

**Additional File 5: Figure S3. Grouped annotation network (A) and cluster distribution network (B) of the functional terms listed in Figure 7 visualised using ClueGO.** In both layouts, terms are connected depending on the similarity of their associated genes. The degree of connectivity between terms (edges) is calculated using kappa statistics and the network is shown using the Organic layout algorithm supported by Cytoscape. The size of the nodes reflects the statistical significance of the terms, whereas the thickness of the edge reflects the grade of functional connection between terms. The group leading term is the most significant term of the group. In the grouped annotation network, functional terms are grouped by different colours, each identifying the most significant term of the group. In the cluster distribution network, green and red label functional terms are up and down-regulated genes, respectively. The colour gradient shows the gene proportion of each cluster associated with the term.

