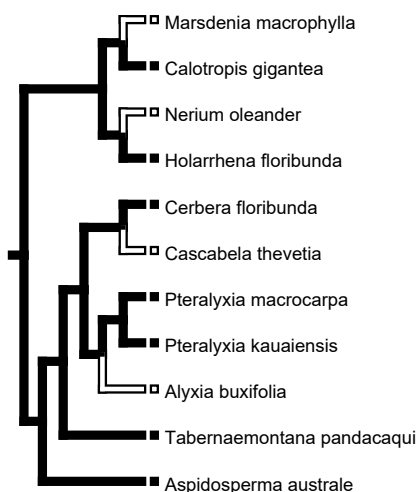
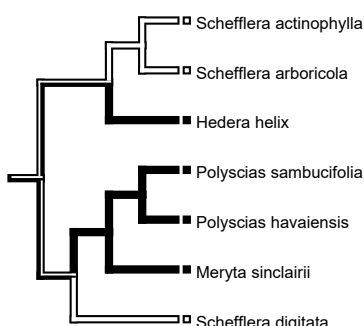


Supporting information Fig. S1: Phylogenetic distribution of the simple and compound type of sieve element end walls in families where both types occur. White bars indicate simple end walls, black bars indicate compound end walls and grey bars indicate the occurrence of both types. Phylogenies based on Apocynaceae: Endress & Bruyns (2000), Araliaceae: Lowry *et al.* (2004), Celastraceae: Wenqing & Xinzeng (1993), Euphorbiaceae: Tokuoka (2007), Fabaceae: Sirichamorn *et al.* (2012), Brown *et al.* (2008), Fagaceae: Manos *et al.* (2001), Lamiaceae: Scheen *et al.* (2010), Malpighiaceae: Davis *et al.* 2001, Malvaceae: Bayer *et al.* (1999), Myrtaceae: Wilson *et al.* (2005), Rosaceae: Potter *et al.* (2007), Rubiaceae: Bremer (2009), Salicaceae: The UniProt Consortium (2015), Sapindaceae: Harrington (2005), Vitaceae: Jansen *et al.* (2006). The corresponding tree for Bignoniaceae can be found in Pace *et al.* (2015).

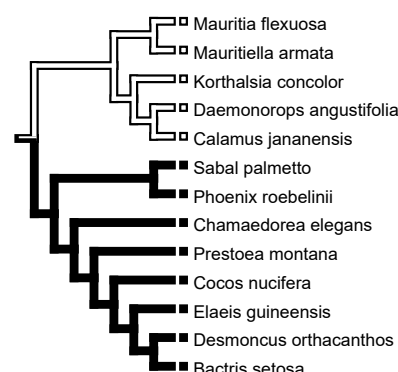
Apocynaceae



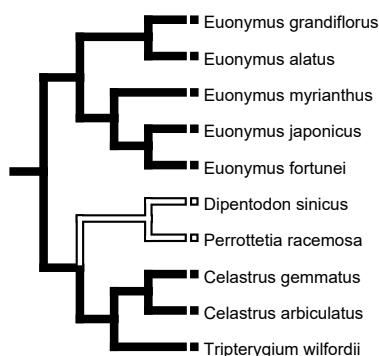
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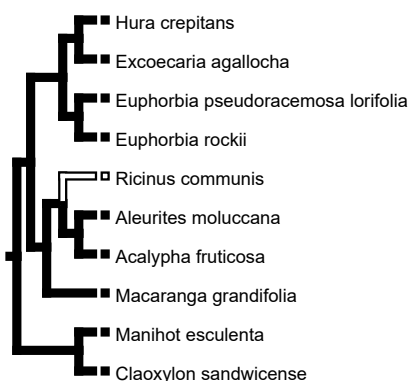
Areaceae



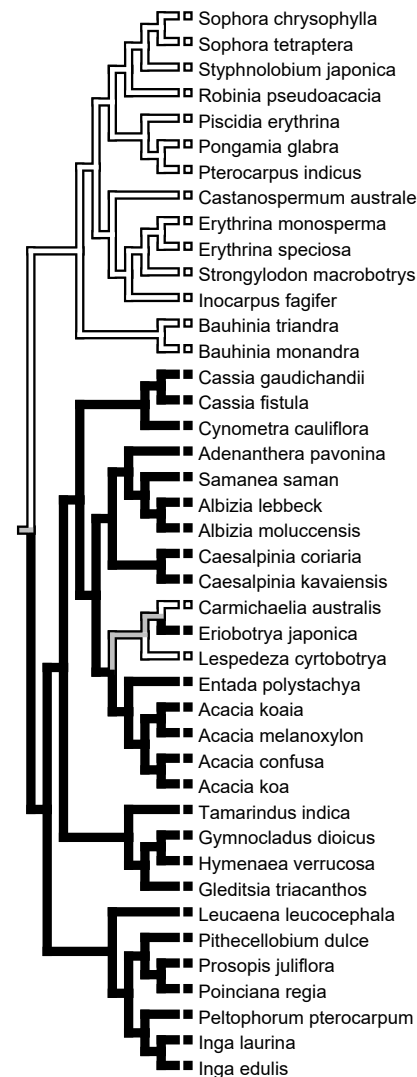
Celastraceae



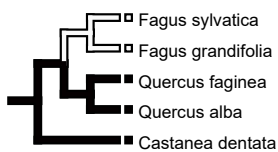
Euphorbiaceae



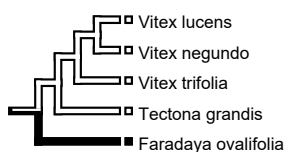
Fabaceae



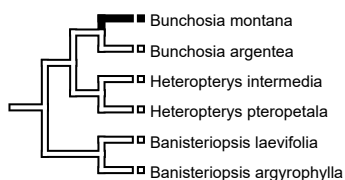
Fagaceae



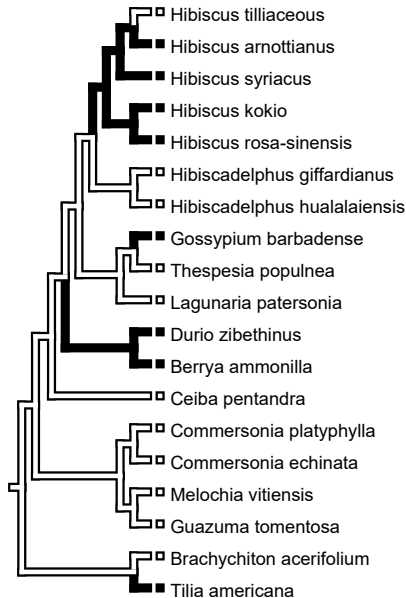
Lamiaceae

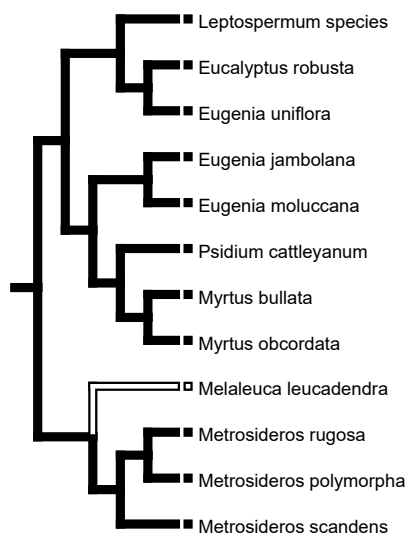
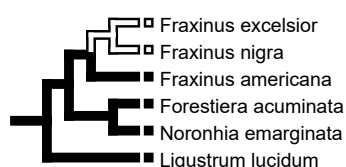
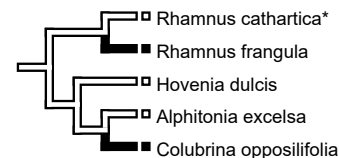
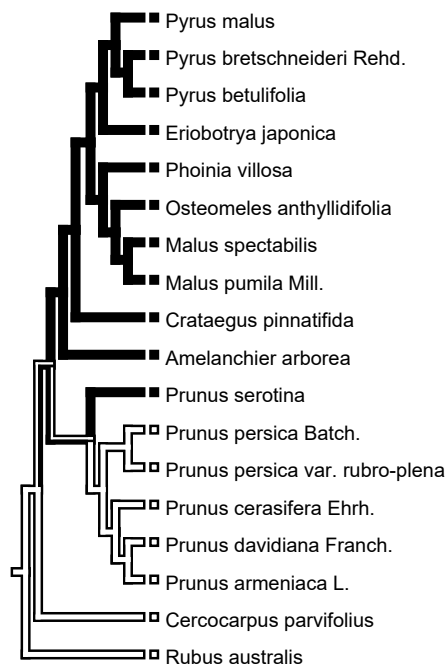
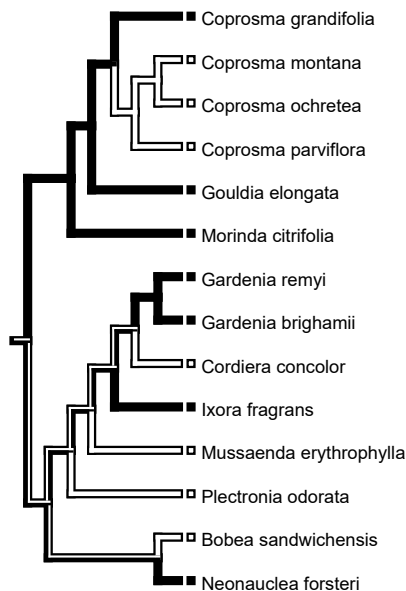
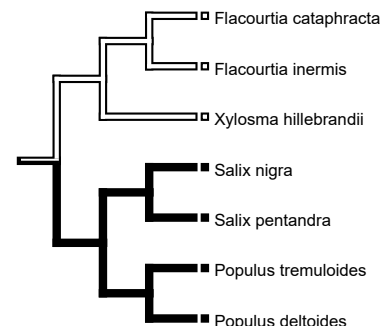
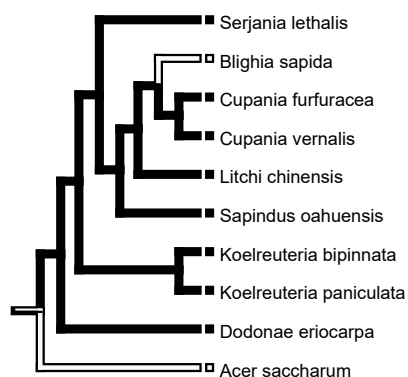
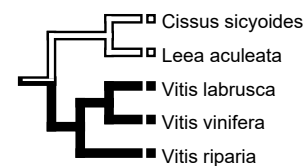


Malpighiaceae



Malvaceae



Myrtaceae**Oleaceae****Rhamnaceae****Rosaceae****Rubiaceae****Salicaceae****Sapindaceae****Vitaceae****References**

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