

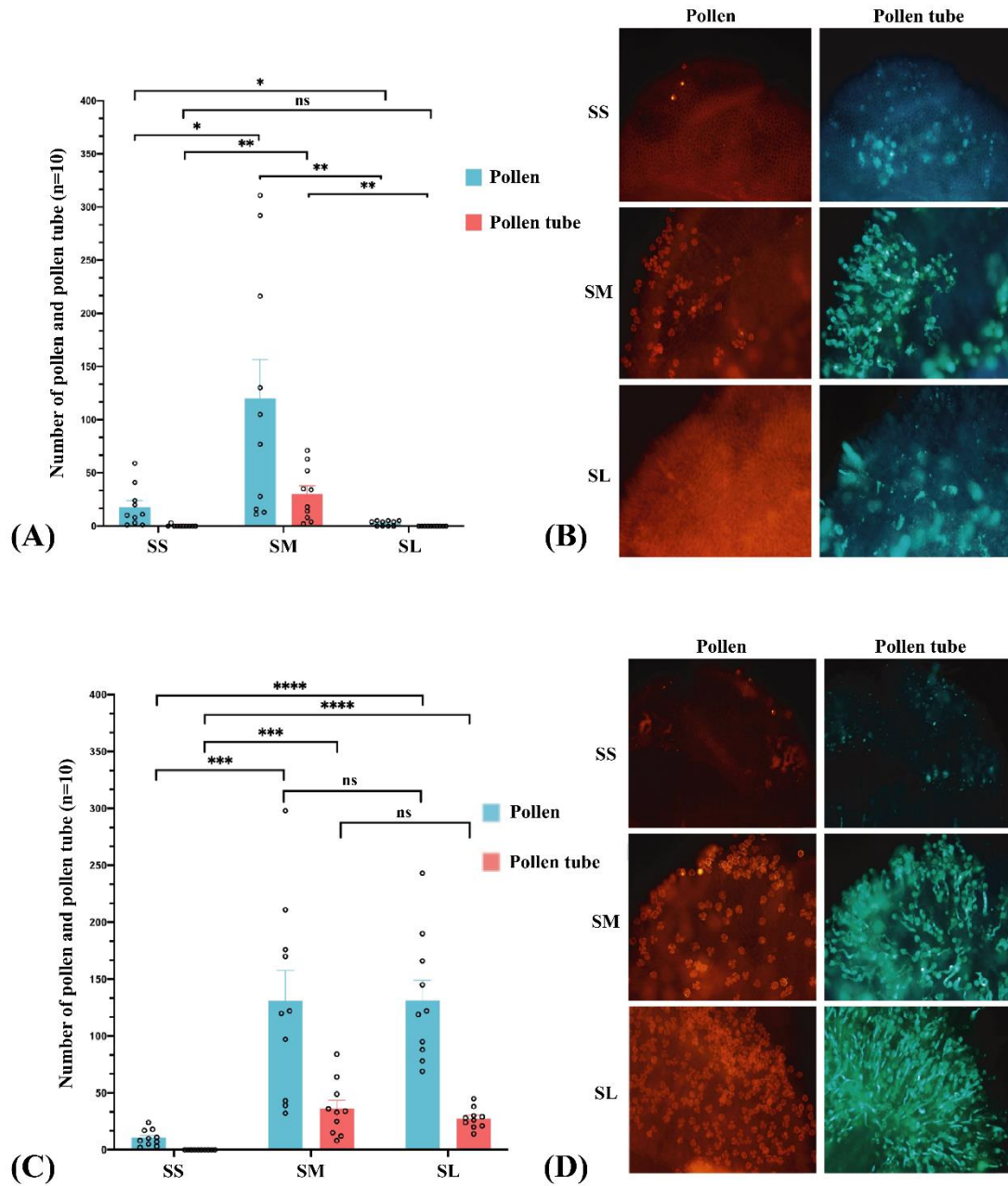


Figure S1. Observation of pollen and pollen tube number at stigma different developmental stages after self-incompatible (SI) and compatible pollination (CP). (A) Pollen and pollen tube number statistics. (B) Aniline blue staining of pollen and pollen tube after SI. (C) Pollen and pollen tube number statistics. (D) Aniline blue staining of pollen and pollen tube after CP. Asterisks indicate significant difference (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$ by Student's t-test), ns indicate no significant difference. Error bars represent the standard error of the mean ($n=10$). Scale bars=100 μ m.

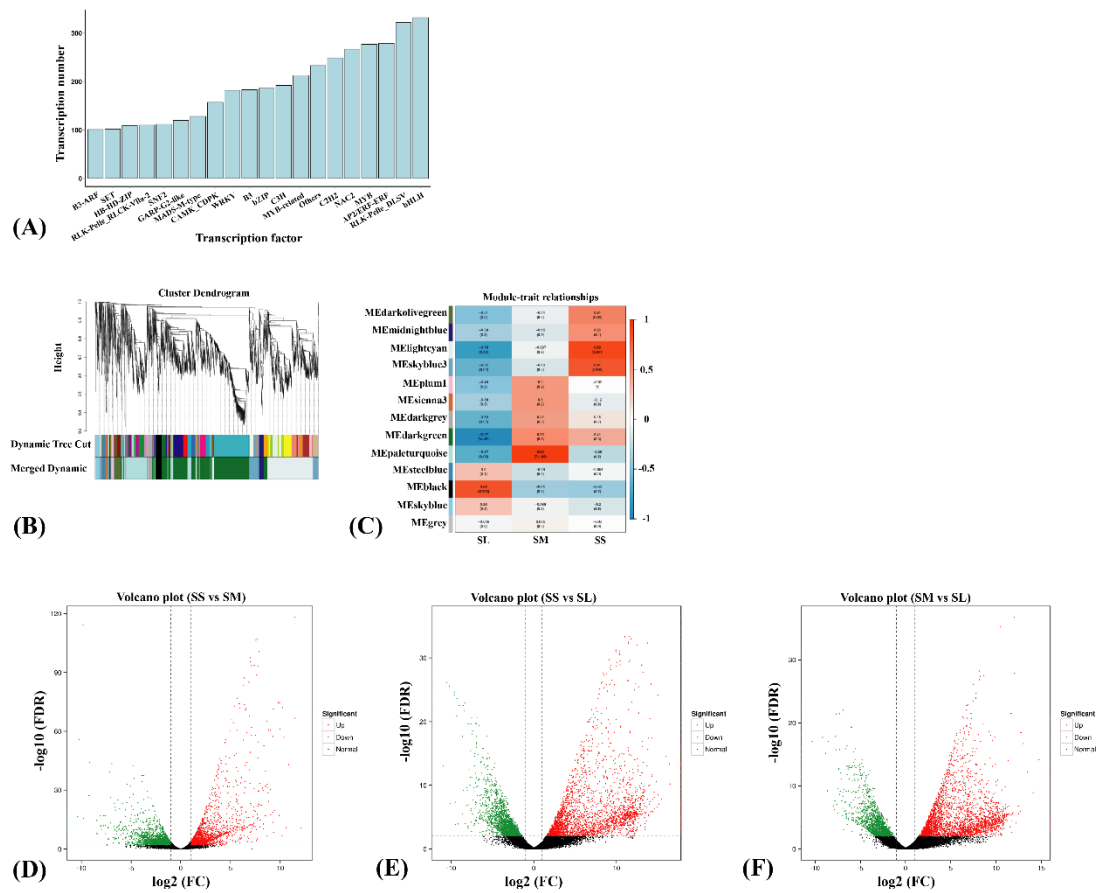


Figure S2. WGCNA analysis of TFs and prediction of DEGs. (A) Transcript number statistics of the top 20 TF families. (B) Hi-erarchical clustering tree of TFs by WGCNA. (C) Module-trait relationship analysis, the numbers inside the boxes were Pearson's correlation coefficient and their p-value in the brackets. Volcano plots show the statistics of DEGs in the three comparison groups (D-F). (D) SS vs SM. (E) SS vs SL. (F) SM vs SL.

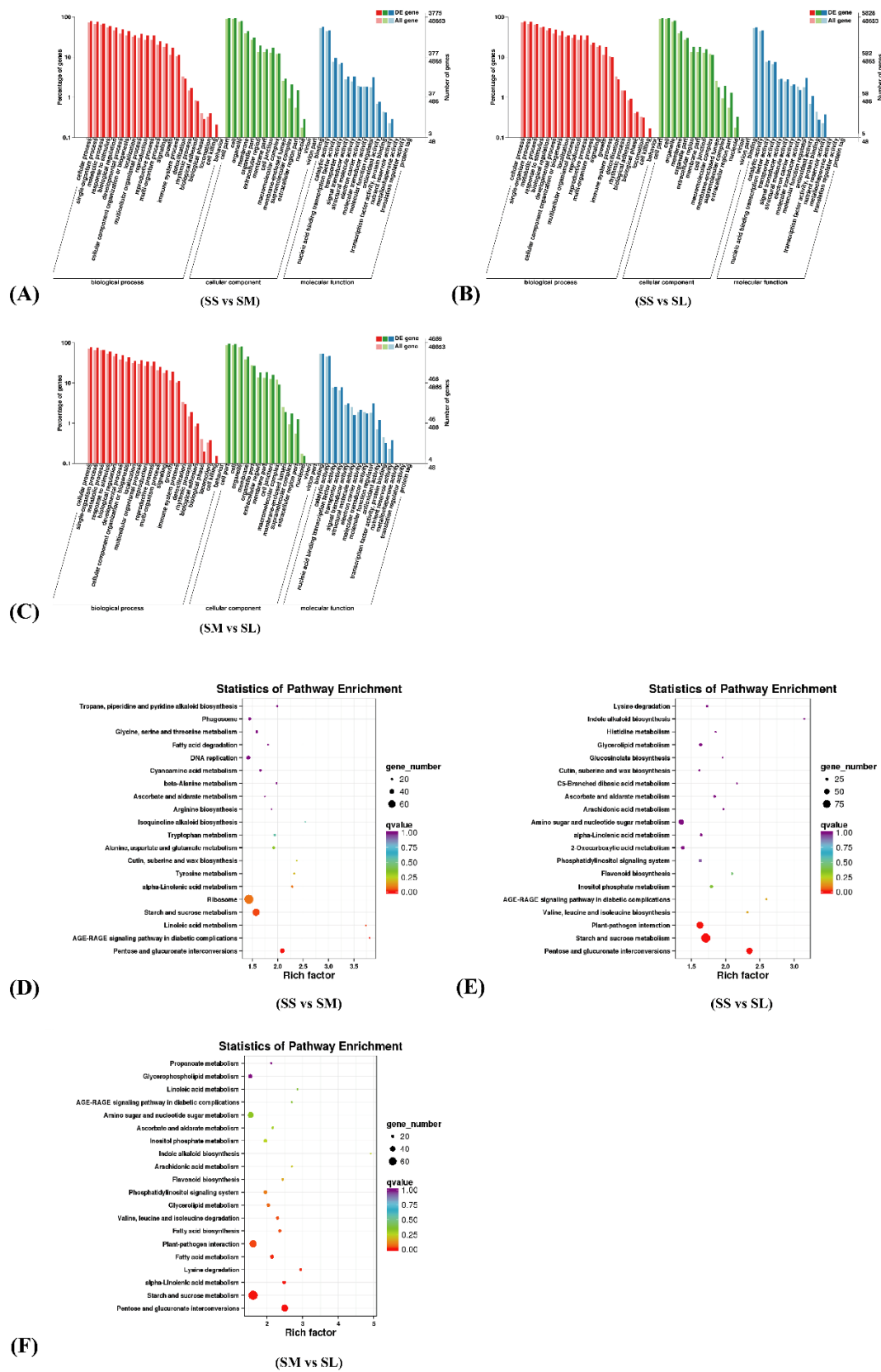


Figure S3. GO enrichment and KEGG enrichment statistics of DEGs in the three comparison groups. GO enrichment of DEGs (A-C). (A) SS vs SM. (B) SS vs SL. (C) SM vs SL. KEGG enrichment of DEGs (D-F). (D) SS vs SM. (E) SS vs SL. (F) SM vs SL.