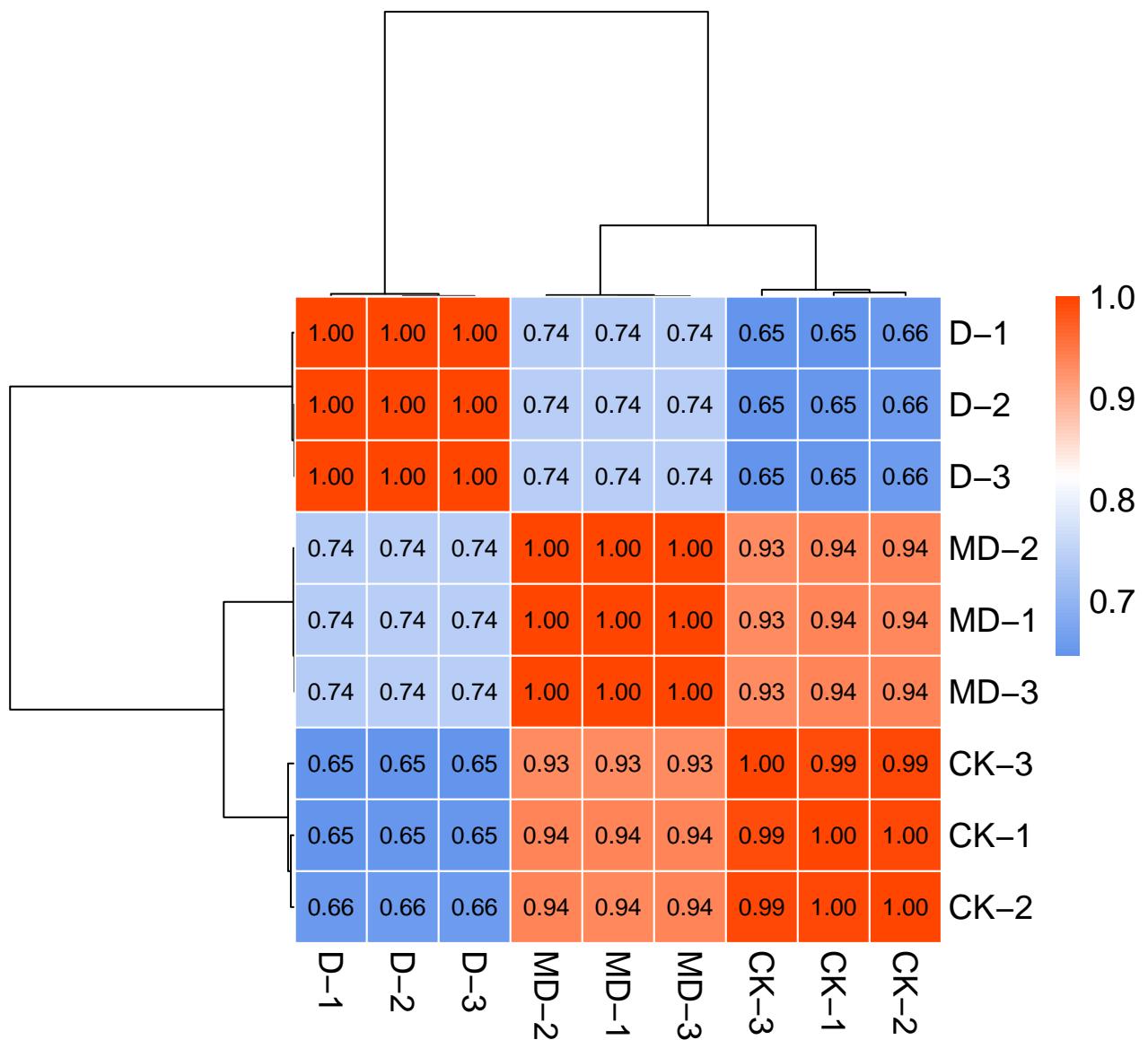


## Pearson Correlation Between Samples



**Supplementary Figure 1. Pearson correlation matrix of all RNA-seq samples under control, drought, and melatonin + drought treatments.** Heatmap shows pairwise Pearson correlation coefficients among biological replicates from three conditions: control (CK), drought stress (D), and melatonin + drought stress (MD). The color scale indicates correlation strength from low (blue) to high (red). Hierarchical clustering groups samples based on similarity, confirming high reproducibility among replicates within each treatment group. Values represent correlation coefficients ( $r$ ), where 1 indicates perfect correlation.