



**Supplemental Fig. S3 Analysis of the trends in sORFs evolution.** **A** – The percentage of each type of sORF among sORFs having homologs in ten plant species. IncRNA-sORFs were underrepresented among sORFs having homologs in the ten species examined. The relative enrichment of conserved CDS-sORFs and interlaced-sORFs found in the two closest species of *P. patens*, *C. purpureus* and *S. fallax*, resulted from a significant reduction in the number of uORFs and dORFs; **B** – Statistical analysis (by Fisher's exact test) of differences between the number of conservative sORFs in each of ten species and the initial dataset. We found significantly fewer uORFs and dORFs in the two closest species, *C. purpureus* and *S. fallax*, whereas CDS-sORFs were significantly overrepresented in these species (Fisher's exact test,  $P < 2.2 \times 10^{-16}$ );