

Figure S2. Effects of *MeFER4* overexpression on drought stress tolerance in *Arabidopsis*. A. Phenotypic comparison of wild-type and *MeFER4*-overexpressing (OE) lines (OE-6, OE-7, and OE-10) under normal (CK) and drought stress conditions. Plants were subjected to drought stress by withholding water for 23 days. B. Survival percentage of wild-type and OE lines after 23 days of drought stress. Data represent the mean \pm SD (n = 3 biological replicates). Asterisks indicate significant differences compared to wild-type (*P < 0.05). C. Phenotypic differences in wild-type and *MeFER4*-overexpressing *Arabidopsis* lines (OE-6, OE-7, OE-10) under control (CK) and drought stress conditions. Left: Leaf coloration and phenotype under CK and drought stress. Right: DAB staining for ROS accumulation in wild-type and transgenic lines, indicating oxidative stress under drought stress. Scale bar = 1 cm. D. Average optical density (AOD) values of detached leaves after drought stress. Data represent the mean \pm SD (n = 3 biological replicates). Asterisks indicate significant differences compared to wild-type (*P < 0.05).