**Supplymentary Figure S1**. HPLC chromatography for determation of anthocyanins and catechins

(A) HPLC chromatography of catechins of ZJ and YK

(B) HPLC chromatography of anthocyanins of ZJ and YK

**Supplementary Figure S2.** The length distributing of Iso-seq of ZJ (A) and YK (B) subreads displayed in histogram.

**Supplementary Figure S3.** GeneOntology (GO) annotation analysis on ZJ and YK isoforms. The number of ZJ (Purple digital) and YK(Green digital) isoforms that are enriched in terms of molecular function, cellular component, and biological process based on GeneOntology (GO) analysis.

**Supplementary Figure S4** Gene annotation of KEGG pathways involved in biosynthesis of ZJ and YK. The isoforms of ZJ and YK have been gathering in KEGG database, and the numbers have been shown and compared.

**Supplementary Figure S5.** The qRT-PCR expression profiling. The relative expression quantity of genes and their AS transtrips in ZJ and YK one leaf and two buds to ZJ Mature leaves based on qRT-PCR studies.