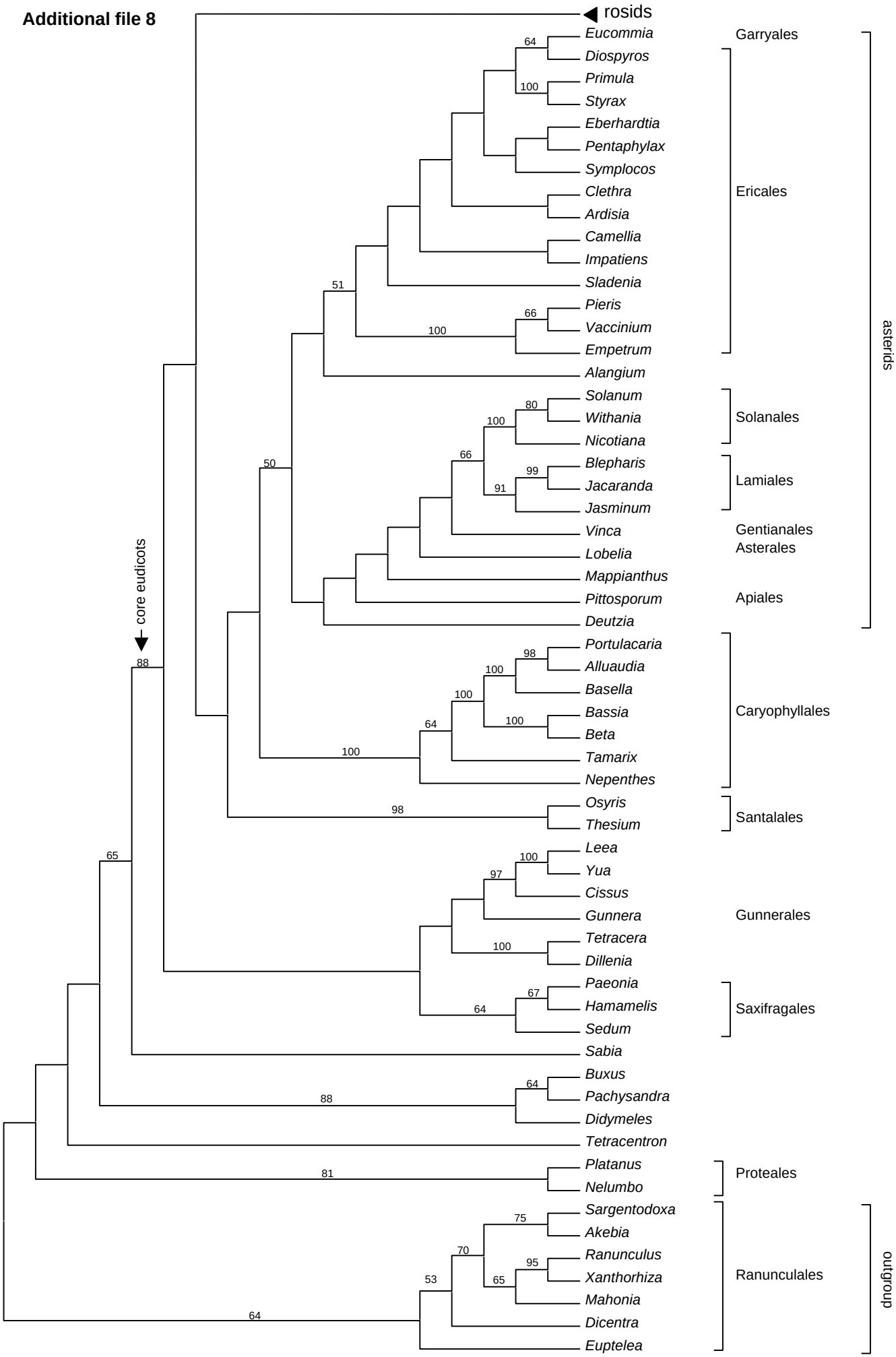
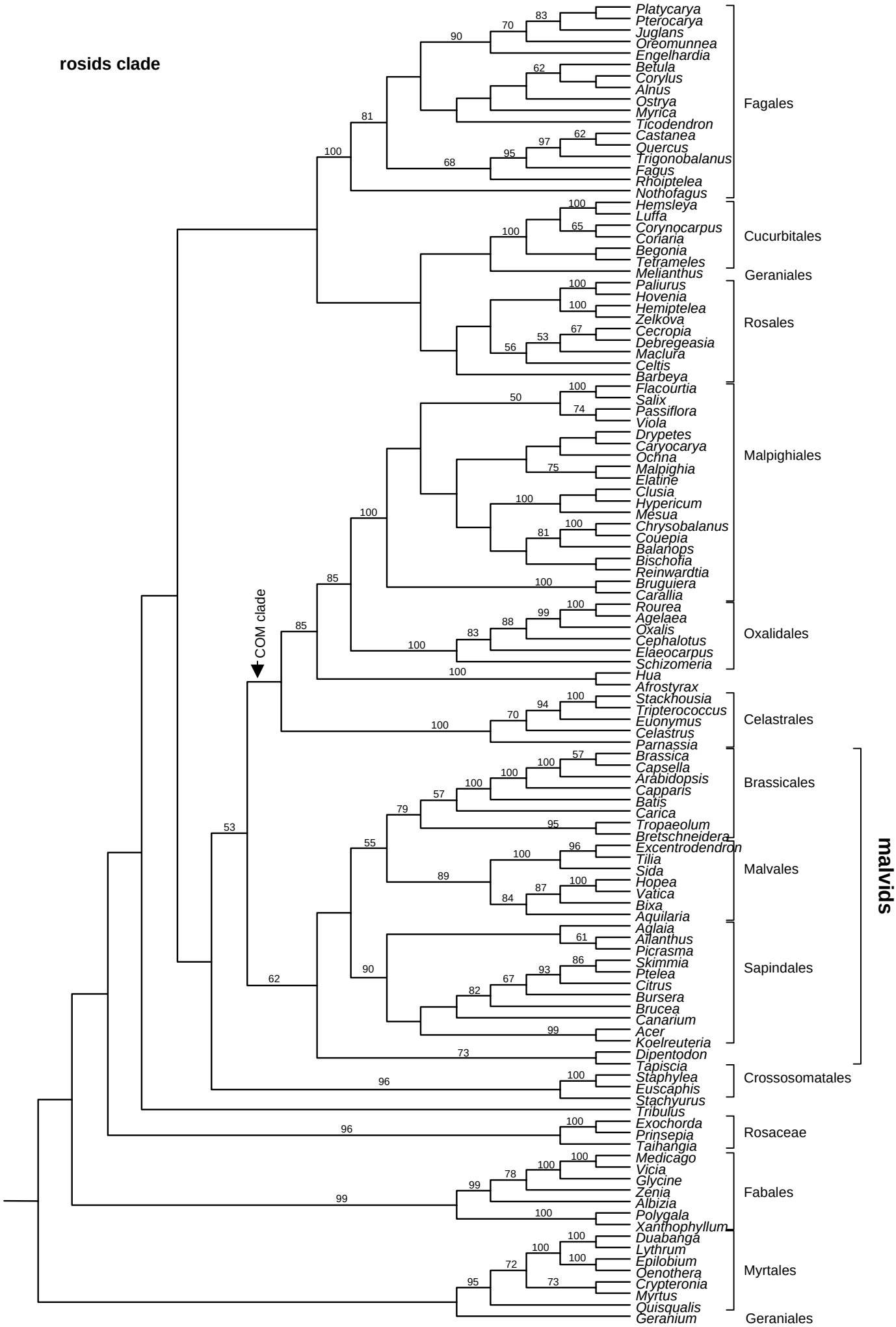
**Additional file 8**




rosids clade
COM clade
Platycarya
Pterocarya
Juglans
Oreomunnea
Engelhardia
Betula
Corylus
Alnus
Ostrya
Myrica
Ticodendron
Castanea
Quercus
Trigonobalanus
Fagus
Rhoiptelea
Nothofagus
Fagales
Hemsleya
Luffa
Corynocarpus
Coriaria
Begonia
Tetrameles
Cucurbitales
Melianthus
Geraniales
Paliurus
Hovenia
Hemiptelea
Zelkova
Cecropia
Debregeasia
Maclura
Celtis
Barbeya
Rosales
Flacourtia
Salix
Passiflora
Viola
Drypetes
Caryocarya
Ochna
Malpighia
Elatine
Clusia
Hypericum
Mesua
Chrysobalanus
Couepia
Balanops
Bischofia
Reinwardtia
Bruguiera
Carallia
Malpighiales
Rourea
Agelaea
Oxalis
Cephalotus
Elaeocarpus
Schizomeria
Oxalidales
Hua
Afrostyrax
Stackhousia
Tripterococcus
Euonymus
Celastrus
Celastrales
Parnassia
Brassica
Capsella
Arabidopsis
Capparis
Batis
Carica
Tropaeolum
Brassicales
Bretschneidera
Excentrodendron
Tilia
Sida
Hopea
Vatica
Bixa
Aquilaria
Malvales
Aglaia
Ailanthus
Picrasma
Skimmia
Ptelea
Citrus
Bursera
Brucea
Canarium
Acer
Koelreuteria
Dipentodon
Sapindales
Tapiscia
Staphylea
Euscaphis
Crossosomatales
Stachyurus
Tribulus
Exochorda
Prinsepia
Taihangia
Rosaceae
Medicago
Vicia
Glycine
Zenia
Albizia
Polygala
Xanthophyllum
Fabales
Duabanga
Lythrum
Epilobium
Oenothera
Crypteronia
Myrtus
Quisqualis
Geranium
Myrtales
Geraniales
malvids