

## Supplemental Materials

# Integrated Metabolomic and Transcriptomic Analysis Reveals Differential Mechanism of Flavonoid Biosynthesis in Two Cultivars of *Angelica sinensis*

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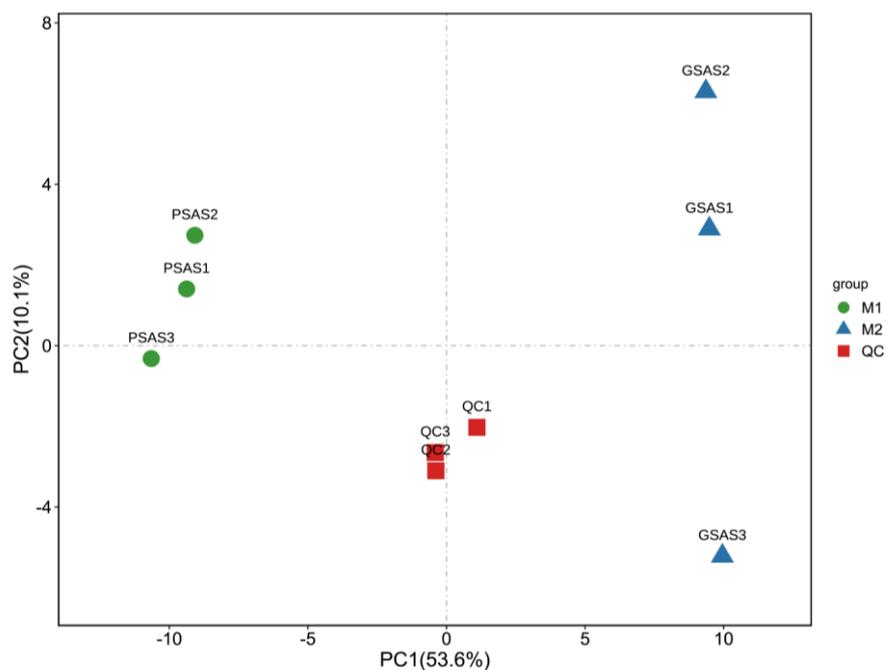


Figure S1: PCA of M1 (PSAS) and M2 (GSAS) as well as quality control (QC) samples.

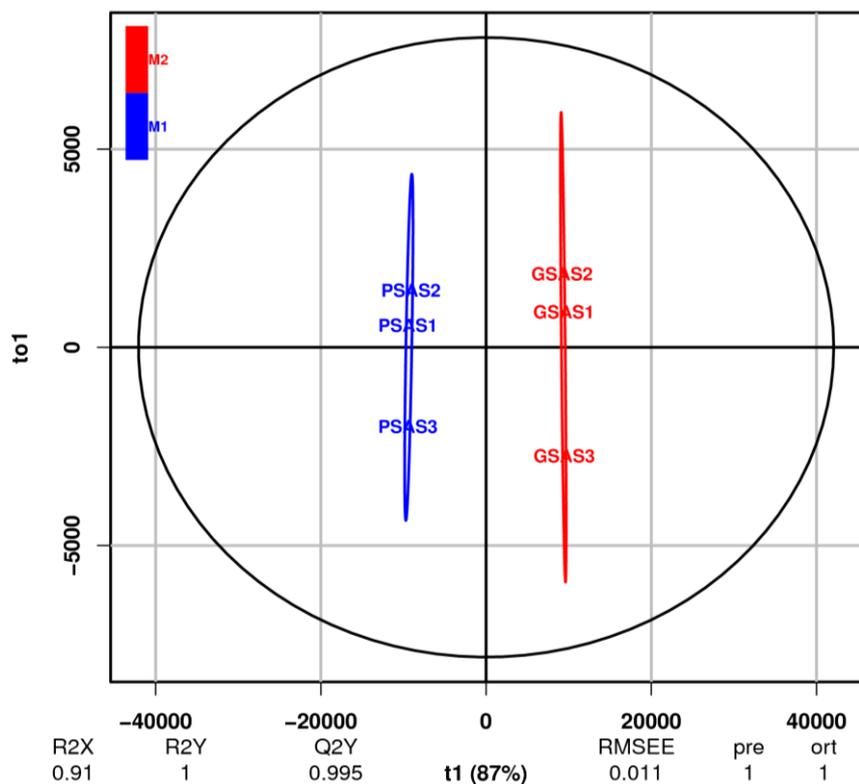


Figure S2: OPLS-DA of M1 and M2.

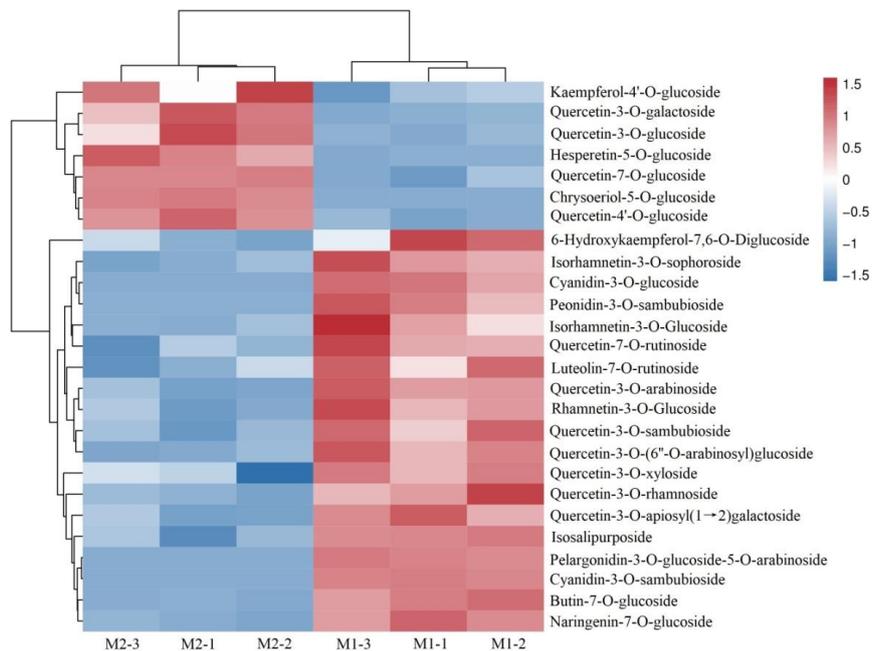
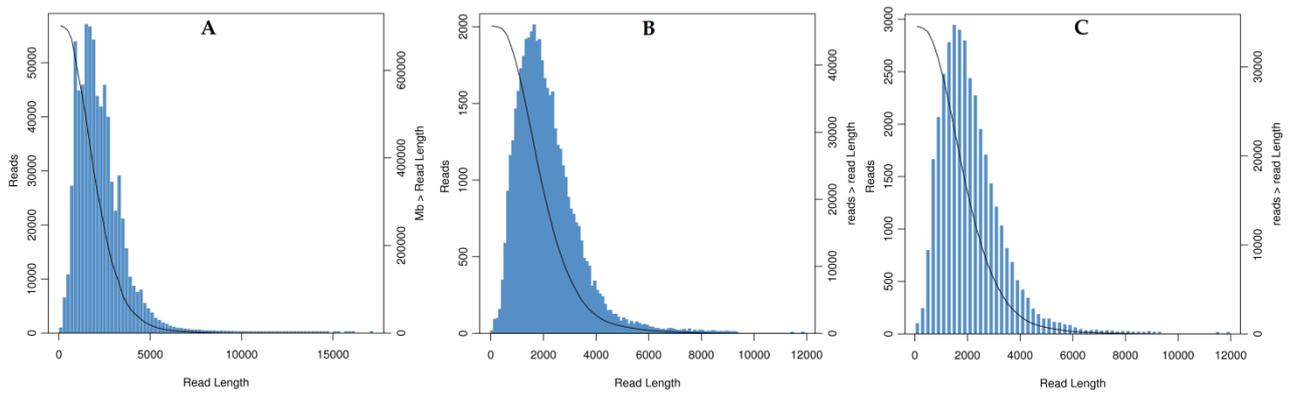
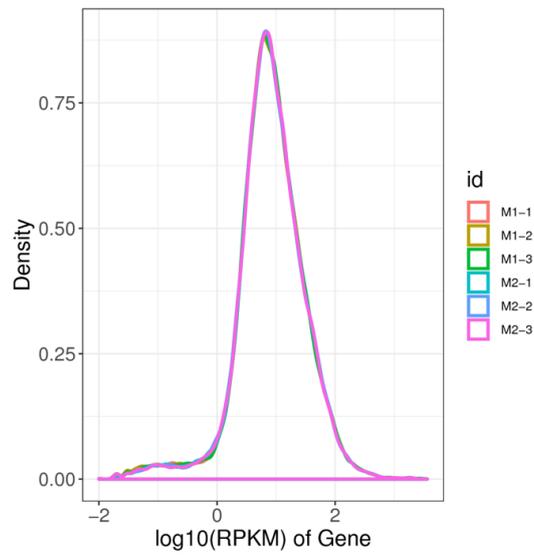


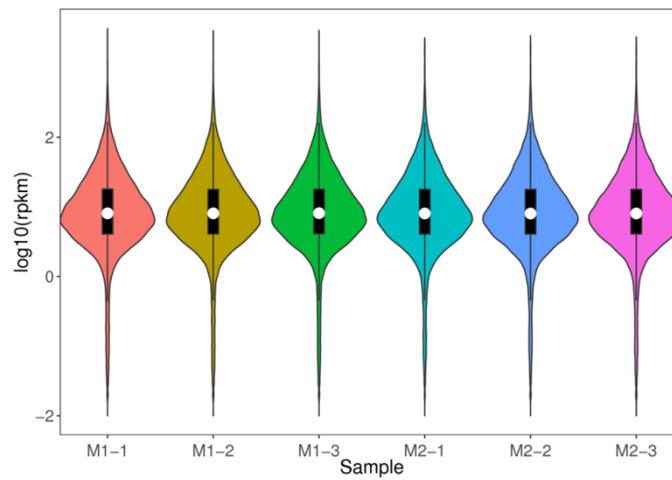
Figure S3: Cluster heat map of the 26 DAFs in M1 vs M2.



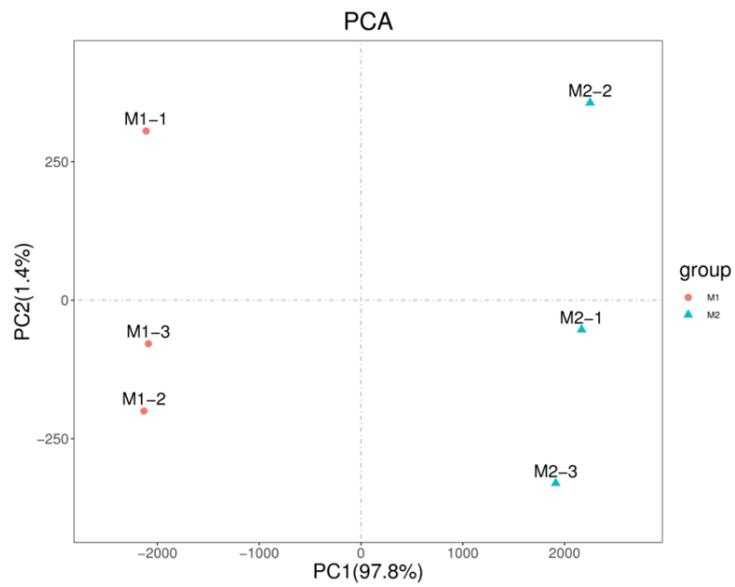
**Figure S4:** Length distribution of high-fidelity reads (A), high-quality isoforms (B) and full-length isoforms (C).



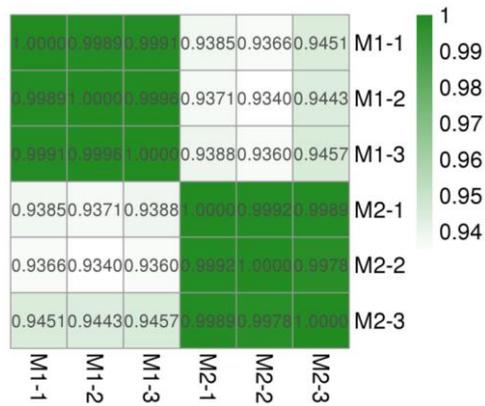
**Figure S5:** RPKM distribution of M1 and M2.



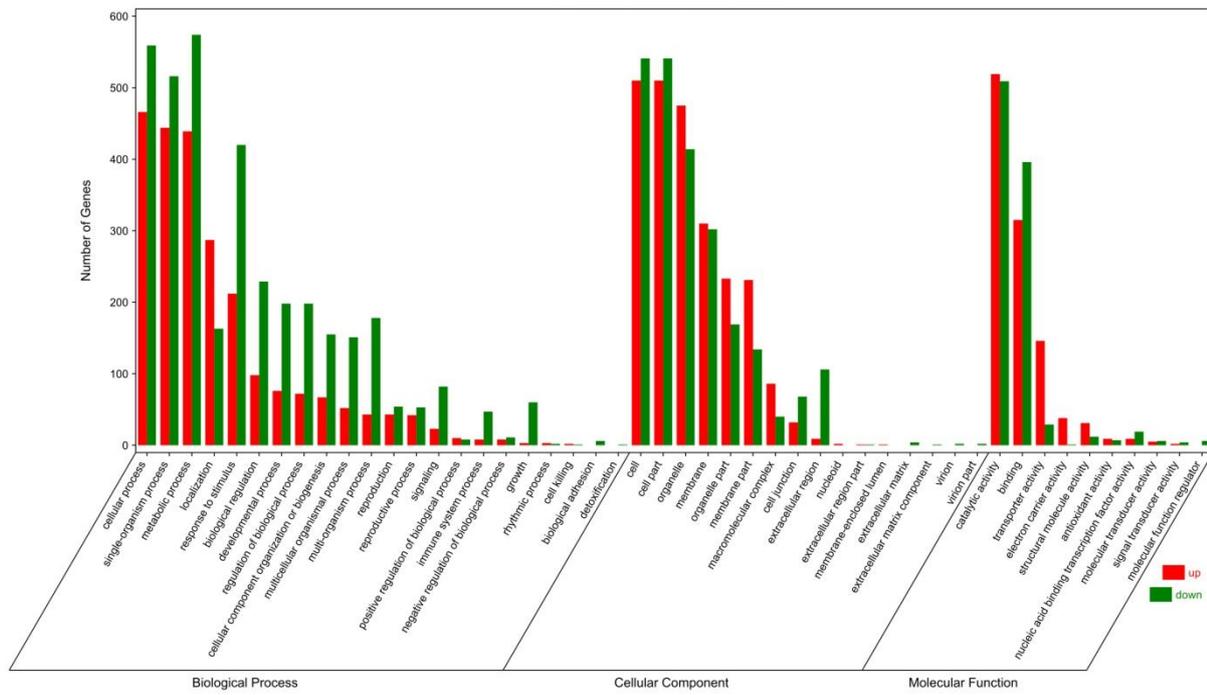
**Figure S6:** Violin plot of expression in M1 and M2.



**Figure S7:** PCA analysis of M1 and M2.



**Figure S8:** Pearson Heat-map correlation between M1 and M2.



**Figure S9:** GO classification of the DEGs in M1 vs M2.

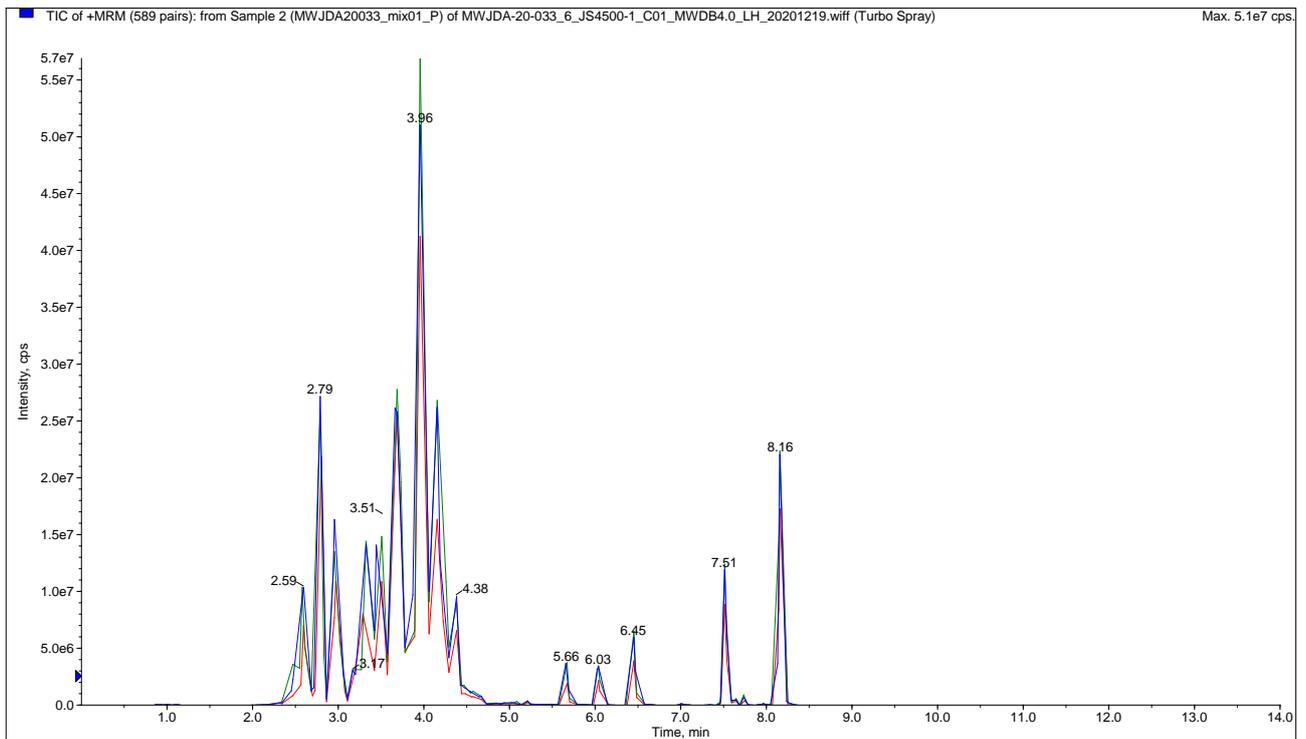


**Mingui 1 (M1) with purple stem**

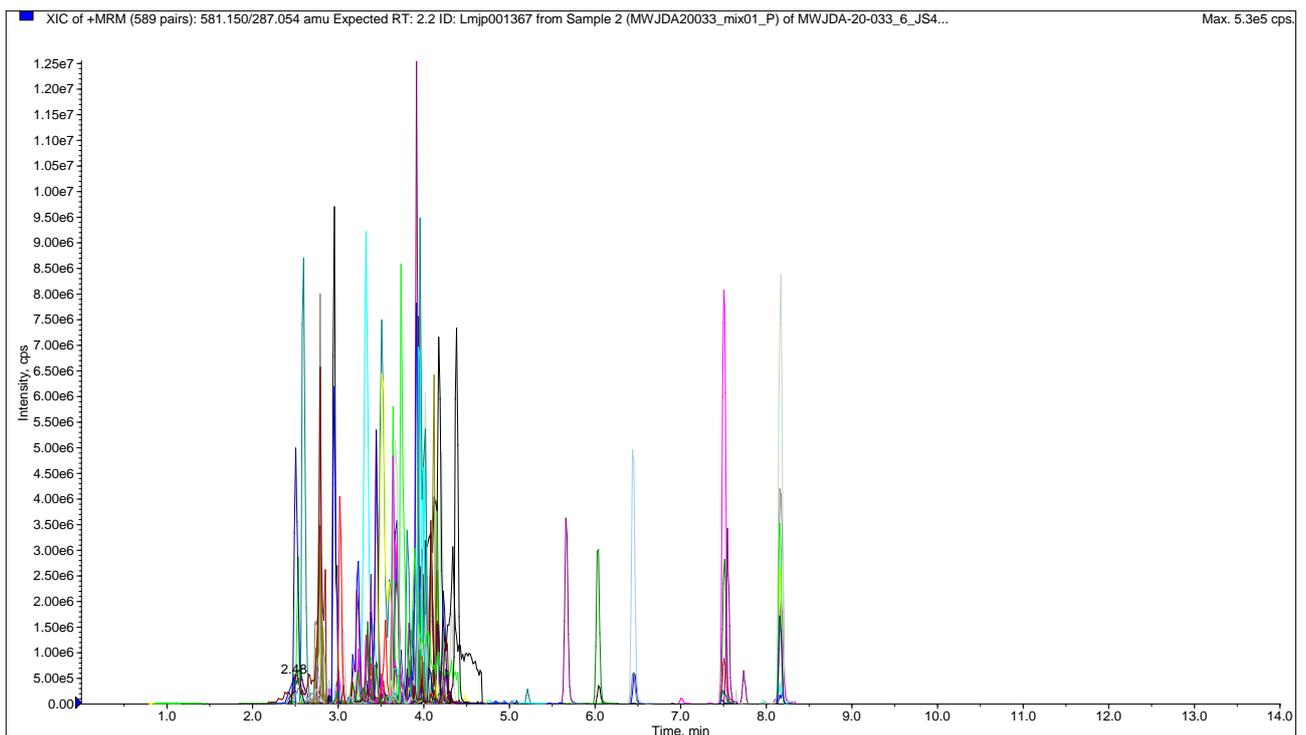


**Mingui 2 (M2) with green stem**

**Figure S10:** Aerial-parts characteristics of the two *Angelica sinensis* cultivars: M1 with purple stem and M2 with green stem



**Figure S11:** Representative total-ion-chromatogram (TIC) of QC sample



**Figure S12:** Representative TIC of MRM metabolites detection of QC sample