



**Supplementary Fig. 3.** Luciferase activity assay for promoters of *WRKY33* (A) and *ORA59* (B) in *AtWRKY55-OE* plants. *pWRKY33-LUC* or *pORA59-LUC* was transfected into protoplasts from wild-type and *WRKY55-OE* plants (A, B). The protoplasts were analyzed 24 h after transfection to quantify the relative LUC activity. R-LUC was co-transfected to normalize the transfection efficiency, and the normalized value (F-LUC/R-LUC) of Col-0 sample was set to 1. (C) *In silico* promoter analysis of *WRKY33* and *ORA59*. 1 kb of the upstream region for *WRKY33* and *ORA59* was utilized to find putative WRKY transcription factor binding sites. Analysis was performed via PlantPAN3.0. (D) *In silico* promoter analysis of *WRKY55* for Myc2 (bHLH) DNA binding site. Analysis was performed as in (C).