



Supplemental Figure 1 Tissue purity and correlation between biological replicates in Illumina RNA-seq. (a, b) Methods of isolating embryos and aleurone layer. Embryo and aleurone layers were separated from ten and twenty dry seeds by hand-cutting. After the tissue is cut, it is directly placed under the microscope (a) or freezing slices for observation (b). (c) We utilized public transcriptome analysis to identify four genes expressed in the aleurone/embryo tissue, which facilitate the discrimination of aleurone and embryo tissue purity. Among them, the green bar chart represents genes that are expressed in the aleurone layer but not in the embryo, while the blue bar chart represents genes that are expressed in the embryo but not in the aleurone layer. **: $P < 0.01$, one-way ANOVA with Tukey's test. (d,e) Heatmap (d) and Principal component analysis (e) of different samples. The samples were described by various abbreviations based on treatment type, time, and tissue type. For example, A5_Cortex_1 is the abbreviation of the aleurone layer after five days of CDT, and B18_Embryo_1 is the abbreviation of the embryo harvested in 2018.