

Figure S1: Sequence length distribution of non-redundant (NR) unique unitranscript sequences after sequencing and de novo assembly of *R. stylosa* leaf transcriptome. The X-axis represents the length range bins in bp. The Y-axis represents the frequency of transcripts in each bin.

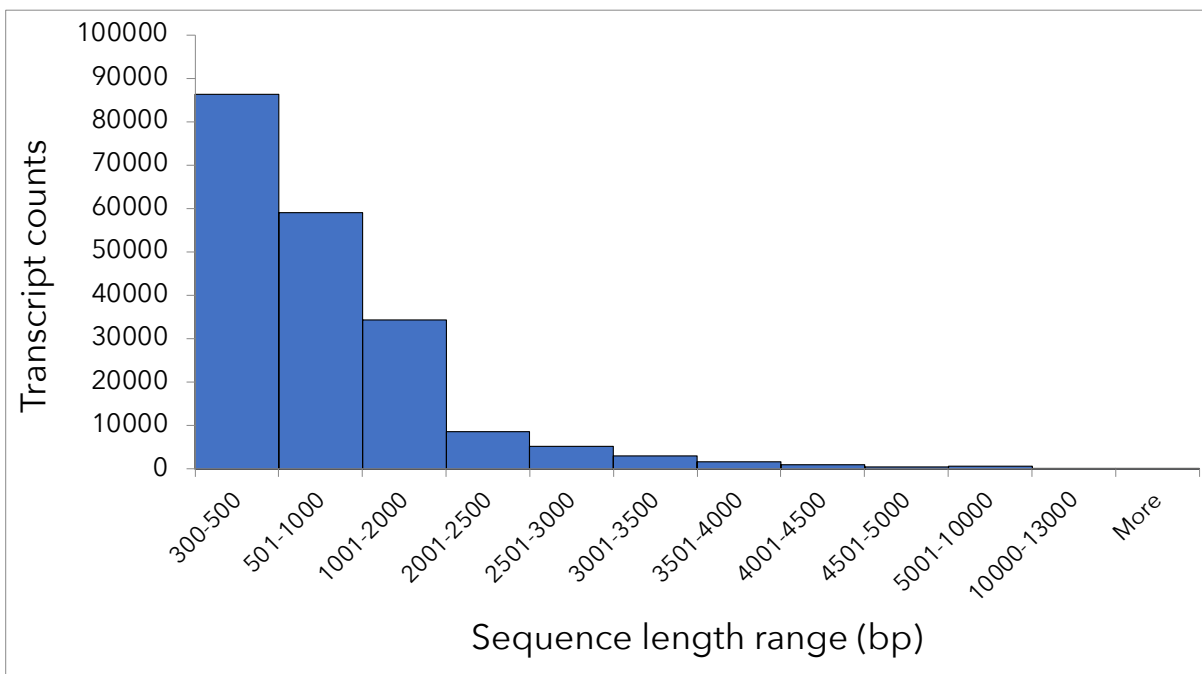


Figure S2. BLAST Top-Hits species distribution for *R. stylosa* leaf transcriptome when compared with nr database (BLASTx).

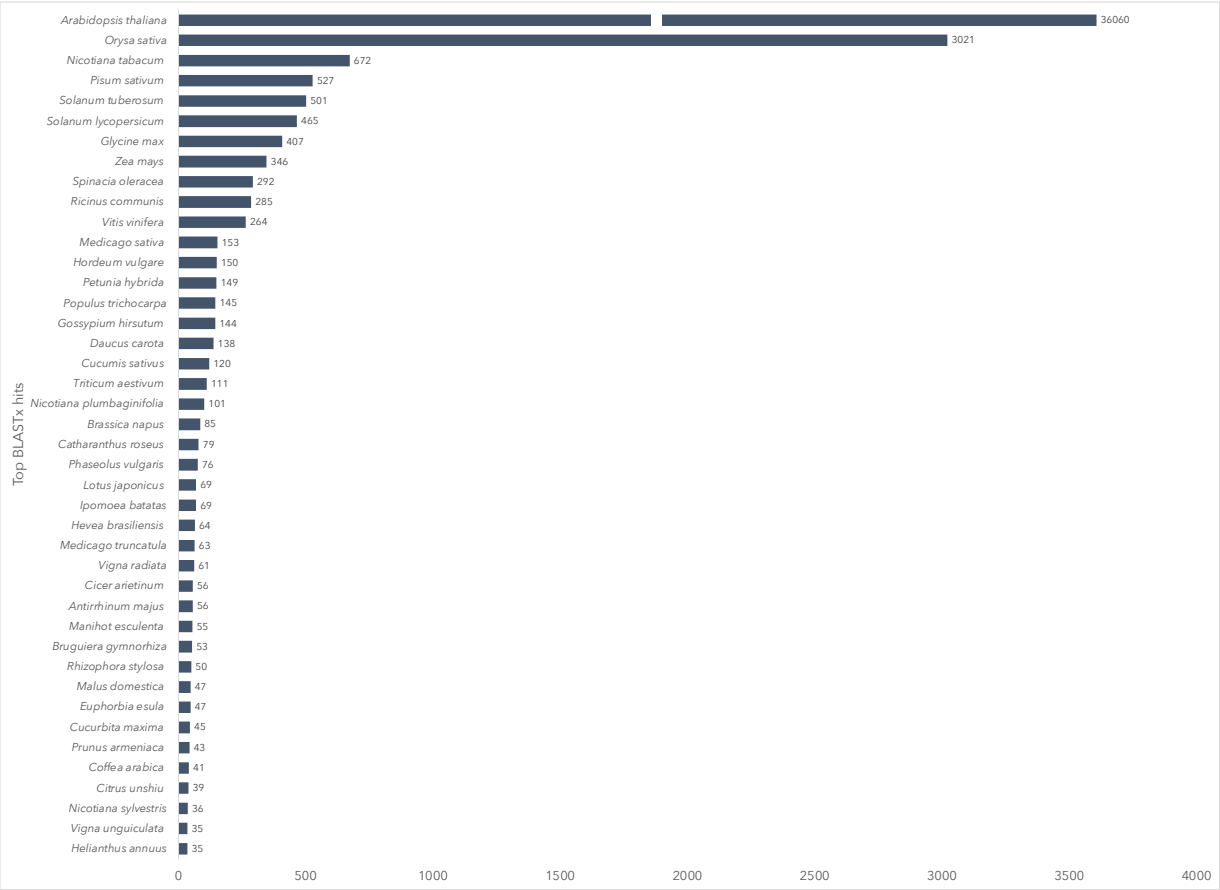


Figure S3. BLAST Top-Hits species distribution for *R. stylosa* leaf transcriptome when compared with Swiss-Prot database (BLASTp).

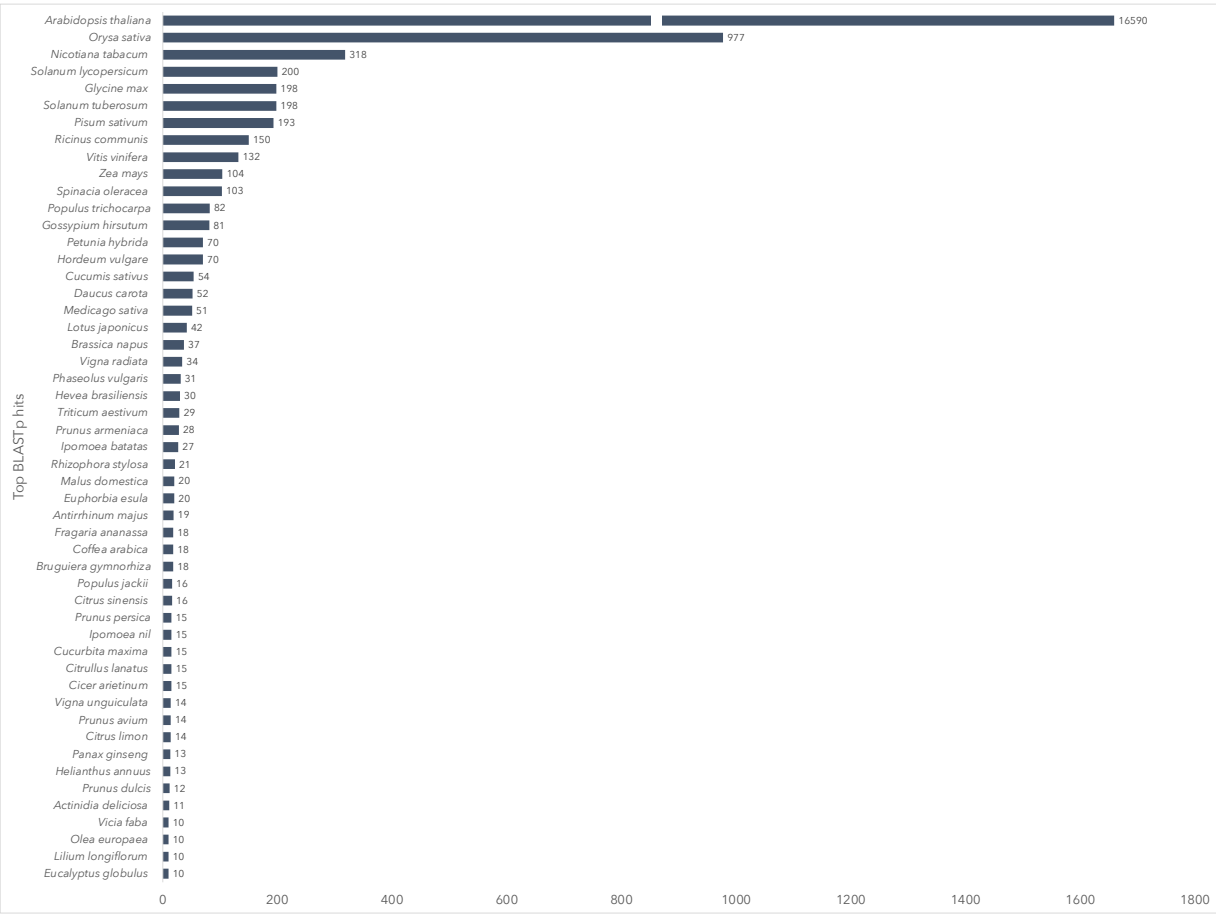


Figure S4. Gene ontology (GO) functional classification of *R. stylosa* leaf transcriptome BLAST Top-Hits species distribution when compared with nr database. Histograms of the frequency of transcripts annotated to specific GO categories; biological process, cellular components, and molecular functions are represented by blue, green, and orange bars, respectively.

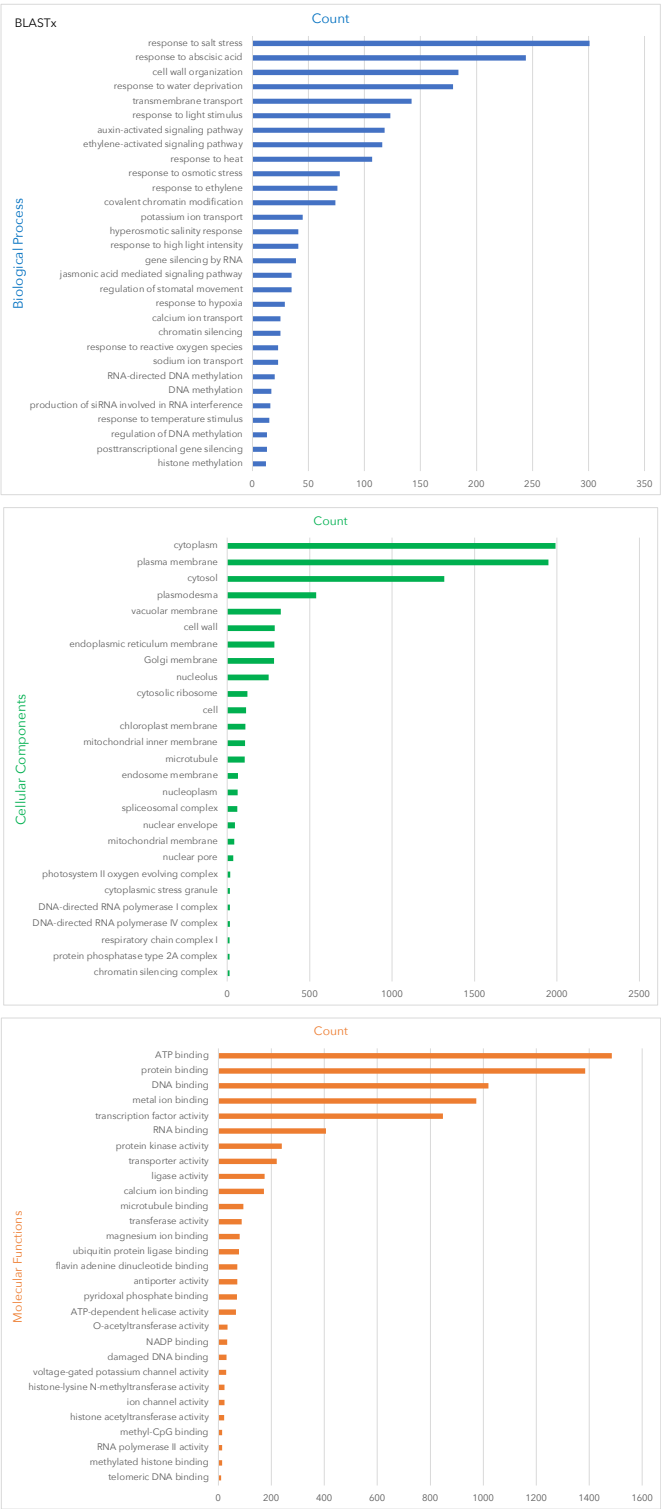


Figure S5. Gene ontology (GO) functional classification of *R. stylosa* leaf transcriptome BLAST Top-Hits species distribution when compared with Swiss-Prot database. Histograms of the frequency of transcripts annotated to specific GO categories; biological process, cellular components, and molecular functions are represented by blue, green, and orange bars, respectively.

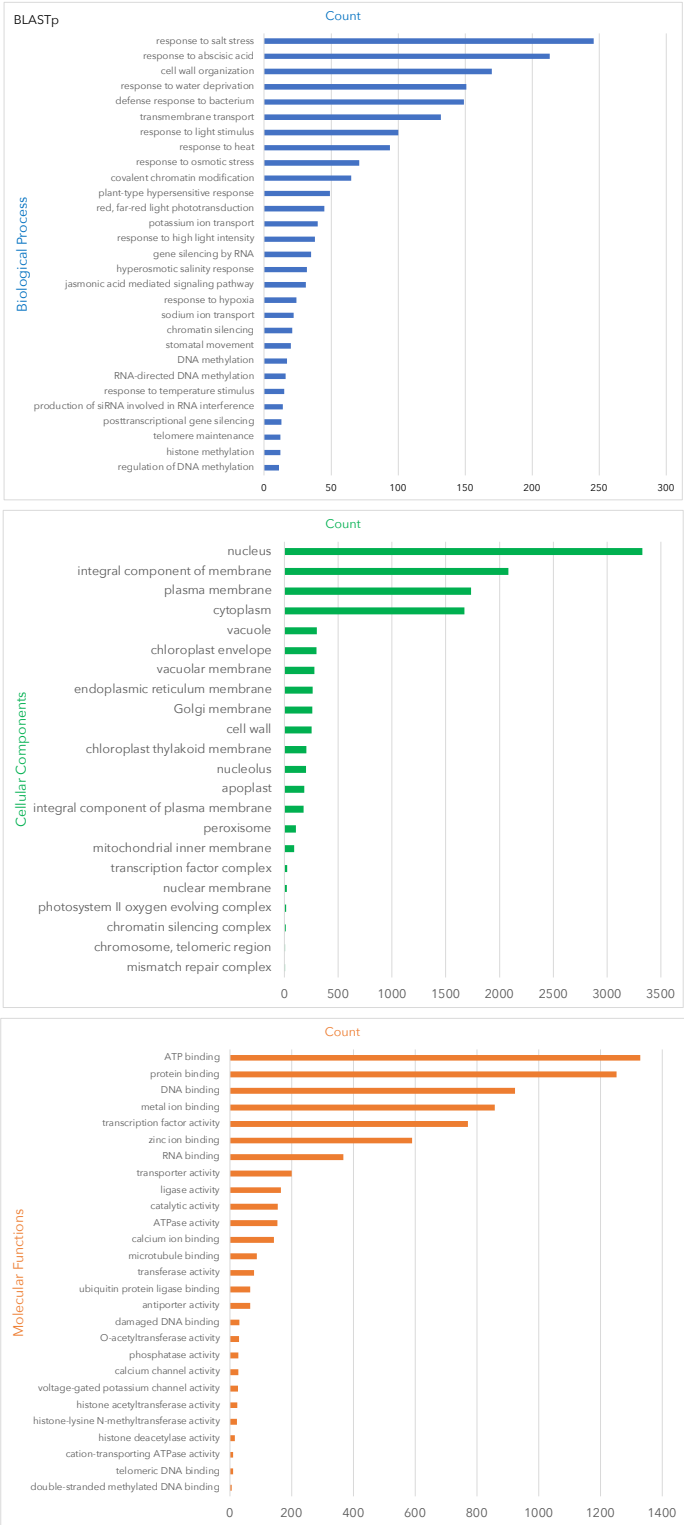


Figure S6. Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of *R. stylosa* leaf transcriptome BLAST Top-Hits species distribution when compared with nr database (top) and Swiss-Prot database (bottom). Histograms of the frequency of transcripts annotated to KEGG pathways.

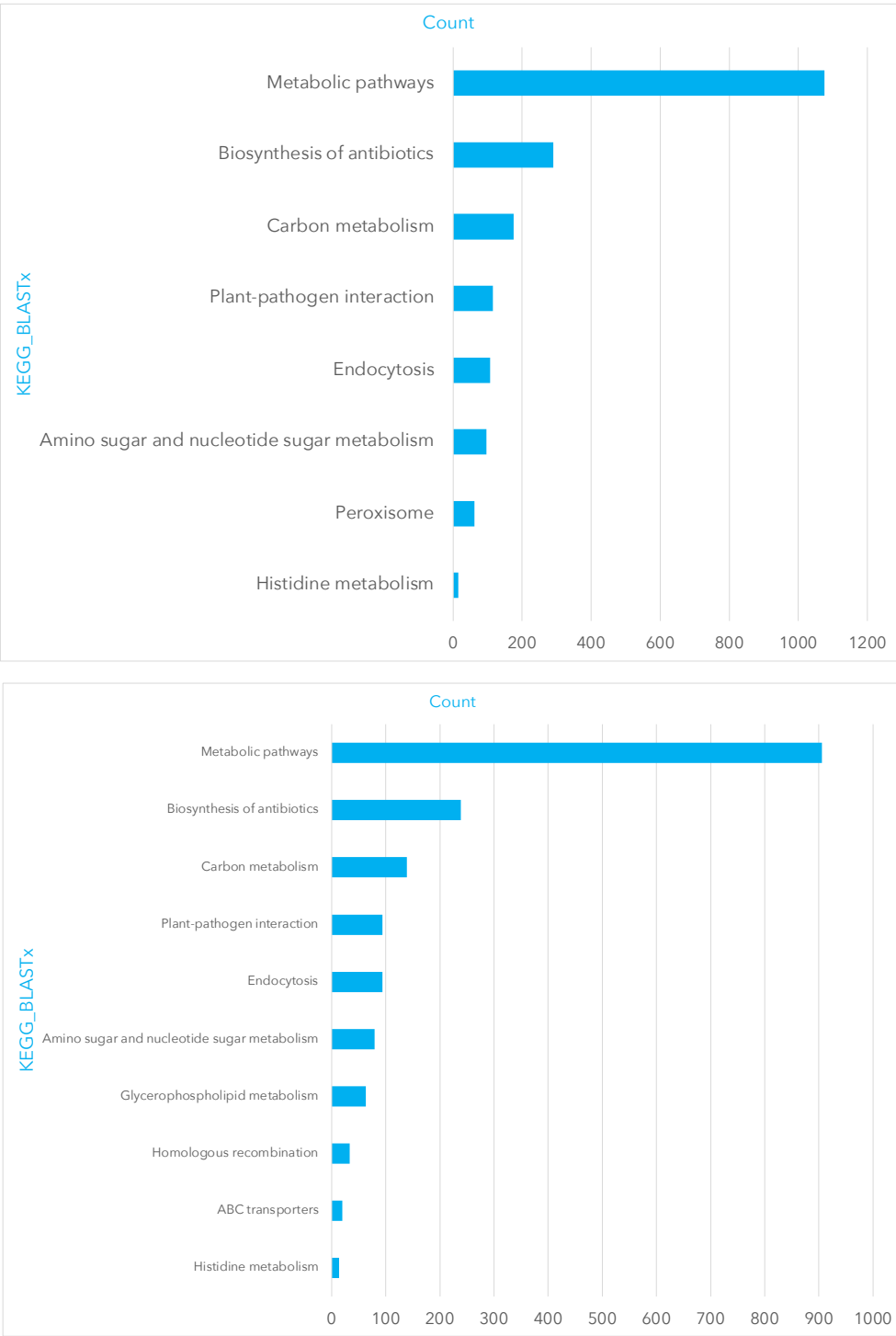


Figure S7. Biological process category of Gene ontology (GO) functional classification of upregulated transcripts BLAST Top-Hits species distribution when compared with Swiss-Prot database. Histograms of the frequency of transcripts annotated to specific GO categories; biological process, cellular components, and molecular functions are represented by blue, green and orange bars, respectively.

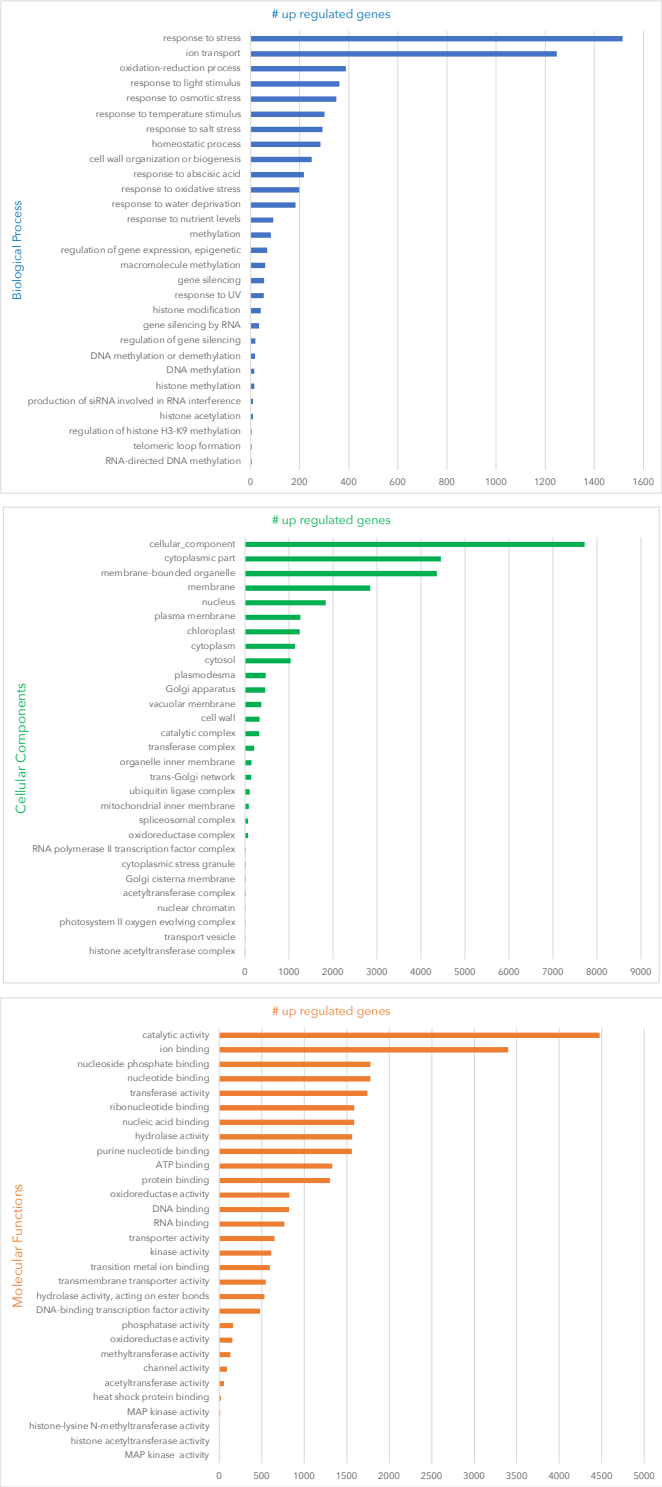
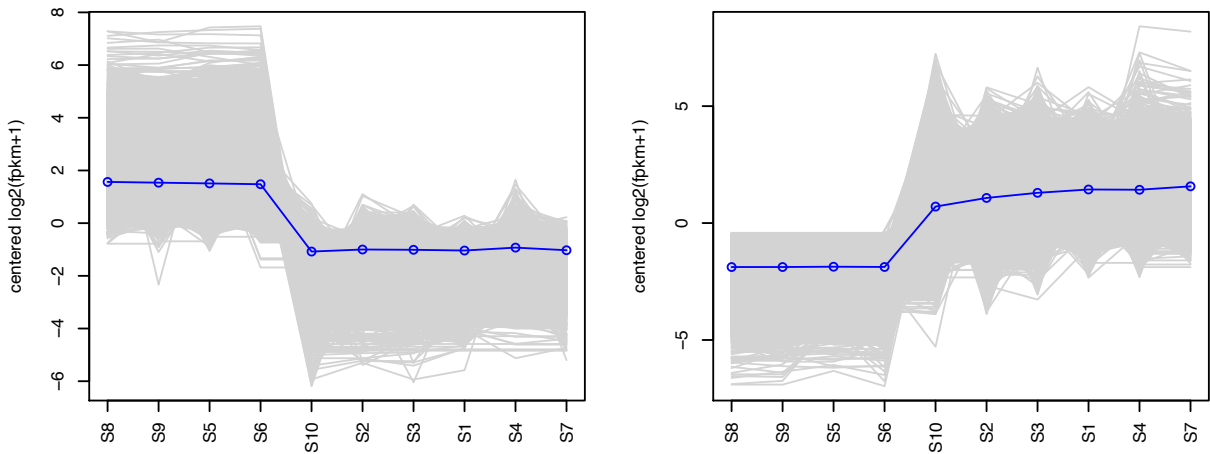


Figure S8. Transcript clusters extracted from the hierarchical clustering with R. X-axis: samples; y-axis: median-centered $\log_2(\text{FPKM})$. Grey lines, individual transcripts; blue line, average expression values per cluster.

subcluster_1_log2_medianCentered_fpkm.matrix, 24512 transcripts **subcluster_2_log2_medianCentered_fpkm.matrix, 15676 transcripts**



subcluster_3_log2_medianCentered_fpkm.matrix, 65 transcripts

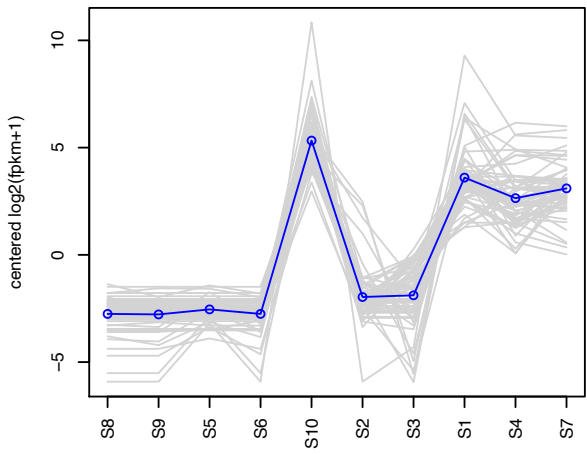


Figure S9. Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of upregulated (Top) and downregulated (bottom) transcripts in oceanside samples of *R. stylosa*.

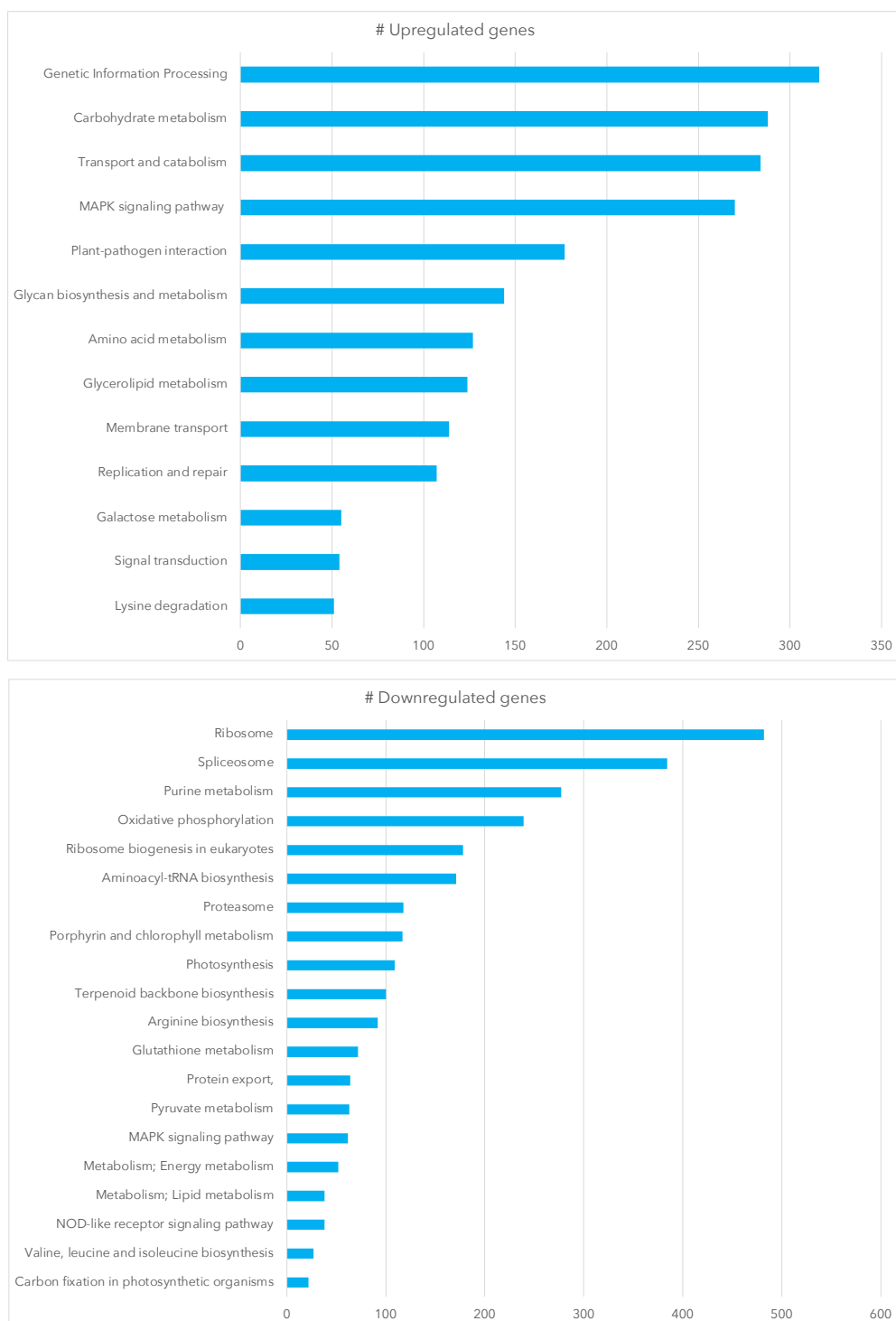


Figure S10. Comparison of BLAST Top-Hits species distribution for *R. stylosa* (green) and *B. gymnorhiza* (orange) leaf transcriptome when compared with nr database (BLASTx).

