cellular protein metabolic process
module_313	GO:0009059	macromolecule biosynthetic process
module_313	GO:0010467	gene expression
module_313	GO:0034645	cellular macromolecule biosynthetic process
module_313	GO:0043170	macromolecule metabolic process
module_313	GO:0044237	cellular metabolic process
module_313	GO:0044249	cellular biosynthetic process
module_313	GO:0044260	cellular macromolecule metabolic process
module_315	GO:0010025	wax biosynthetic process
module_315	GO:0010166	wax metabolic process
module_317	GO:0009769	photosynthesis, light harvesting in photosystem II
module_317	GO:0009765	photosynthesis, light harvesting
module_317	GO:0015979	photosynthesis
module_317	GO:0019684	photosynthesis, light reaction
module_323	GO:0009767	photosynthetic electron transport chain
module_323	GO:0015979	photosynthesis
module_323	GO:0019684	photosynthesis, light reaction
module_323	GO:0022900	electron transport chain
module_355	GO:0010289	homogalacturonan biosynthetic process
module_355	GO:0000271	polysaccharide biosynthetic process
module_355	GO:0005976	polysaccharide metabolic process
module_355	GO:0033692	cellular polysaccharide biosynthetic process

module_355	GO:0034637	cellular carbohydrate biosynthetic process
module_355	GO:0044264	cellular polysaccharide metabolic process
module_355	GO:0045488	pectin metabolic process
module_355	GO:0045489	pectin biosynthetic process
module_358	GO:0019751	polyol metabolic process
module_371	GO:0016070	RNA metabolic process
module_378	GO:0015977	carbon fixation
module_378	GO:0071704	organic substance metabolic process
module_380	GO:0009059	macromolecule biosynthetic process
module_380	GO:0010467	gene expression
module_380	GO:0034645	cellular macromolecule biosynthetic process
module_380	GO:0044249	cellular biosynthetic process
module_380	GO:0044260	cellular macromolecule metabolic process
module_380	GO:0044267	cellular protein metabolic process
module_391	GO:0006468	protein amino acid phosphorylation
module_404	GO:0006468	protein amino acid phosphorylation
module_404	GO:0006793	phosphorus metabolic process
module_404	GO:0006796	phosphate metabolic process
module_404	GO:0016310	phosphorylation
module_404	GO:0043412	macromolecule modification
module_41	GO:0009059	macromolecule biosynthetic process
module_41	GO:0010467	gene expression
module_41	GO:0034645	cellular macromolecule biosynthetic process
module_41	GO:0043170	macromolecule metabolic process
module_41	GO:0044249	cellular biosynthetic process
module_41	GO:0044260	cellular macromolecule metabolic process
module_41	GO:0044267	cellular protein metabolic process
module_410	GO:0009059	macromolecule biosynthetic process
module_410	GO:0010467	gene expression
module_410	GO:0034645	cellular macromolecule biosynthetic process
module_410	GO:0043170	macromolecule metabolic process
module_410	GO:0044237	cellular metabolic process
module_410	GO:0044249	cellular biosynthetic process
module_410	GO:0044260	cellular macromolecule metabolic process
module_410	GO:0044267	cellular protein metabolic process
module_413	GO:0005998	xylulose catabolic process
module_413	GO:0006573	valine metabolic process
module_413	GO:0005996	monosaccharide metabolic process
module_413	GO:0005997	xylulose metabolic process
module_413	GO:0006066	alcohol metabolic process
module_413	GO:0019323	pentose catabolic process
module_413	GO:0044275	cellular carbohydrate catabolic process
module_413	GO:0044282	small molecule catabolic process
module_413	GO:0046164	alcohol catabolic process
module_413	GO:0046365	monosaccharide catabolic process
module_419	GO:0051555	flavonol biosynthetic process
module_419	GO:0051552	flavone metabolic process
module_419	GO:0051553	flavone biosynthetic process
module_419	GO:0051554	flavonol metabolic process
module_421	GO:0006796	phosphate metabolic process
module_421	GO:0006793	phosphorus metabolic process
module_429	GO:0009765	photosynthesis, light harvesting
module_429	GO:0019684	photosynthesis, light reaction
module_433	GO:0016119	carotene metabolic process
module_433	GO:0042440	pigment metabolic process
module_456	GO:0045337	farnesyl diphosphate biosynthetic process
module_456	GO:0016090	prenol metabolic process
module_456	GO:0016091	prenol biosynthetic process
module_456	GO:0016093	polyprenol metabolic process
module_456	GO:0016094	polyprenol biosynthetic process
module_456	GO:0045338	farnesyl diphosphate metabolic process
module_467	GO:0006457	protein folding
module_467	GO:0006779	porphyrin biosynthetic process
module_467	GO:0044237	cellular metabolic process
module_467	GO:0006778	porphyrin metabolic process
module_467	GO:0033013	tetrapyrrole metabolic process
module_467	GO:0033014	tetrapyrrole biosynthetic process
module_467	GO:0044267	cellular protein metabolic process
module_471	GO:0043086	negative regulation of catalytic activity
module_473	GO:0006396	RNA processing
module_476	GO:0010143	cutin biosynthetic process
module_480	GO:0009059	macromolecule biosynthetic process
module_480	GO:0010467	gene expression
module_480	GO:0034645	cellular macromolecule biosynthetic process
module_480	GO:0043170	macromolecule metabolic process
module_480	GO:0044249	cellular biosynthetic process
module_480	GO:0044260	cellular macromolecule metabolic process
module_480	GO:0044267	cellular protein metabolic process
module_491	GO:0006418	tRNA aminoacylation for protein translation
module_491	GO:0043038	amino acid activation
module_491	GO:0043039	tRNA aminoacylation
module_502	GO:0046274	lignin catabolic process
module_502	GO:0046271	phenylpropanoid catabolic process
module_521	GO:0010253	UDP-rhamnose biosynthetic process
module_521	GO:0009226	nucleotide-sugar biosynthetic process
module_521	GO:0019299	rhamnose metabolic process
module_521	GO:0019300	rhamnose biosynthetic process
module_521	GO:0019319	hexose biosynthetic process
module_521	GO:0033478	UDP-rhamnose metabolic process
module_529	GO:0009059	macromolecule biosynthetic process
module_529	GO:0010467	gene expression
module_529	GO:0034645	cellular macromolecule biosynthetic process
module_529	GO:0044249	cellular biosynthetic process
module_529	GO:0044260	cellular macromolecule metabolic process
module_529	GO:0044267	cellular protein metabolic process
module_540	GO:0006552	leucine catabolic process
module_543	GO:0019379	sulfate assimilation, phosphoadenylyl sulfate reduction by phosphoadenylyl-sulfate reductase (thioredoxin)
module_543	GO:0019419	sulfate reduction
module_548	GO:0030244	cellulose biosynthetic process
module_548	GO:0030243	cellulose metabolic process
module_553	GO:0006268	DNA unwinding involved in replication
module_553	GO:0006270	DNA-dependent DNA replication initiation
module_553	GO:0006260	DNA replication
module_553	GO:0006261	DNA-dependent DNA replication
module_553	GO:0006807	nitrogen compound metabolic process
module_553	GO:0009059	macromolecule biosynthetic process
module_553	GO:0034641	cellular nitrogen compound metabolic process
module_553	GO:0034645	cellular macromolecule biosynthetic process
module_553	GO:0043170	macromolecule metabolic process
module_553	GO:0044260	cellular macromolecule metabolic process
module_554	GO:0006260	DNA replication
module_557	GO:0030418	nicotianamine biosynthetic process
module_557	GO:0030417	nicotianamine metabolic process
module_563	GO:0030244	cellulose biosynthetic process
module_563	GO:0000271	polysaccharide biosynthetic process
module_563	GO:0005976	polysaccharide metabolic process
module_563	GO:0030243	cellulose metabolic process



module_563	GO:0033692	cellular polysaccharide biosynthetic process	
module_563	GO:0034637	cellular carbohydrate biosynthetic process	
module_563	GO:0044264	cellular polysaccharide metabolic process	
module_567	GO:0006468	protein amino acid phosphorylation	
module_567	GO:0006793	phosphorus metabolic process	
module_567	GO:0006796	phosphate metabolic process	
module_567	GO:0016310	phosphorylation	
module_567	GO:0043412	macromolecule modification	
module_567	GO:0044267	cellular protein metabolic process	
module_569	GO:0009059	macromolecule biosynthetic process	
module_569	GO:0010467	gene expression	
module_569	GO:0034645	cellular macromolecule biosynthetic process	
module_569	GO:0043170	macromolecule metabolic process	
module_569	GO:0044267	cellular protein metabolic process	
module_581	GO:0006468	protein amino acid phosphorylation	
module_581	GO:0006793	phosphorus metabolic process	
module_581	GO:0006796	phosphate metabolic process	
module_581	GO:0016310	phosphorylation	
module_589	GO:0019252	starch biosynthetic process	
module_589	GO:0005982	starch metabolic process	
module_589	GO:0010021	amylopectin biosynthetic process	
module_592	GO:0006468	protein amino acid phosphorylation	
module_592	GO:0006793	phosphorus metabolic process	
module_592	GO:0006796	phosphate metabolic process	
module_592	GO:0016310	phosphorylation	
module_592	GO:0043412	macromolecule modification	
module_603	GO:0030244	cellulose biosynthetic process	
module_603	GO:0009250	glucan biosynthetic process	
module_603	GO:0030243	cellulose metabolic process	
module_606	GO:0006465	signal peptide processing	
module_606	GO:0006518	peptide metabolic process	
module_606	GO:0016485	protein processing	
module_606	GO:0051604	protein maturation	
module_606	GO:0051605	protein maturation by peptide bond cleavage	
module_86	GO:0006119	oxidative phosphorylation	
module_94	GO:0005986	sucrose biosynthetic process	
module_94	GO:0005984	disaccharide metabolic process	
module_94	GO:0005985	sucrose metabolic process	
module_94	GO:0016137	glycoside metabolic process	
module_94	GO:0016138	glycoside biosynthetic process	
module_94	GO:0034637	cellular carbohydrate biosynthetic process	
module_94	GO:0046351	disaccharide biosynthetic process	
Slim id: GO:0008283	cell proliferation		1
module_553	GO:0008283	cell proliferation	
Slim id: GO:0009056	catabolic process		22
module_259	GO:0006511	ubiquitin-dependent protein catabolic process	
module_259	GO:0009056	catabolic process	
module_259	GO:0009057	macromolecule catabolic process	
module_259	GO:0019941	modification-dependent protein catabolic process	
module_259	GO:0030163	protein catabolic process	
module_259	GO:0043632	modification-dependent macromolecule catabolic process	
module_259	GO:0044248	cellular catabolic process	
module_259	GO:0044257	cellular protein catabolic process	
module_259	GO:0044265	cellular macromolecule catabolic process	
module_259	GO:0051603	proteolysis involved in cellular protein catabolic process	
module_272	GO:0006096	glycolysis	
module_296	GO:0006552	leucine catabolic process	
module_413	GO:0005998	xylulose catabolic process	
module_413	GO:0016052	carbohydrate catabolic process	
module_413	GO:0019323	pentose catabolic process	
module_413	GO:0044275	cellular carbohydrate catabolic process	
module_413	GO:0044282	small molecule catabolic process	
module_413	GO:0046164	alcohol catabolic process	
module_413	GO:0046365	monosaccharide catabolic process	
module_502	GO:0046274	lignin catabolic process	
module_502	GO:0046271	phenylpropanoid catabolic process	
module_540	GO:0006552	leucine catabolic process	
Slim id: GO:0009058	biosynthetic process		99
module_118	GO:0019375	galactolipid biosynthetic process	
module_118	GO:0009247	glycolipid biosynthetic process	
module_118	GO:0046467	membrane lipid biosynthetic process	
module_12	GO:0006556	S-adenosylmethionine biosynthetic process	
module_12	GO:0000097	sulfur amino acid biosynthetic process	
module_125	GO:0009853	photorespiration	
module_125	GO:0043094	cellular metabolic compound salvage	
module_142	GO:0006656	phosphatidylcholine biosynthetic process	
module_142	GO:0008654	phospholipid biosynthetic process	
module_142	GO:0045017	glycerolipid biosynthetic process	
module_142	GO:0046474	glycerophospholipid biosynthetic process	
module_170	GO:0019253	reductive pentose-phosphate cycle	
module_170	GO:0019685	photosynthesis, dark reaction	
module_202	GO:0033014	tetrapyrrole biosynthetic process	
module_236	GO:0009699	phenylpropanoid biosynthetic process	
module_236	GO:0009813	flavonoid biosynthetic process	
module_236	GO:0019438	aromatic compound biosynthetic process	
module_236	GO:0042398	cellular amino acid derivative biosynthetic process	
module_237	GO:0009059	macromolecule biosynthetic process	
module_237	GO:0034645	cellular macromolecule biosynthetic process	
module_249	GO:0019438	aromatic compound biosynthetic process	
module_265	GO:0006633	fatty acid biosynthetic process	
module_265	GO:0008610	lipid biosynthetic process	
module_265	GO:0016053	organic acid biosynthetic process	
module_265	GO:0046394	carboxylic acid biosynthetic process	
module_266	GO:0006355	regulation of transcription, DNA-dependent	
module_290	GO:0034645	cellular macromolecule biosynthetic process	
module_290	GO:0009059	macromolecule biosynthetic process	
module_290	GO:0006414	translational elongation	
module_290	GO:0009058	biosynthetic process	
module_290	GO:0044249	cellular biosynthetic process	
module_313	GO:0009058	biosynthetic process	
module_313	GO:0009059	macromolecule biosynthetic process	
module_313	GO:0034645	cellular macromolecule biosynthetic process	
module_313	GO:0044249	cellular biosynthetic process	
module_315	GO:0010025	wax biosynthetic process	
module_355	GO:0010289	homogalacturonan biosynthetic process	
module_355	GO:0000271	polysaccharide biosynthetic process	
module_355	GO:0016051	carbohydrate biosynthetic process	
module_355	GO:0033692	cellular polysaccharide biosynthetic process	
module_355	GO:0034637	cellular carbohydrate biosynthetic process	
module_355	GO:0045489	pectin biosynthetic process	
module_380	GO:0009058	biosynthetic process	
module_380	GO:0009059	macromolecule biosynthetic process	
module_380	GO:0034645	cellular macromolecule biosynthetic process	
module_380	GO:0044249	cellular biosynthetic process	

module_41	GO:0009058	biosynthetic process	
module_41	GO:0009059	macromolecule biosynthetic process	
module_41	GO:0034645	cellular macromolecule biosynthetic process	
module_41	GO:0044249	cellular biosynthetic process	
module_410	GO:0009058	biosynthetic process	
module_410	GO:0009059	macromolecule biosynthetic process	
module_410	GO:0034645	cellular macromolecule biosynthetic process	
module_410	GO:0044249	cellular biosynthetic process	
module_419	GO:0051555	flavonol biosynthetic process	
module_419	GO:0051553	flavone biosynthetic process	
module_456	GO:0045337	farnesyl diphosphate biosynthetic process	
module_456	GO:0016091	prenol biosynthetic process	
module_456	GO:0016094	polyprenol biosynthetic process	
module_467	GO:0006779	porphyrin biosynthetic process	
module_467	GO:0033014	tetrapyrrole biosynthetic process	
module_476	GO:0010143	cutin biosynthetic process	
module_480	GO:0009058	biosynthetic process	
module_480	GO:0009059	macromolecule biosynthetic process	
module_480	GO:0034645	cellular macromolecule biosynthetic process	
module_480	GO:0044249	cellular biosynthetic process	
module_521	GO:0010253	UDP-rhamnose biosynthetic process	
module_521	GO:0009226	nucleotide-sugar biosynthetic process	
module_521	GO:0019300	rhamnose biosynthetic process	
module_521	GO:0019319	hexose biosynthetic process	
module_529	GO:0009058	biosynthetic process	
module_529	GO:0009059	macromolecule biosynthetic process	
module_529	GO:0034645	cellular macromolecule biosynthetic process	
module_529	GO:0044249	cellular biosynthetic process	
module_548	GO:0030244	cellulose biosynthetic process	
module_553	GO:0006268	DNA unwinding involved in replication	
module_553	GO:0006270	DNA-dependent DNA replication initiation	
module_553	GO:0006260	DNA replication	
module_553	GO:0006261	DNA-dependent DNA replication	
module_553	GO:0009059	macromolecule biosynthetic process	
module_553	GO:0034645	cellular macromolecule biosynthetic process	
module_554	GO:0006260	DNA replication	
module_557	GO:0030418	nicotianamine biosynthetic process	
module_563	GO:0030244	cellulose biosynthetic process	
module_563	GO:0000271	polysaccharide biosynthetic process	
module_563	GO:0033692	cellular polysaccharide biosynthetic process	
module_563	GO:0034637	cellular carbohydrate biosynthetic process	
module_569	GO:0009059	macromolecule biosynthetic process	
module_569	GO:0034645	cellular macromolecule biosynthetic process	
module_589	GO:0019252	starch biosynthetic process	
module_589	GO:0010021	amylopectin biosynthetic process	
module_603	GO:0030244	cellulose biosynthetic process	
module_603	GO:0009250	glucan biosynthetic process	
module_94	GO:0005986	sucrose biosynthetic process	
module_94	GO:0009312	oligosaccharide biosynthetic process	
module_94	GO:0016051	carbohydrate biosynthetic process	
module_94	GO:0016138	glycoside biosynthetic process	
module_94	GO:0034637	cellular carbohydrate biosynthetic process	
module_94	GO:0046351	disaccharide biosynthetic process	
Slim id: GO:0009605	response to external stimulus		3
module_356	GO:0009652	thigmotropism	
module_356	GO:0009606	tropism	
module_356	GO:0009612	response to mechanical stimulus	
Slim id: GO:0009628	response to abiotic stimulus		25
module_236	GO:0009411	response to UV	
module_277	GO:0009408	response to heat	
module_277	GO:0009644	response to high light intensity	
module_277	GO:0009266	response to temperature stimulus	
module_277	GO:0009628	response to abiotic stimulus	
module_277	GO:0009642	response to light intensity	
module_317	GO:0010114	response to red light	
module_317	GO:0010218	response to far red light	
module_317	GO:0009637	response to blue light	
module_343	GO:0009408	response to heat	
module_343	GO:0009266	response to temperature stimulus	
module_343	GO:0009628	response to abiotic stimulus	
module_356	GO:0009652	thigmotropism	
module_356	GO:0009612	response to mechanical stimulus	
module_403	GO:0010201	response to continuous far red light stimulus by the high-irradiance response system	
module_403	GO:0010203	response to very low fluence red light stimulus	
module_403	GO:0010161	red light signaling pathway	
module_403	GO:0055122	response to very low light intensity stimulus	
module_403	GO:0071491	cellular response to red light	
module_406	GO:0009631	cold acclimation	
module_406	GO:0009414	response to water deprivation	
module_406	GO:0009415	response to water	
module_530	GO:0009644	response to high light intensity	
module_530	GO:0009416	response to light stimulus	
module_530	GO:0009314	response to radiation	
Slim id: GO:0009719	response to endogenous stimulus		3
module_406	GO:0009961	response to 1-aminocyclopropane-1-carboxylic acid	
module_406	GO:0009737	response to abscisic acid stimulus	
module_72	GO:0009739	response to gibberellin stimulus	
Slim id: GO:0009790	embryo development		1
module_406	GO:0009790	embryo development	
Slim id: GO:0016043	cellular component organization		56
module_167	GO:0006334	nucleosome assembly	
module_167	GO:0006323	DNA packaging	
module_167	GO:0016043	cellular component organization	
module_167	GO:0022607	cellular component assembly	
module_167	GO:0031497	chromatin assembly	
module_167	GO:0034621	cellular macromolecular complex subunit organization	
module_167	GO:0034622	cellular macromolecular complex assembly	
module_167	GO:0034728	nucleosome organization	
module_167	GO:0043933	macromolecular complex subunit organization	
module_167	GO:0065003	macromolecular complex assembly	
module_167	GO:0065004	protein-DNA complex assembly	
module_286	GO:0006334	nucleosome assembly	
module_286	GO:0006323	DNA packaging	
module_286	GO:0016043	cellular component organization	
module_286	GO:0022607	cellular component assembly	
module_286	GO:0031497	chromatin assembly	
module_286	GO:0034621	cellular macromolecular complex subunit organization	
module_286	GO:0034622	cellular macromolecular complex assembly	
module_286	GO:0034728	nucleosome organization	
module_286	GO:0043933	macromolecular complex subunit organization	
module_286	GO:0065003	macromolecular complex assembly	
module_286	GO:0065004	protein-DNA complex assembly	

module_400	GO:0006334	nucleosome assembly	
module_400	GO:0006323	DNA packaging	
module_400	GO:0022607	cellular component assembly	
module_400	GO:0031497	chromatin assembly	
module_400	GO:0034621	cellular macromolecular complex subunit organization	
module_400	GO:0034622	cellular macromolecular complex assembly	
module_400	GO:0034728	nucleosome organization	
module_400	GO:0043933	macromolecular complex subunit organization	
module_400	GO:0065003	macromolecular complex assembly	
module_400	GO:0065004	protein–DNA complex assembly	
module_408	GO:0051225	spindle assembly	
module_56	GO:0006334	nucleosome assembly	
module_56	GO:0006323	DNA packaging	
module_56	GO:0016043	cellular component organization	
module_56	GO:0022607	cellular component assembly	
module_56	GO:0031497	chromatin assembly	
module_56	GO:0034621	cellular macromolecular complex subunit organization	
module_56	GO:0034622	cellular macromolecular complex assembly	
module_56	GO:0034728	nucleosome organization	
module_56	GO:0043933	macromolecular complex subunit organization	
module_56	GO:0065003	macromolecular complex assembly	
module_56	GO:0065004	protein–DNA complex assembly	
module_598	GO:0006334	nucleosome assembly	
module_598	GO:0006323	DNA packaging	
module_598	GO:0016043	cellular component organization	
module_598	GO:0022607	cellular component assembly	
module_598	GO:0031497	chromatin assembly	
module_598	GO:0034621	cellular macromolecular complex subunit organization	
module_598	GO:0034622	cellular macromolecular complex assembly	
module_598	GO:0034728	nucleosome organization	
module_598	GO:0043933	macromolecular complex subunit organization	
module_598	GO:0065003	macromolecular complex assembly	
module_598	GO:0065004	protein–DNA complex assembly	
module_67	GO:0008535	respiratory chain complex IV assembly	
Slim id: GO:0019538	protein metabolic process		31
module_259	GO:0006511	ubiquitin–dependent protein catabolic process	
module_259	GO:0006508	proteolysis	
module_259	GO:0019941	modification–dependent protein catabolic process	
module_259	GO:0030163	protein catabolic process	
module_259	GO:0044257	cellular protein catabolic process	
module_259	GO:0051603	proteolysis involved in cellular protein catabolic process	
module_277	GO:0006457	protein folding	
module_290	GO:0019538	protein metabolic process	
module_290	GO:0044267	cellular protein metabolic process	
module_313	GO:0044267	cellular protein metabolic process	
module_313	GO:0019538	protein metabolic process	
module_380	GO:0019538	protein metabolic process	
module_380	GO:0044267	cellular protein metabolic process	
module_41	GO:0019538	protein metabolic process	
module_41	GO:0044267	cellular protein metabolic process	
module_410	GO:0019538	protein metabolic process	
module_410	GO:0044267	cellular protein metabolic process	
module_467	GO:0006457	protein folding	
module_467	GO:0044267	cellular protein metabolic process	
module_480	GO:0019538	protein metabolic process	
module_480	GO:0044267	cellular protein metabolic process	
module_529	GO:0019538	protein metabolic process	
module_529	GO:0044267	cellular protein metabolic process	
module_567	GO:0019538	protein metabolic process	
module_567	GO:0044267	cellular protein metabolic process	
module_569	GO:0019538	protein metabolic process	
module_569	GO:0044267	cellular protein metabolic process	
module_606	GO:0006465	signal peptide processing	
module_606	GO:0016485	protein processing	
module_606	GO:0051604	protein maturation	
module_606	GO:0051605	protein maturation by peptide bond cleavage	
Slim id: GO:0019725	cellular homeostasis		8
module_128	GO:0006878	cellular copper ion homeostasis	
module_128	GO:0030005	cellular di-, tri-valent inorganic cation homeostasis	
module_357	GO:0030002	cellular anion homeostasis	
module_357	GO:0030319	cellular di-, tri-valent inorganic anion homeostasis	
module_357	GO:0030643	cellular phosphate ion homeostasis	
module_538	GO:0051453	regulation of intracellular pH	
module_538	GO:0030004	cellular monovalent inorganic cation homeostasis	
module_538	GO:0030641	regulation of cellular pH	
Slim id: GO:0019748	secondary metabolic process		13
module_236	GO:0009698	phenylpropanoid metabolic process	
module_236	GO:0009699	phenylpropanoid biosynthetic process	
module_236	GO:0009812	flavonoid metabolic process	
module_236	GO:0009813	flavonoid biosynthetic process	
module_236	GO:0019748	secondary metabolic process	
module_249	GO:0009698	phenylpropanoid metabolic process	
module_419	GO:0051555	flavonol biosynthetic process	
module_419	GO:0051552	flavone metabolic process	
module_419	GO:0051553	flavone biosynthetic process	
module_419	GO:0051554	flavonol metabolic process	
module_433	GO:0016119	carotene metabolic process	
module_502	GO:0046274	lignin catabolic process	
module_502	GO:0046271	phenylpropanoid catabolic process	
Slim id: GO:0030154	cell differentiation		1
module_589	GO:0010444	guard mother cell differentiation	
Slim id: GO:0044238	primary metabolic process		5
module_266	GO:0006355	regulation of transcription, DNA–dependent	
module_266	GO:0051252	regulation of RNA metabolic process	
module_290	GO:0044238	primary metabolic process	
module_313	GO:0044238	primary metabolic process	
module_410	GO:0044238	primary metabolic process	
Slim id: GO:0050789	regulation of biological process		8
module_118	GO:0042550	photosystem I stabilization	
module_118	GO:0010109	regulation of photosynthesis	
module_118	GO:0042548	regulation of photosynthesis, light reaction	
module_118	GO:0043467	regulation of generation of precursor metabolites and energy	
module_266	GO:0006355	regulation of transcription, DNA–dependent	
module_266	GO:0051252	regulation of RNA metabolic process	
module_333	GO:0009870	defense response signaling pathway, resistance gene–dependent	
module_471	GO:0043086	negative regulation of catalytic activity	