

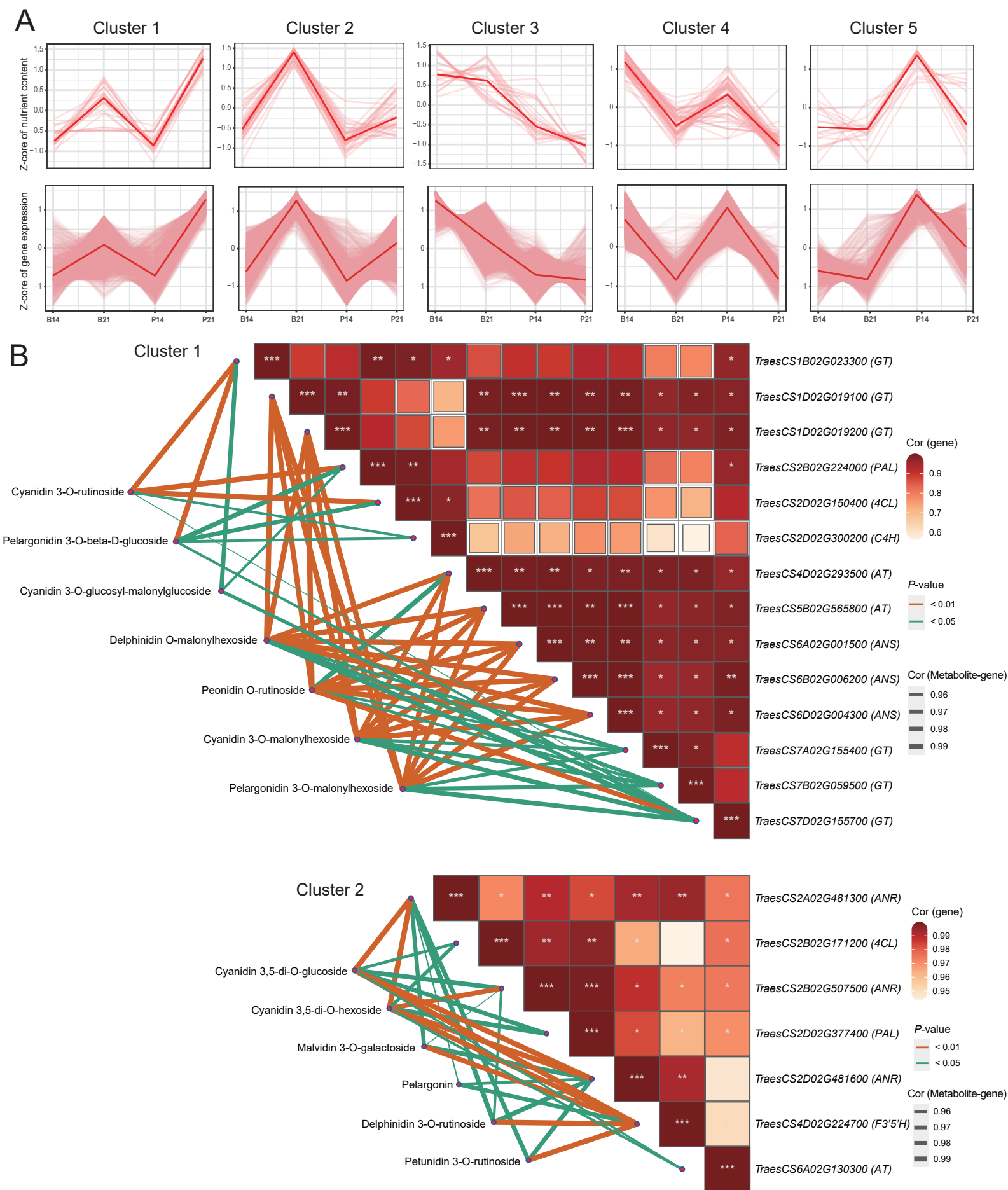


Fig. S7. (A) The dynamic changes in nutrient content and gene expression during the grain developmental stages. K-means clustering groups the nutrients (upper layer) and genes (lower layer) into five clusters. The x-axis shows four samples from two key grain developmental stages, and the y-axis represents the Z score per nutrient or gene. Detailed information are listed in supplementary table 12. (B) Correlation network between anthocyanin-related genes and anthocyanins. Statistical significance determined by one-sided t-tests ($***P < 0.001$, $**P < 0.01$, $*P < 0.05$). The thickness of the line indicates the correlation between anthocyanin content and gene expression. The square color's depth represents the correlation between gene and gene. The color of the line represents significance, green ($P < 0.05$) and orange ($P < 0.01$).