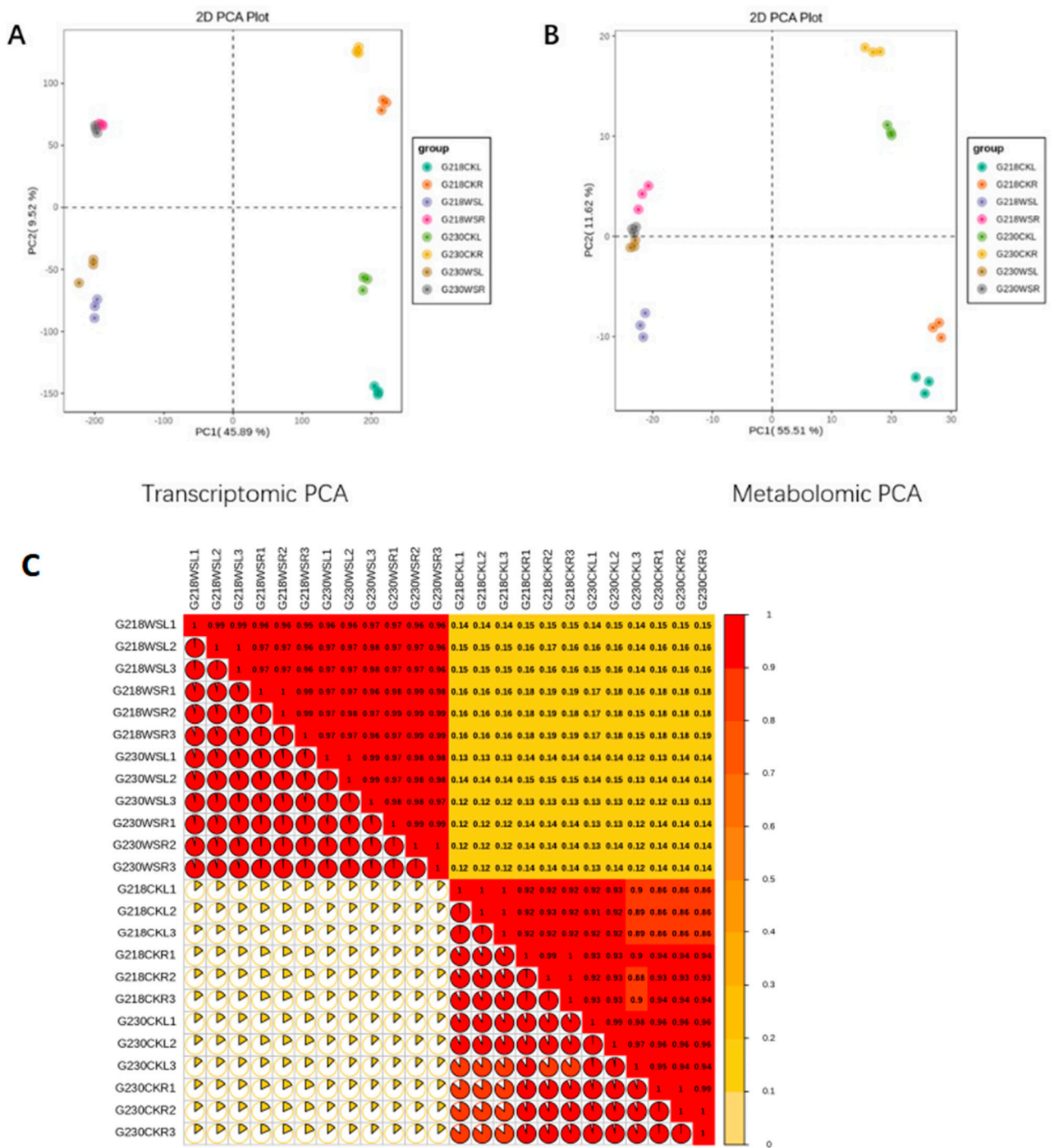


## Supporting Information



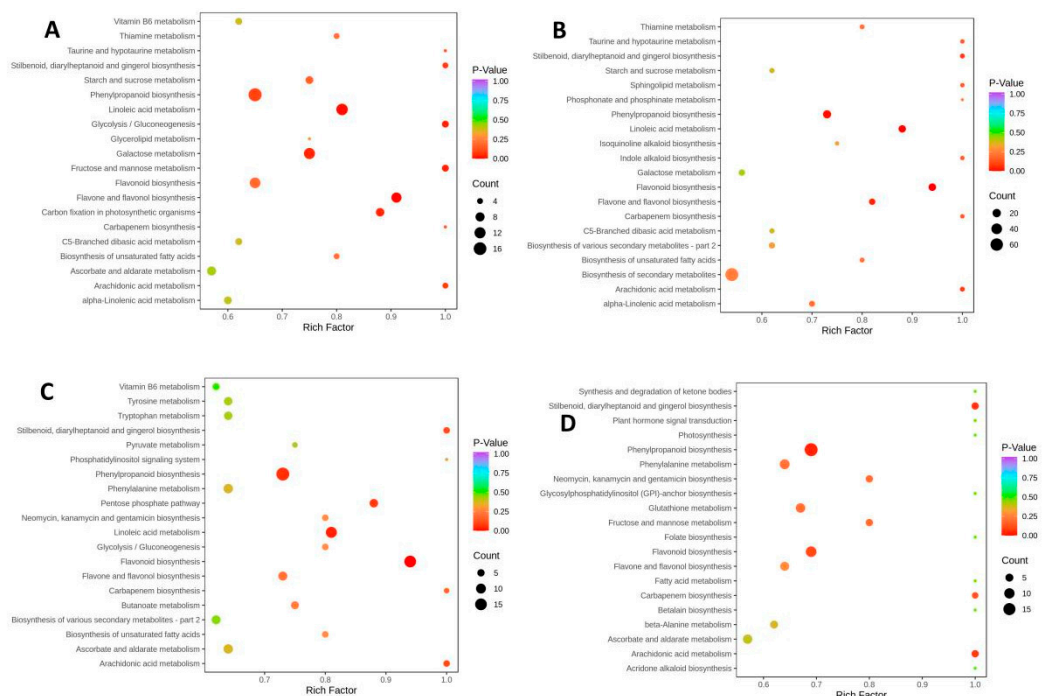
**Figure S1.** Field waterlogging stress. The field water content reached 90%.



**Figure S2.** Sample PCA analysis and correlation analysis. (A) Transcriptomic PCA analysis. (B) Metabolomics PCA Analysis. (C) Transcriptomics sample correlation analysis heatmap.







**Figure S4.** KEGG enrichment analysis of DEMs of different comparative combinations under waterlogging stress. (A) Significantly enriched KEGG pathways in the G218CKL vs. G218WSL comparison. (B) Significantly enriched KEGG pathways in the G218CKR vs. G218WSR comparison. (C) Significantly enriched KEGG pathways in the G230CKL vs. G230WSL comparison. (D) Significantly enriched KEGG pathways in the G230CKR vs. G230WSR comparison.