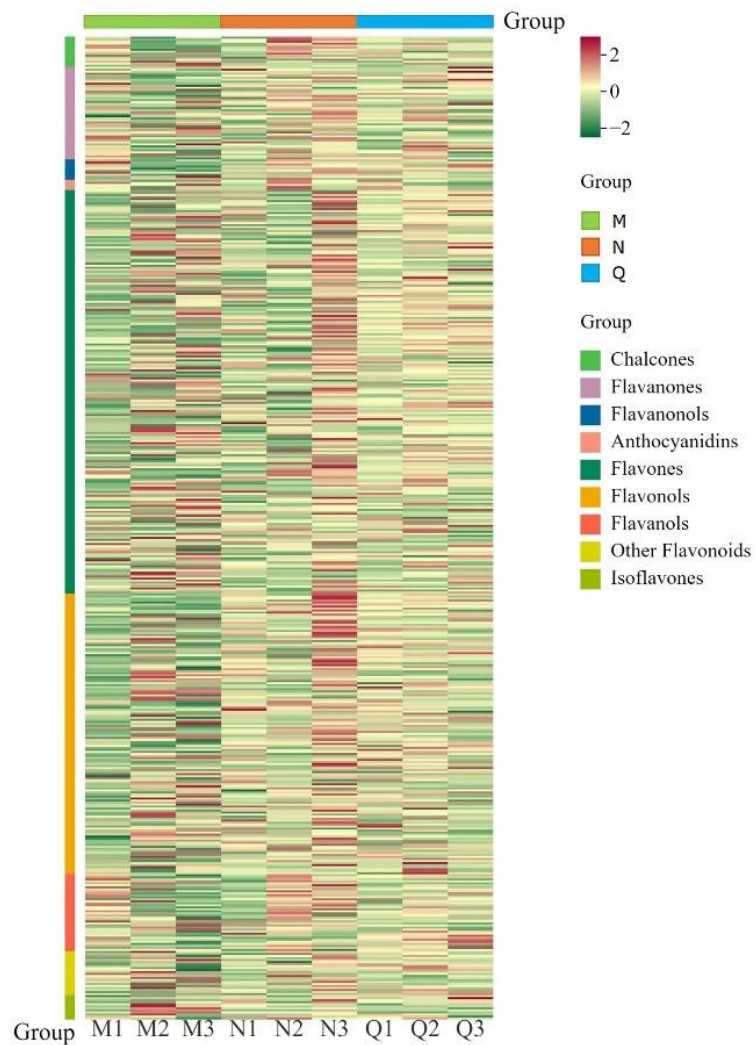
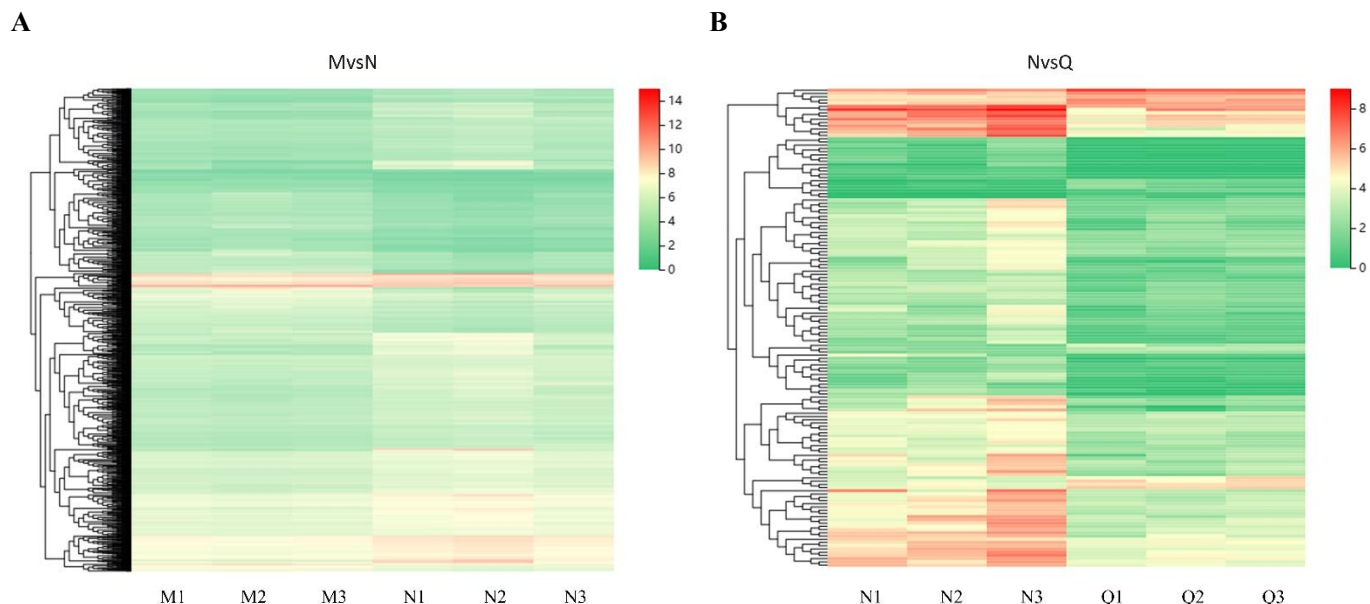


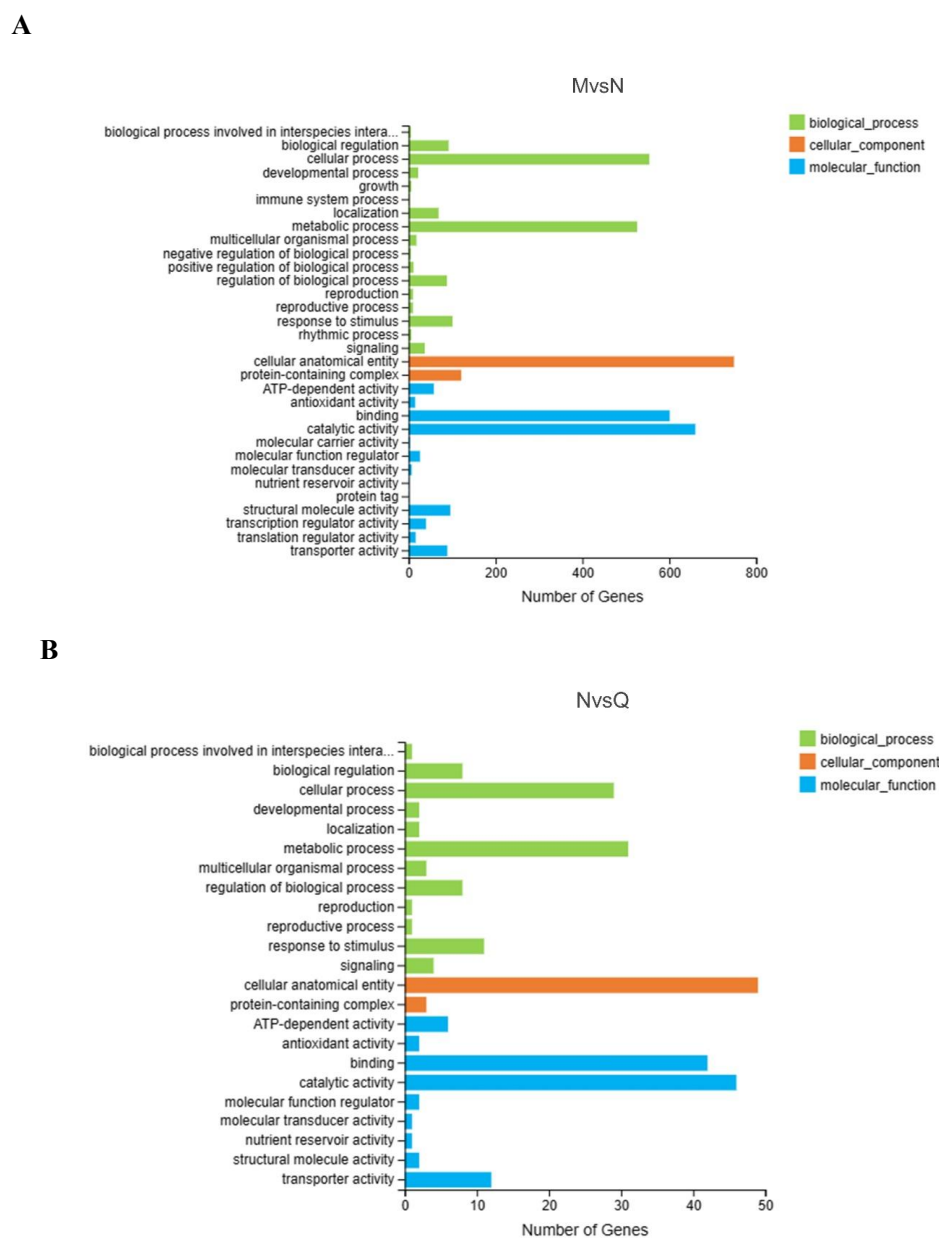
Supplementary Figure S1: A, OPLS-DA evaluation model (MvsN); A, OPLS-DA evaluation model (NvsQ). R^2X and R^2Y denote the explanatory rate of the constructed model on the X and Y matrices, respectively, and Q^2 denotes the predictive power of the model. A model is generally considered valid when $Q^2 > 0.5$.



Supplementary Figure S2: Clustering heatmap of the detected 487 flavonoids.

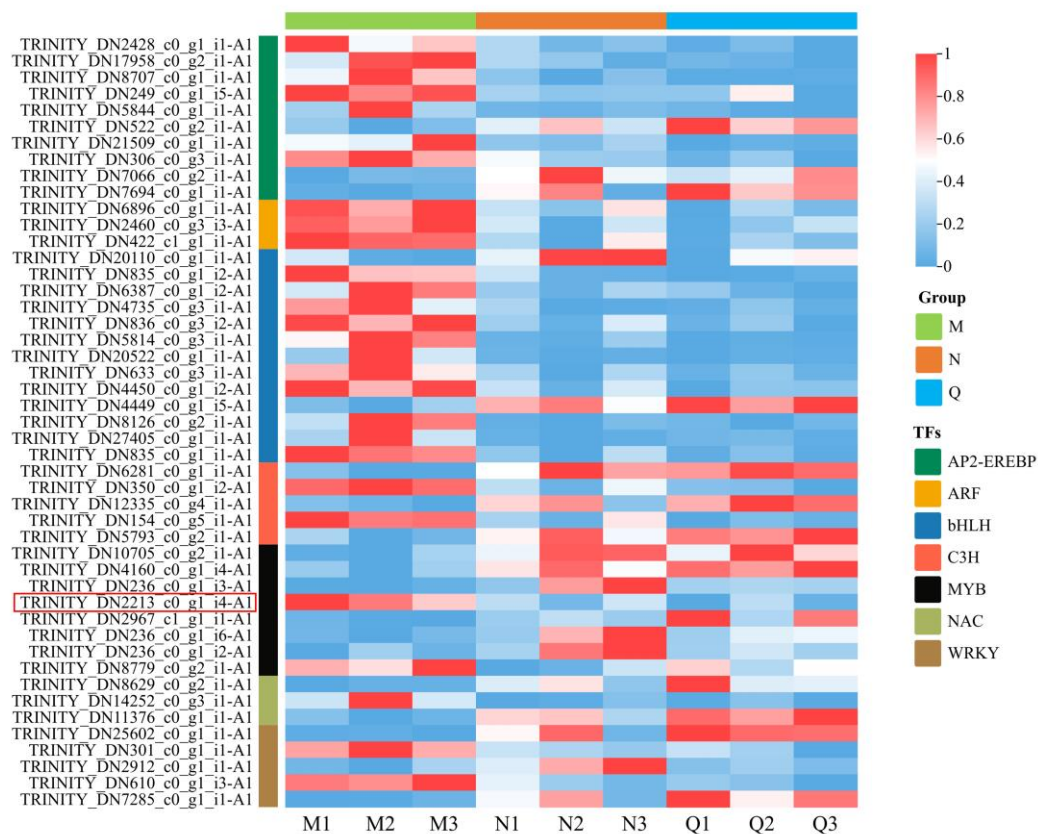


Supplementary Figure S3: A, Hierarchical clustering analysis of DEGs in Groups M and N; B, Hierarchical cluster analysis of DEGs in Groups N and Q.

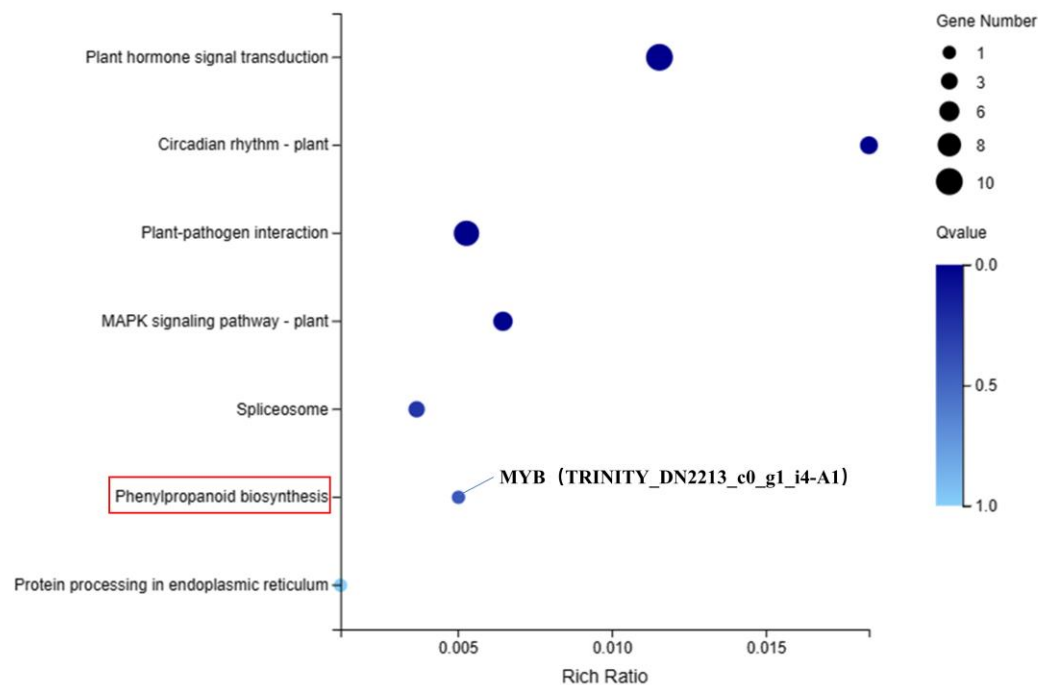


Supplementary Figure S4: A, Functional classification of GO term enrichment analysis of DEGs in Group M and Group

N comparison.; B, Functional classification of GO term enrichment analysis of DEGs in Group N and Group Q comparison.



Supplementary Figure S5: Clustering heatmap of key TFs regulating flavonoid-related pathway DEGs.



Supplementary Figure S6: Bubble map of KEGG Pathway enrichment of TFs.