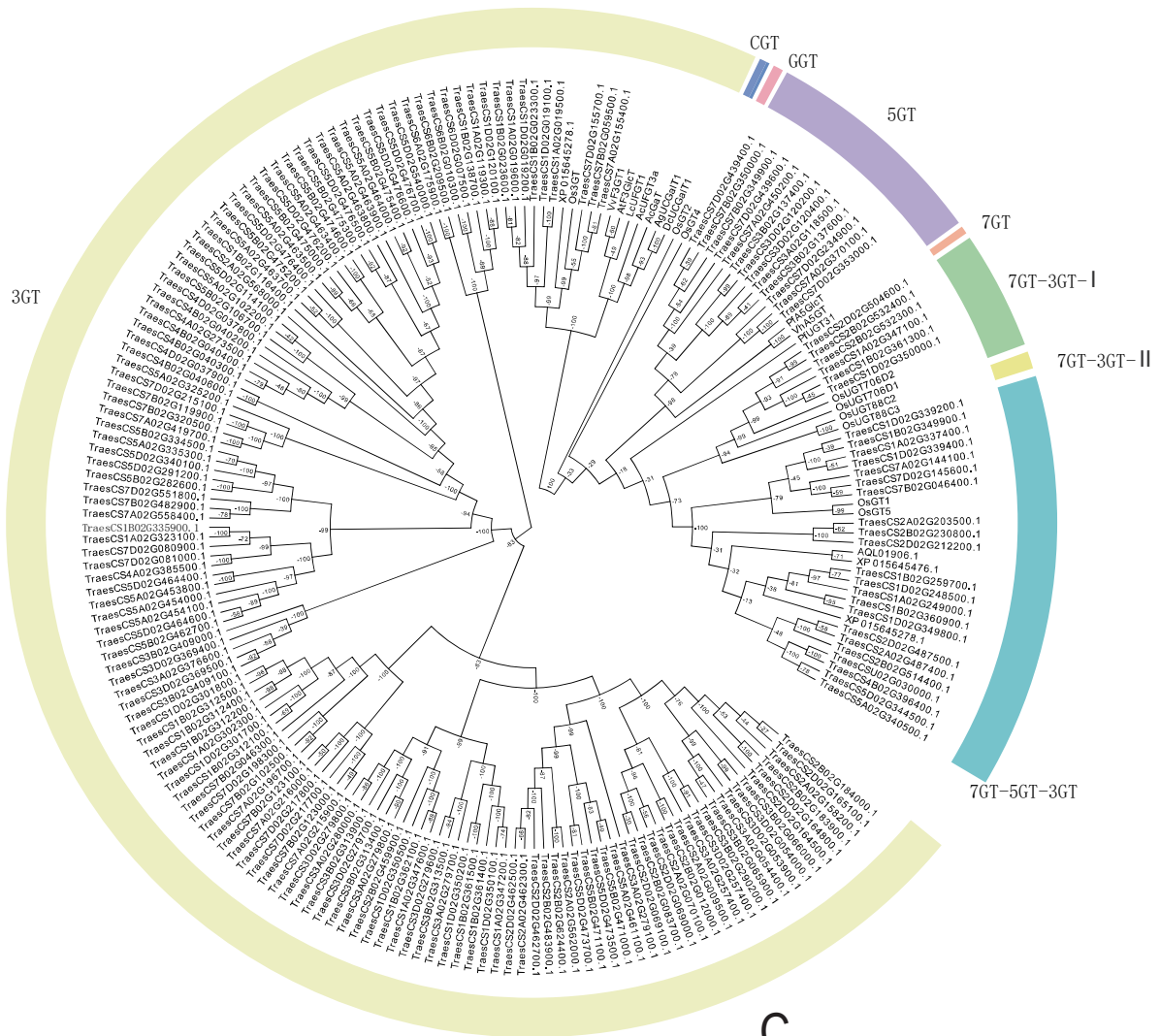
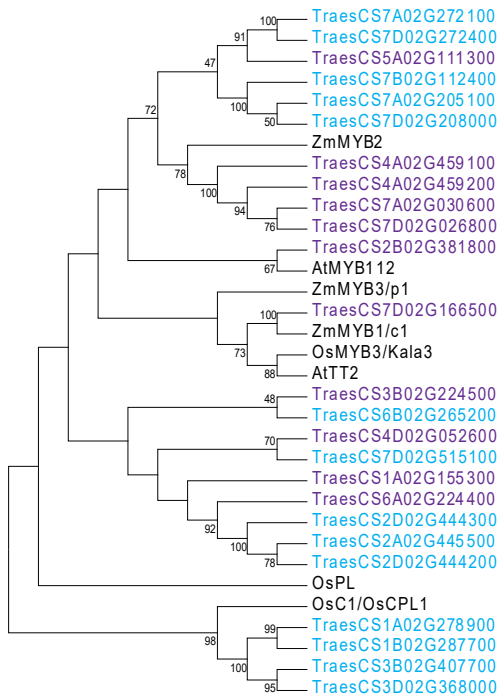


A



B



C

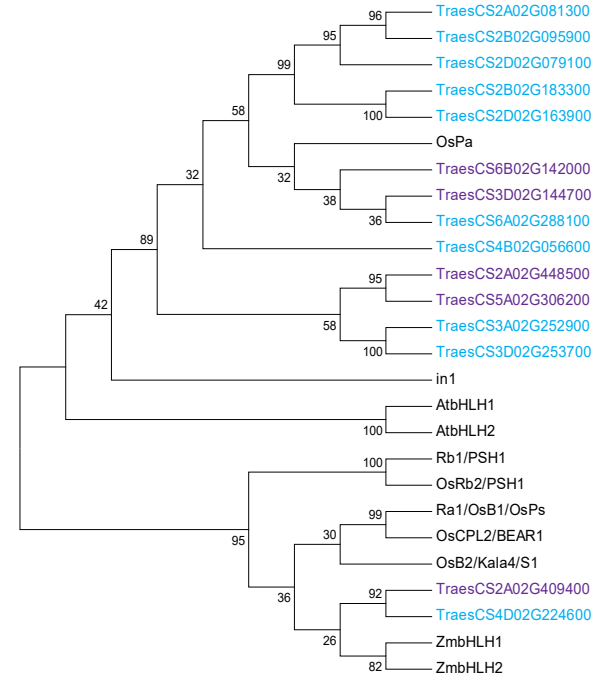


Fig. S8. (A) Phylogenetic tree analysis of genes encoding flavonoid glycosyltransferases potentially involved in wheat (obtained by predicting the function of the gene encoding the enzyme) and flavonoid glycosyltransferases reported in other plants. CGT, flavonoid C-glycosyltransferases; 3GT, flavonoid 3-O-glycosyltransferases; 5GT, flavonoid 5-O-glycosyltransferases; 7GT, flavonoid 7-O-glycosyltransferases; GGT, flavonoid glycoside glycosyltransferases; MGT, monolignol glycosyltransferase; 7GT-5GT-3GT, UGTs with at least one of 7-O-, 5-O-, and 3-O-glycosyltransferase activity; 7GT-3GT-I, group-I UGTs with at least one of 7-O- and 5-O-glycosyltransferase activity; 7GT-3GT-II, group-II UGTs with at least one of 7-O- and 5-O-glycosyltransferase activity. (B) Phylogenetic tree of MYBs transcription factors in the anthocyanin synthesis pathway of color wheat. (C) Phylogenetic tree of bHLHs transcription factors in the anthocyanin synthesis pathway of color wheat. Phylogenetic tree construction using MYBs and bHLHs from blue and purple wheat identified in Table S11 and from *Oryza sativa*, *Zea mays* and *Arabidopsis thaliana* for which relevant functions have been identified. Different colors represent different species, blue: blue wheat; purple: purple wheat; Multiple sequence alignment was performed using ClustalW program in MEGA7.0 software, and the phylogenetic tree was constructed using the Neighbor-joining (NJ) with 1000 bootstraps.