

Supplementary Table S1. COG functional classification of all of the up-regulated differently expression genes

COG functional classification	Functional description	DEGs Number
Information storage and processing	RNA processing and modification	16
Information storage and processing	Chromatin structure and dynamics	20
metabolism	Energy production and conversion	23
cellular processes and signaling	Cell cycle control, cell division, chromosome partitioning	10
metabolism	Amino acid transport and metabolism	22
metabolism	Nucleotide transport and metabolism	10
metabolism	Carbohydrate transport and metabolism	34
metabolism	Coenzyme transport and metabolism	12
metabolism	Lipid transport and metabolism	28
Information storage and processing	Translation, ribosomal structure and biogenesis	51
Information storage and processing	Transcription	75
Information storage and processing	Replication, recombination and repair	19
cellular processes and signaling	Cell wall/membrane/envelope biogenesis	5
cellular processes and signaling	Cell motility	1
cellular processes and signaling	Posttranslational modification, protein turnover, chaperones	86
metabolism	Inorganic ion transport and metabolism	19
metabolism	Secondary metabolites biosynthesis, transport and catabolism	3
poorly characterized	Function unknown	491
cellular processes and signaling	Signal transduction mechanisms	81
cellular processes and signaling	Intracellular trafficking, secretion, and vesicular transport	144
cellular processes and signaling	Defense mechanisms	2
cellular processes and signaling	Cytoskeleton	30