BioGeoBEARS DEC
ancstates: global optim, 5 areas max. d=0.0017; e=0.0016; j=0; LnL=−209.03

Endressianthus_miraensis
Normanthus_miraensis
Bedellocarpus_serialis
Dahlgrenianthus_suecicus
Salocarpus_minimus
Caryanthus_knoblochii
Manningia_crassa
Antiquocarya_verruculosa
Gymnostoma_nobile
Ceuthostoma_terminale
Casuarina_equisetifolia
Allocasuarina_verticillata
Ticodendron_incognitum
Ferrignocarpus_bivalvis
Betula_leopoldae
Betula_pendula
Alnus_incana
Cranea_wyomingensis
Palaeocarpinus_dakotensis
Asterocarpinus_perplexans
Corylus_avellana
Ostryopsis_davidiana
Ostrya_carpinifolia
Carpinus_betulus
Cascadiacarpa_spinosa
Canacomyrica_monticola
Comptonia_peregrina
Myrica_gale
Morella_cerifera
Rhoiptelea_chiliantha
Alnusclarnoensis
Casholdia_croptera
Paleooreomunnea_stoneana
Palaeocarya_clarnensis
Engelhardia_spicata
Alfaropsis_roxburghiana
Oreomunnea_mexicana
Alfaroa_manningii
Paleoplatycarya_wingii
Platycarya_strobilacea
Hooleya_lata
Polyptera_manningii
Crucptera_simpsonii
Beardia_vancouverensis
Carya_ovata
Juglans_mandshurica
Pterocarya_stenoptera
Cyclocarya_paliurus
Soepadmoa_cupulata
Nothofagus_fusca
Nothofagus_baumanniae
Nothofagus_dombeyi
Nothofagus_glauca
Nothofagus_crenata
Nothofagus_pumilio
Nothofagus_codonandra
Nothofagus_aequilateralis
Nothofagus_perryi
Nothofagus_alpina
Nothofagus_betuloides
Nothofagus_obliqua
Nothofagus_nitida
Nothofagus_cunninghamii
Nothofagus_antarctica
Nothofagus_balansae
Nothofagus_alessandrii
Protofagacea_allonensis
Antiquacupula_sulcata
Archaefagacea_futabensis
Pseudofagus_idahoensis
Fagus_sylvatica
Trigonobalanoidea_americana
Formanodendron_doichangensis
Colombobalanus_excelsa
Contracuparius_nantsvillensis
Fagopsis_longifolia
Castaneoidea_columbiana
Trigonobalanus_verticillata
Quercus_rubra
Notholithocarpus_densiflorus
Lithocarpus_henryi
Chrysolepis_sempervirens
Castanopsis_tibetana
Castanea_seguinii

120   100   80   60   40   20   0

Millions of years ago
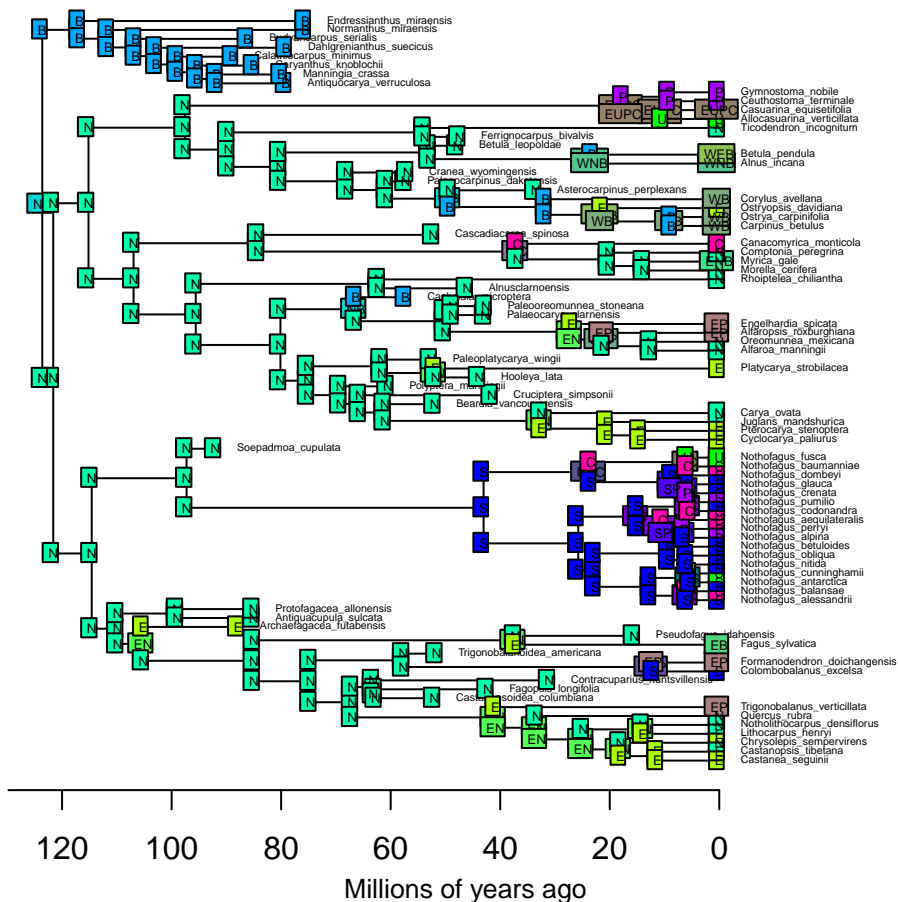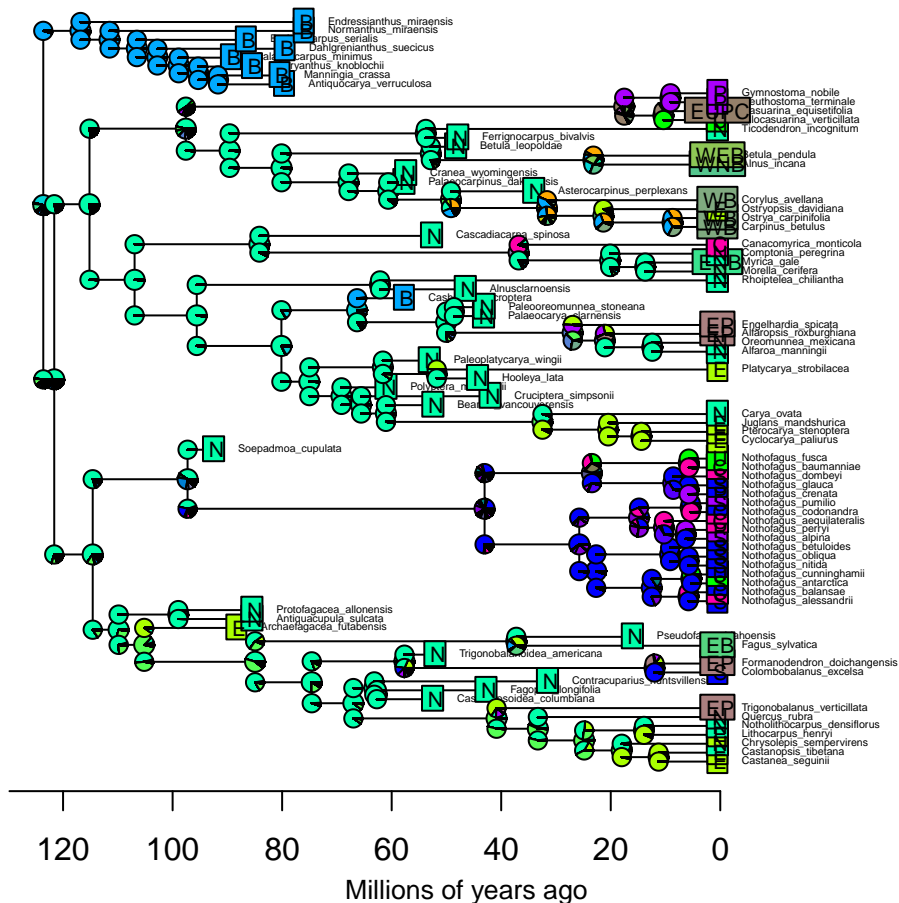
BioGeoBEARS DEC
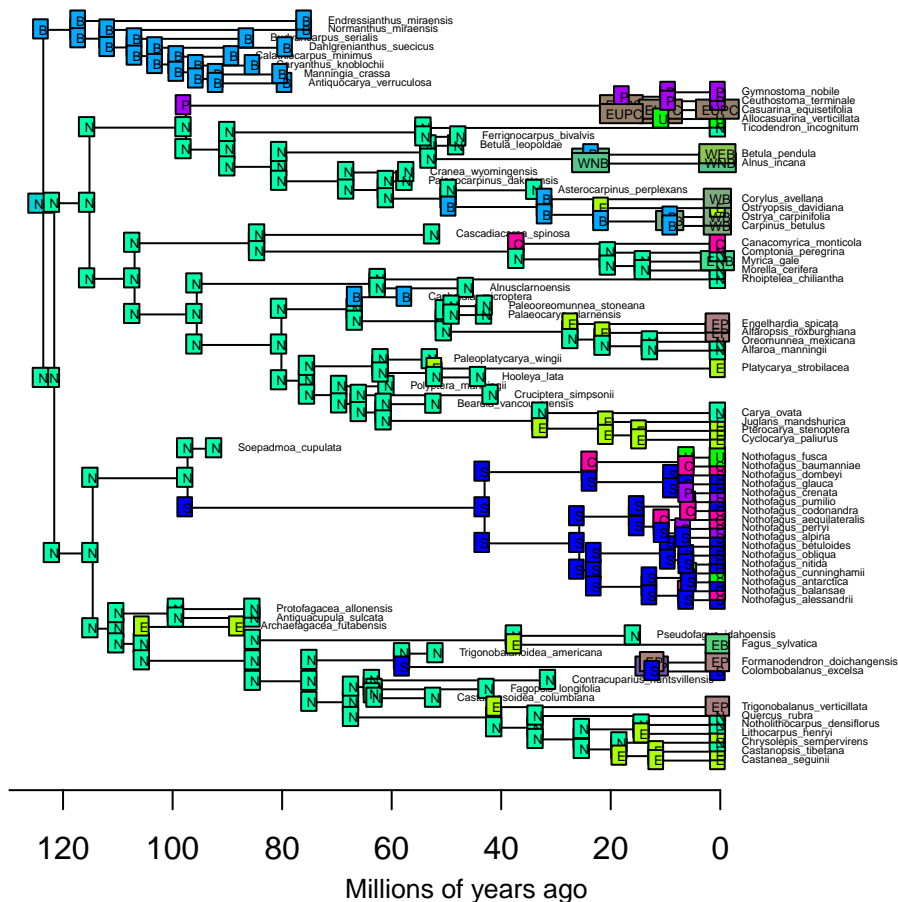**ancstates: global optim, 5 areas max. d=0.0017; e=0.0016; j=0; LnL=−209.03**

BioGeoBEARS DEC+J
ancstates: global optim, 5 areas max. d=9e−04; e=0; j=0.0257; LnL=−188.57

Endressianthus_miraensis
Normanthus_miraensis
Bedascarpus_serialis
Dahlgrenianthus_suecicus
Caryanthus_knoblochii
Salaciocarpus_minimus
Manningia_crassa
Antiquocarya_verruculosa
Gymnostoma_nobile
Ceuthostoma_terminale
Casuarina_equisetifolia
Allocasuarina_verticillata
Ticodendron_incognitum
Ferrignocarpus_bivalvis
Betula_leopoldae
Betula_pendula
Alnus_incana
Cranea_wyomingensis
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Hooleya_lata
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Carya_ovata
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Cyclocarya_paliurus
Soepadmoa_cupulata
Nothofagus_fusca
Nothofagus_baumanniae
Nothofagus_dombeyi
Nothofagus_glauca
Nothofagus_crenata
Nothofagus_pumilio
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Nothofagus_aequilateralis
Nothofagus_perryi
Nothofagus_alpina
Nothofagus_betuloides
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Chrysolepis_sempervirens
Castanopsis_tibetana
Castanea_seguinii

Millions of years ago

BioGeoBEARS DEC+J
ancstates: global optim, 5 areas max. d=9e−04; e=0; j=0.0257; LnL=−188.57