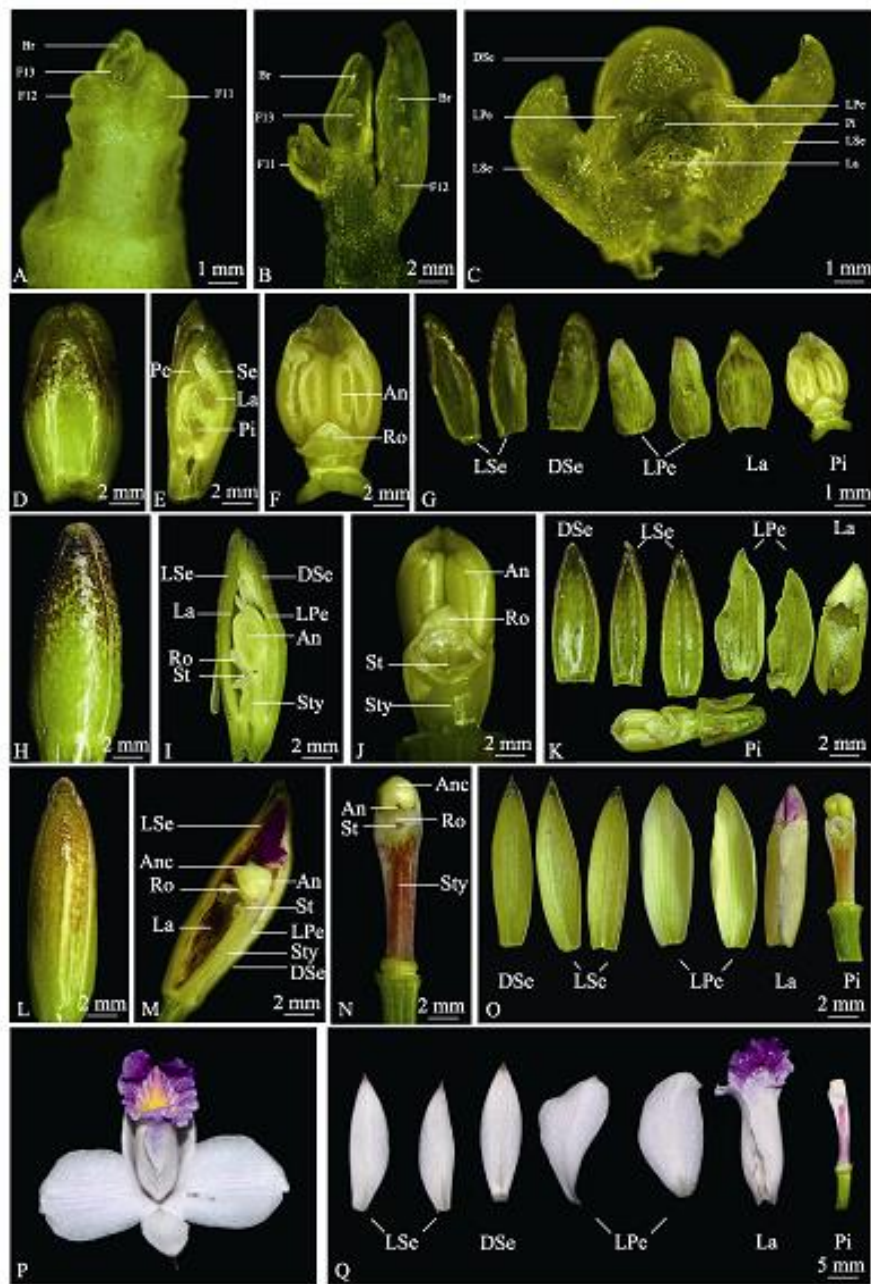
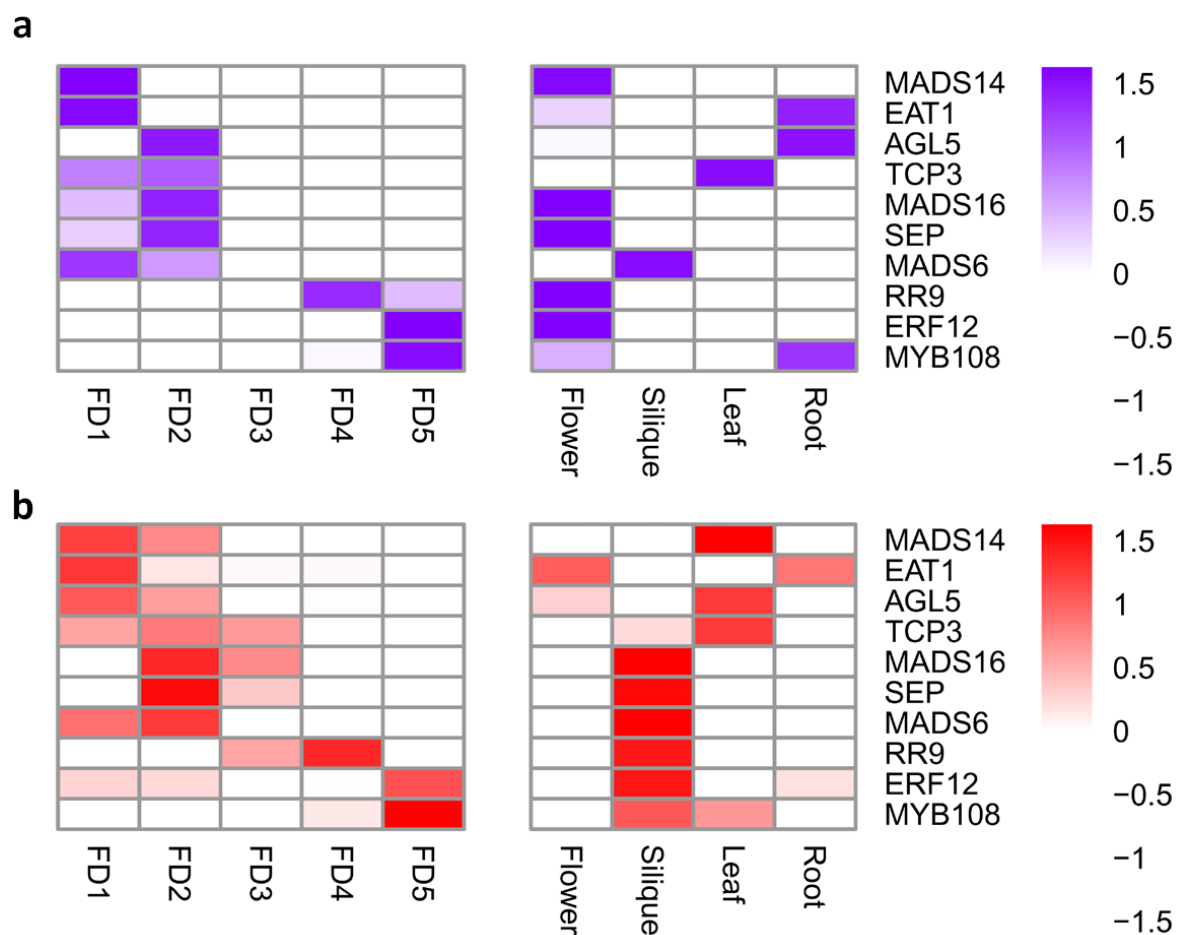


## Supplementary Materials



**Supplementary Figure S1.** Floral organ development and morphogenesis of *A. graminifolia*. **A–C:** Flower bud differentiation period 1; **D–G:** Sepal growth period 2; **H–K:** Pillar development period 3; **L–O:** Flower dyeing period 4; **P–Q:** Flowering period 5; **A:** The inflorescence; **B:** The inflorescence longitudinal section; **C:** Flower 1 (Fl 1); **D, H, L:** The whole flower bud; **E, I, M:** The longitudinal section of the flower bud; **F, J, N:** The pillar; **G, K, O, Q:** The organ anatomy; **P:** The flower; **Se:** Sepal; **LSe:** The lateral sepal; **DSe:** The dorsal sepal; **LPe:** Lateral petal; **La:** Labellum; **Pi:** Pillar; **Br:** Bract; **Fl 1, Fl 2, Fl 3:** Flower 1, Flower 2, Flower 3; **An:** Anther; **Ro:** Rostellum; **St:** Stigma; **Sty:** Style; **Anc:** Anther cap.



**Supplementary Figure S2.** Comparison of qRT-PCR expression intensities of selected TFs (a) with that of transcriptomic expression as FPKM (b).

**Supplementary Table S1.** Individual ratio (%) of annotation of DEGs related to flowering and hormonal regulation.

DB	Ratio (%)
GO	67.73
KEGG	36.42
Pfam	64.18
SwissProt	56.54
eggNOG	74.37
NR	72.29