10.1071/FP23049

Functional Plant Biology

Supplementary Material

Metabolomic analysis reveals key metabolites and metabolic pathways in *Suaeda salsa* under salt and drought stress

Jinbo Bao^A, Zhiyou Liu^B, Zhijie Ding^{A,C}, Gulbar Yisilam^{A,C}, Qiuyan Wang^{A,*}, and Xinmin Tian^{A,C,*}

^AKey Laboratory of Ecology of Rare and Endangered Species and Environmental Protection, College of Life Science, Guangxi Normal University, Ministry of Education, Guilin 541004, China.

^BCity Management and Service Centre of Tiemenguan, Xinjiang, China.

^cXinjiang Key Laboratory of Biological Resources and Genetic Engineering, College of Life science and Technology, Xinjiang University, Urumqi, Xinjiang, China.

*Correspondence to: Qiuyan Wang Key Laboratory of Ecology of Rare and Endangered Species and Environmental Protection, College of Life Science, Guangxi Normal University, Ministry of Education, Guilin 541004, China Email: qiuyanw2015@163.com Xinmin Tian Key Laboratory of Ecology of Rare and Endangered Species and Environmental Protection, College of Life Science, Guangxi Normal University, Ministry of Education, Guilin 541004, China Email: tianxm06@lzu.edu.cn

Supplementary files:



Fig. S1 Pearson correlation between QC samples.



Fig. S2 Load plot of the total PCA map for QC and all metabolic samples.

Note: The horizontal coordinates PC1 and PC2 in the figure indicate the scores of the first- and second-ranked principal components, respectively. The scatter points of different colours indicate the samples of different experimental subgroups; the ellipse represents the 95% confidence interval.



Fig. S3 Volcano map of differential metabolites. a. Volcano map of differential metabolites under salt stress. b. Volcano map of differential metabolites under drought stress.

Note: ps = salt stress treatment group; pd = drought stress treatment group; pw = control group. The horizontal coordinates represent the variance fold-change (log2FoldChange) of metabolites in different subgroups, the vertical coordinates represent the different significance levels (-log10 P-value), the red dots represent significantly upregulated metabolites, and the green dots represent significantly downregulated metabolites.



Fig. S4 Flavonoid biosynthesis pathway map.

Note: Circles represent metabolites, where green solid circles represent annotated metabolites, red circles represent upregulated differential metabolites, blue circles represent downregulated differential metabolites, and yellow circles indicate metabolites that contain both up-and downregulated metabolites.



Fig. S5 Phenylalanine metabolic pathway map.

Note: Circles represent metabolites, where green solid circles represent annotated metabolites, red circles represent upregulated differential metabolites, blue circles represent downregulated differential metabolites, and yellow circles indicate metabolites that contain both up-and downregulated metabolites.