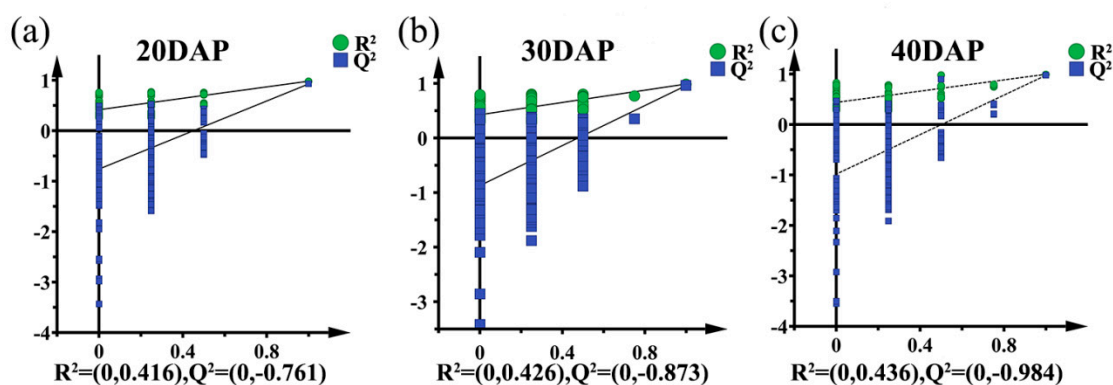
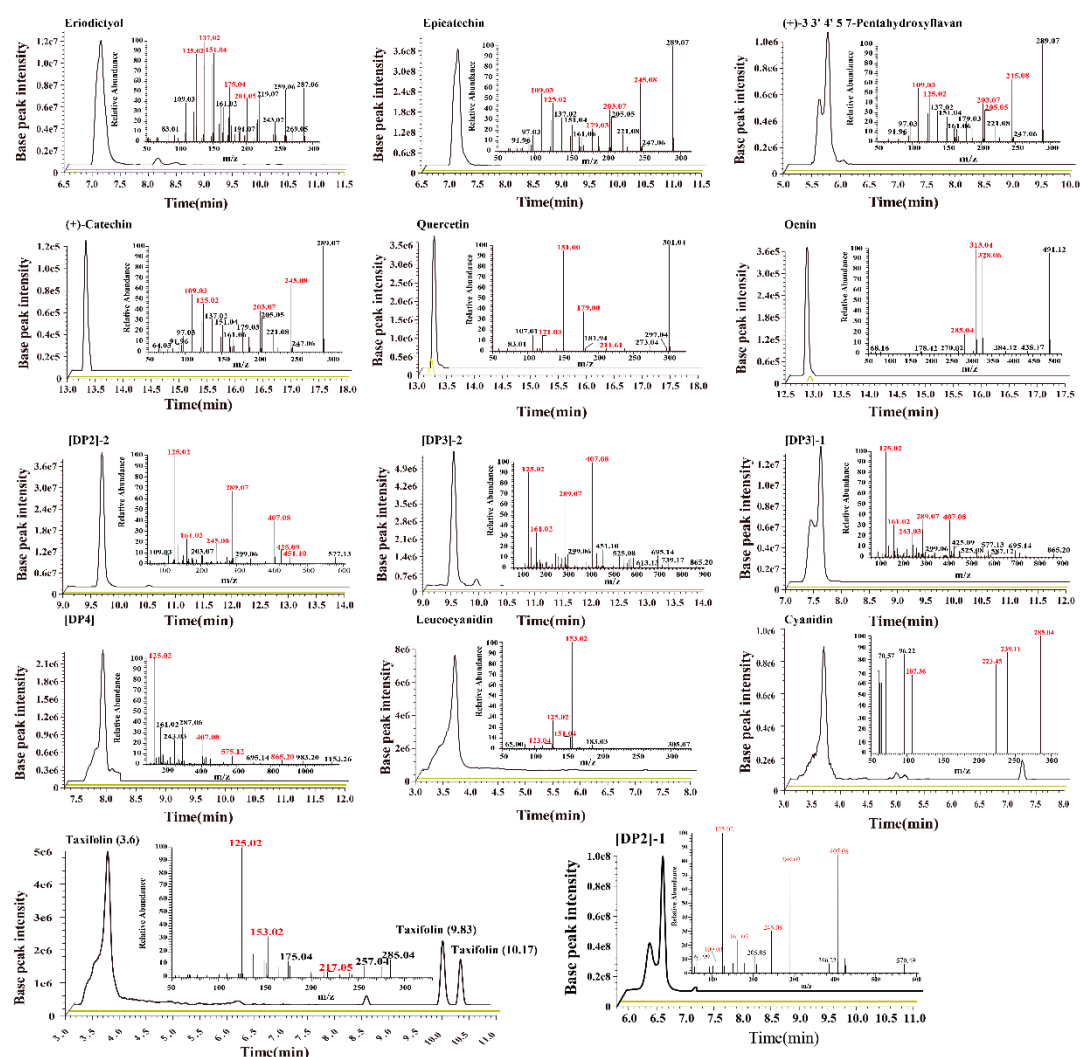


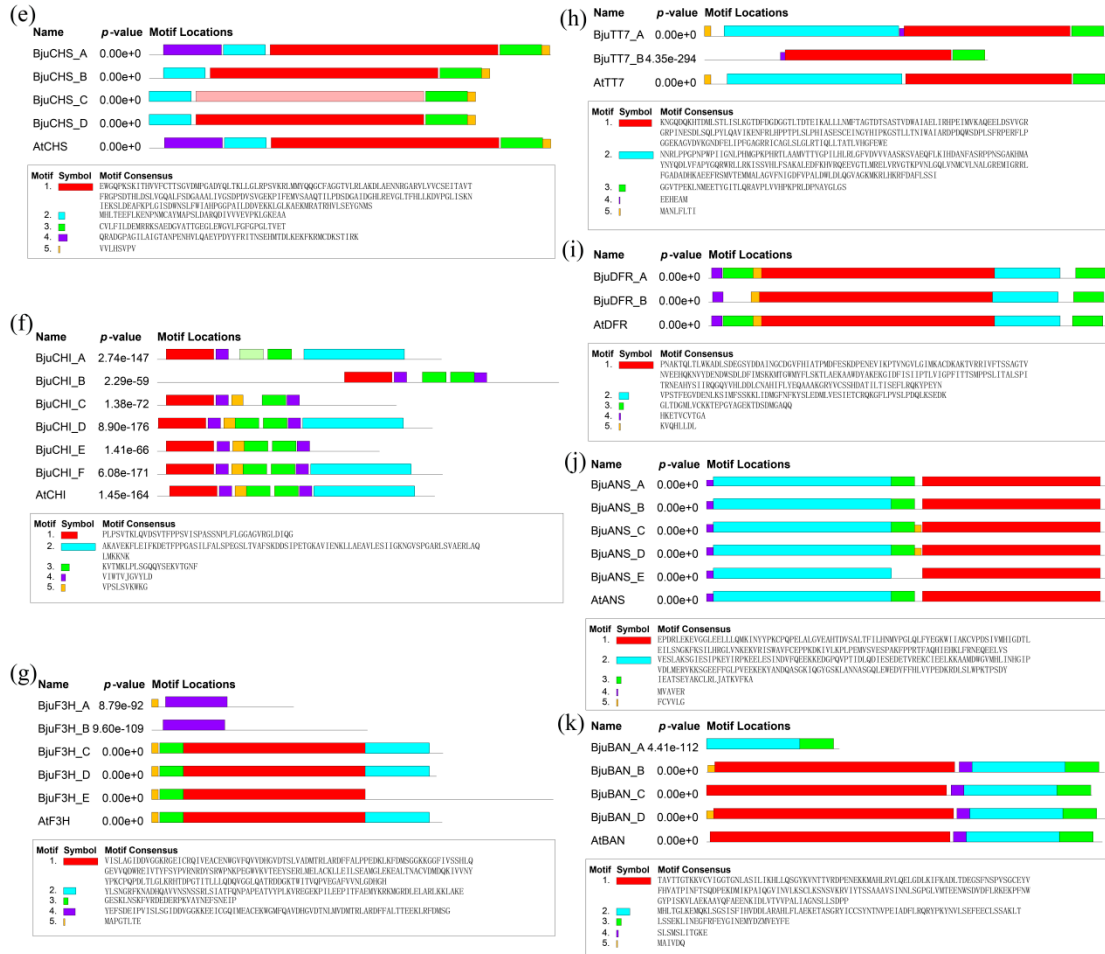
Supplementary Figure S1. Differential flavonoid metabolite analysis on the basis of OPLS-DA and principal component (PCA). (a) The OPLS-DA score plot of different yellow- and dark-seeded *B. juncea*. Different colored dots represent the different stages of seed. (b) Principal component analysis of 78 metabolites detected in yellow- and dark-seeded *B. juncea*. Different colored dots represent the different seed development stages.



Supplementary Figure S2. The partial least squares-discriminant analysis (OPLS-DA). (a-c) OPLS-DA model plots for the permutation test at 20, 30 and 40 DAP, respectively.



Supplementary Figure S3. UPLC-HESI-MS/MS chromatograms of significant constituents in yellow- and dark-seeded *B. juncea*. DP2, procyanidin B; DP3, procyanidin C; DP4, procyanidin D.



Supplementary Figure S4. Continually

