

S8 Figure: Phylogenetic tree of the angiosperm HD-ZIP1 family.

Phylogeny of the HD-Zip1 type homeodomain genes in representative angiosperm genomes (*Solanum lycopersicum*, *Oryza sativa*, *Zea mays*, and *Arabidopsis thaliana*) and the *D. lotus* genome. The 175 HD-ZIP1 genes clustered into 8 major clades (Clade I-VIII), which each included at least one homolog from all 5 species used in this study (see Materials and Methods). It is important to note that the root branches of clades VI and VII were not statistically significant though (32/100 and 28/100, respectively). *MeG* and *SiMeG* from persimmon, the three closest orthologs from Arabidopsis, *Vrs1* from barley and *LOC_Os07g39320* from rice were all nested within clade IV (colored in light green). No other persimmon paralog nested into clade IV (bootstrap = 100/100). This suggested that the other persimmon paralogs had diverged from *MeG* and *SiMeG* before the divergence of the angiosperms (or the time of divergence between monocots and dicots).

