



**Figure S11.** Phylogenetic analysis of DCL proteins from *P. lambertiana* and several plant species, including three conifers (*Pinus taeda* (Ptaeda), *Picea abies* (Pabies), *Picea glauca* (Pglauca) and *Pinus tabuliformis* (Ptabuliformis)), a monocot (*Oryza sativa* (Osativa)), a dicot (*Arabidopsis thaliana* (Athaliana)), *Amborella trichopoda* (Atrichopoda), *Physcomitrella patens* (Ppatens) and *Selaginella moellendorffii* (Smoellendorffii). All DCL proteins grouped according the main four described DCL types. DCL1 clade was split in three subgroups, one corresponding to conventional plant DCL1s, other potentially being conifer-specific DCL1s (grey shaded), and the third one corresponding to truncated DCL1 variants of ancient plants.

260  
262  
264