

Supplement 1.1–1.5

Phylogenetic biogeography of Hamamelidaceae s. l. based on molecular data.

Alexey V. Bobrov, Maxim S. Roslov, Mikhail S. Romanov

Supplement 1.1 Species and GenBank accession numbers (Source: GenBank, 2019).

Species	<i>ITS–5.8S rRNA</i>	<i>matK</i>	<i>rbcL</i>	<i>trnL–trnF</i>	<i>psaA–ycf3</i>	<i>psbA–trnH</i>
<i>Itea chinensis</i> Hook. & Arn.	KP092690.1	KC737245.1	KC737397.1	MH191391.1	MH191391.1	KP095319.1
<i>Paeonia brownii</i> Douglas ex Hook.	U27674.1	AF033588.1	AF274592.1	MH191385.1	MH191385.1	MH191385.1
<i>Paeonia lactiflora</i> Pall.	U27682.1	AF033597.1	KT944713.1	MG897127.1	MG897127.1	KU525672.1
<i>Cercidiphyllum japonicum</i> Siebold & Zucc. ex J.J.Hoffm. & J.H.Schult.bis	HQ652479.1	KC737246.1	JN541237.1	AM397171.1	AF377996.1	AB445234.1
<i>Daphniphyllum oldhamii</i> (Hemsl.) K.Rosenthal	KP093233.1	KC737244.1	KC737396.1	MH191390.1	MH191390.1	KP095969.1
<i>Altingia chinensis</i> (Champ.) Oliv. ex Hance	AF133232.1	AF133225.1	DQ352376.1	DQ352202.1	AF304542.1	KP095964.1
<i>Altingia excelsa</i> Noronha	AF304525.1	AF304520.1	DQ352374.1	DQ352225.1	AF304533.1	EU595859.1
<i>Altingia gracilipes</i> Hemsl.	AF133233.1	AF133223.1	DQ352379.1	DQ352205.1	AF304535.1	–
<i>Altingia obovata</i> Merr. & Chun	AF133234.1	AF133224.1	DQ352377.1	DQ352204.1	AF304540.1	EU595862.1

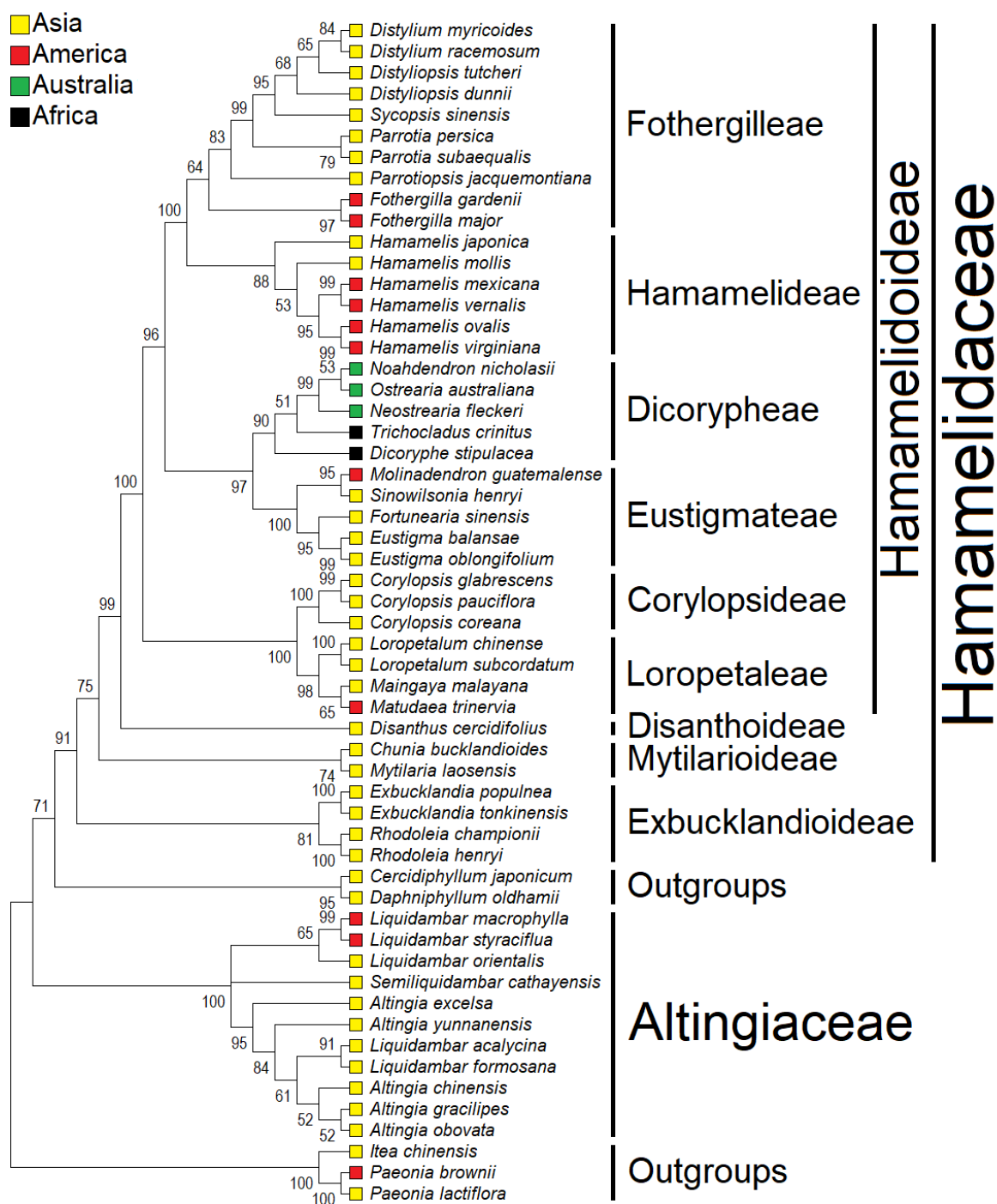
Species	<i>ITS-5.8S rRNA</i>	<i>matK</i>	<i>rbcL</i>	<i>trnL-trnF</i>	<i>psaA-ycf3</i>	<i>psbA-trnH</i>
<i>Altingia yunnanensis</i> Rehder & E.H.Wilson	GU576644.1	GU576679.1	DQ352378.1	DQ352211.1	DQ352242.1	GU576748.1
<i>Liquidambar acalycina</i> H.T.Chang	AF133231.1	AF015649.1	DQ352380.1	DQ352215.1	DQ352246.1	GU576771.1
<i>Liquidambar formosana</i> Hance	AF133230.1	AF015650.1	DQ352384.1	DQ352220.1	AF304539.1	KP095966.1
<i>Liquidambar macrophylla</i> Oerst.	–	–	DQ352382.1	DQ352218.1	DQ352249.1	–
<i>Liquidambar orientalis</i> Mill.	AF133229.1	AF015651.1	DQ352383.1	DQ352222.1	DQ352253.1	EF138729.1
<i>Liquidambar styraciflua</i> L.	AF133227.1	AF015652.1	AF119181.1	DQ352217.1	AF304531.1	GU576773.1
<i>Semiliquidambar cathayensis</i> H.T.Chang	AF133235.1	AF133226.1	KX527048.1	DQ352199.1	AF304536.1	–
<i>Chunia bucklandioides</i> H.T.Chang	AF162211.1	AF108466.1	MG644608.1	EF456729.1	MG644608.1	MG644608.1
<i>Corylopsis coreana</i> Uyeki	AY726625.1	MG835449.1	MG835449.1	MG835449.1	MG835449.1	MG835449.1
<i>Corylopsis glabrescens</i> Franch. & Sav.	AF127516.1	AB236993.1	AB237027.1	GU576816.1	GU576715.1	GU576749.1
<i>Corylopsis pauciflora</i> Siebold & Zucc.	AB299314.1	AB236994.1	AB237030.1	AF147465.1	DQ352363.1	AB237077.1
<i>Dicoryphe stipulacea</i> J.St.-Hil.	GU576646.1	AF013040.1	–	AF147466.1	–	GU576750.1
<i>Disanthus cercidifolius</i> Maxim.	AF127507.1	AF128826.1	AF081069.1	AF147467.1	GU576716.1	GU576751.1
<i>Distyliopsis dunnii</i> (Hemsl.) P.K.Endress	KP093236.1	KP093939.1	–	–	–	KP095976.1
<i>Distyliopsis tutcheri</i> (Hemsl.) P.K.Endress	AH005557.2	AF013042.1	–	AF147470.1	–	–
<i>Distylium myricoides</i> Hemsl.	AF074249.1	GU576683.1	AM183408.1	AF147468.1	GU576717.1	–
<i>Distylium racemosum</i> Siebold & Zucc.	GU576648.1	AF013041.1	AF061998.1	AF147469.1	–	KP095971.1

Species	<i>ITS-5.8S rRNA</i>	<i>matK</i>	<i>rbcL</i>	<i>trnL-trnF</i>	<i>psaA-ycf3</i>	<i>psbA-trnH</i>
<i>Eustigma balansae</i> Oliv.	KP093235.1	HQ415379.1	–	–	–	KP095972.1
<i>Eustigma oblongifolium</i> Gardner & Champ.	AF127518.1	AF013043.1	–	AF147471.1	–	KJ686840.1
<i>Exbucklandia populnea</i> (R.Br. ex Griff.) R.W.Br.	GU576649.1	AF128831.1	AF081071.1	AF147472.1	GU576718.1	GU576752.1
<i>Exbucklandia tonkinensis</i> (Lecomte) H.T.Chang	GU576650.1	AF128832.1	DQ352372.1	DQ352198.1	GU576719.1	GU576753.1
<i>Fortunearia sinensis</i> Rehder & E.H.Wilson	AF127515.1	AF013044.1	AF081068.1	AF147473.1	MK533616.1	MK533616.1
<i>Fothergilla gardenii</i> Murray	GU576651.1	KT438384.1	–	KT438462.1	GU576720.1	GU576754.1
<i>Fothergilla major</i> G.Lodd.	AF074250.2	AF013045.1	AM183407.1	AF147474.1	–	–
<i>Hamamelis japonica</i> Siebold & Zucc.	GU576652.1	AF248617.1	AY263940.1	GU576826.1	AF304543.1	GU576758.1
<i>Hamamelis mexicana</i> Standl.	GU576656.1	AF248618.1	–	GU576827.1	GU576725.1	GU576759.1
<i>Hamamelis mollis</i> Oliv. ex F.B.Forbes & Hemsl.	GU576657.1	KC737241.1	KC737393.1	DQ352357.1	DQ352362.1	GU576762.1
<i>Hamamelis ovalis</i> S.W.Leonard	GU576660.1	GU576695.1	–	GU576831.1	GU576729.1	GU576763.1
<i>Hamamelis vernalis</i> Sarg.	GU576661.1	AF013047.1	–	GU576832.1	GU576734.1	GU576768.1
<i>Hamamelis virginiana</i> L.	GU576666.1	AF013046.1	DQ352368.1	DQ352196.1	DQ352227.1	GU576770.1
<i>Loropetalum chinense</i> (R. Br.) Oliv.	GU576672.1	AF013059.1	DQ352370.1	AF147476.1	DQ352364.1	KP095974.1

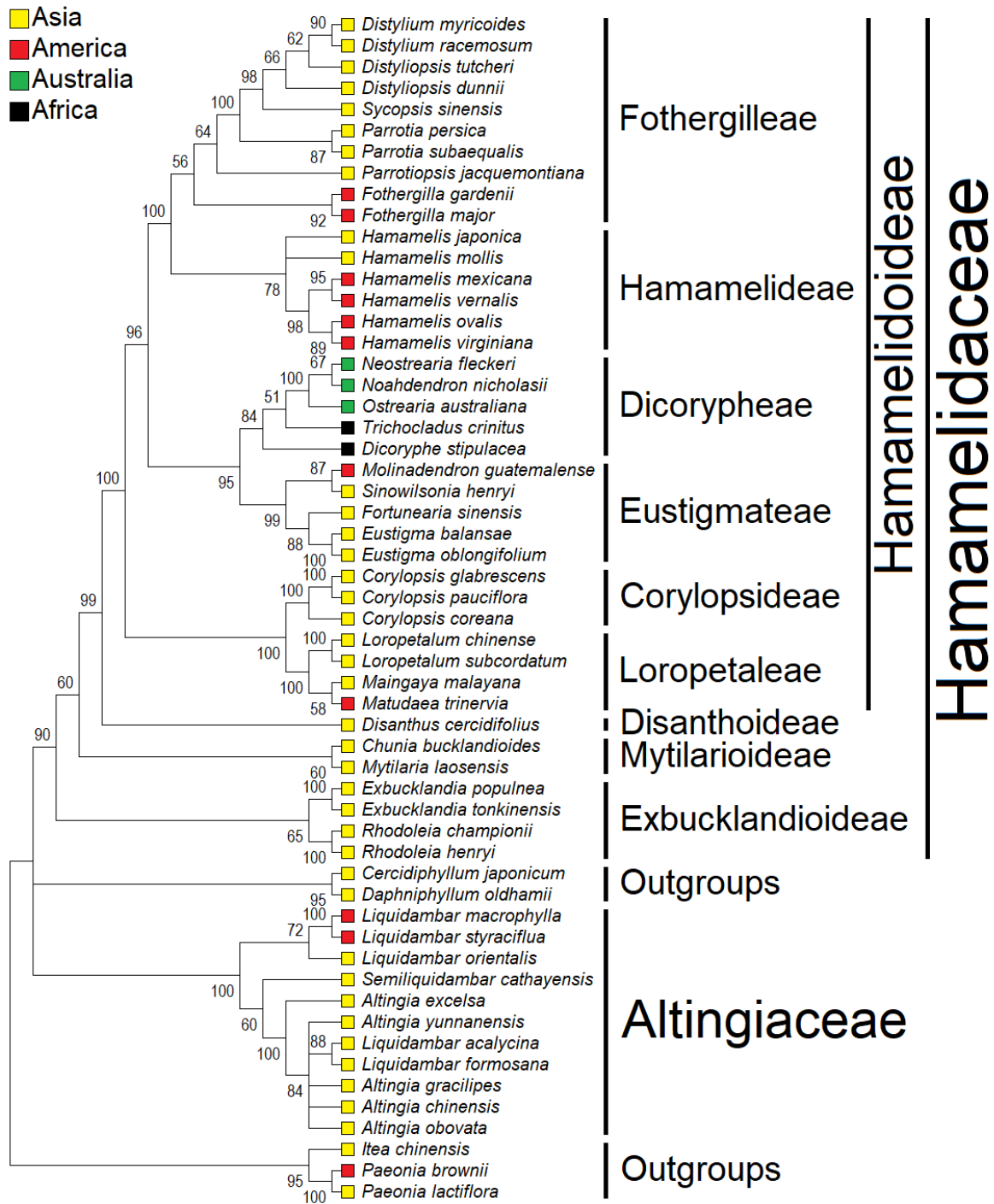
Species	<i>ITS-5.8S rRNA</i>	<i>matK</i>	<i>rbcL</i>	<i>trnL-trnF</i>	<i>psaA-ycf3</i>	<i>psbA-trnH</i>
<i>Loropetalum subcordatum</i> (Benth.) Oliv.	AF022242.1	MG457805.1	DQ352371.1	AF147489.1	DQ352365.1	HM369154.1
<i>Maingaya malayana</i> Oliv.	AF022241.1	AF025393.1	AM183403.1	AF147477.1	–	–
<i>Matudaea trinervia</i> Lundell	AF015437.1	AF013048.1	AM183409.1	AF147478.1	–	KJ002052.1
<i>Molinadendron guatemalense</i> (Radlk. ex Harms) P.K.Endress	AF015438.1	AF013049.1	–	AF147479.1	–	–
<i>Mytilaria laosensis</i> Lecomte	AF127501.1	AF128828.1	AF081070.1	EF456731.1	AF304544.1	–
<i>Neostrearia fleckeri</i> L.S.Sm.	AF015439.1	AF013050.1	–	AF147480.1	–	–
<i>Noahdendron nicholasii</i> P.K.Endress, B.Hyland & Tracey	AF015440.1	AF013051.1	–	AF147481.1	–	–
<i>Ostrearia australiana</i> Baill.	AF015441.1	AF013052.1	AM183404.1	AF147482.1	–	–
<i>Parrotia persica</i> (DC.) C.A.Mey.	AF015443.1	AF013053.1	AM183411.1	AF147483.1	–	MF348740.1
<i>Parrotia subaequalis</i> (Hung T.Chang) R.M.Hao & H.T.Wei	GU576674.1	AF013055.1	MG252374.1	AF147486.1	GU576743.1	GU576776.1
<i>Parrotiopsis jacquemontiana</i> (Decne.) Rehder	AF015442.1	AF013054.1	–	AF147484.1	–	–
<i>Rhodoleia championii</i> Hook. f.	GU576675.1	AF128833.1	AF062002.1	AF147485.1	GU576744.1	GU576777.1
<i>Rhodoleia henryi</i> K.Y.Tong	GU576676.1	GU576711.1	AF081072.1	GU576847.1	GU576745.1	GU576778.1
<i>Sinowilsonia henryi</i> Hemsl.	AF127512.1	AF013056.1	AM183406.1	AF147487.1	MF687003.1	NC036069.1

Species	<i>ITS-5.8S rRNA</i>	<i>matK</i>	<i>rbcL</i>	<i>trnL-trnF</i>	<i>psaA-ycf3</i>	<i>psbA-trnH</i>
<i>Sycopsis sinensis</i> Oliv.	AF127517.1	AF013057.1	-	AF147488.1	GU576746.1	GU576779.1
<i>Trichocladus crinitus</i> Pers.	AF147755.1	AF013058.1	AF060711.1	AF147490.1	GU576747.1	GU576780.1

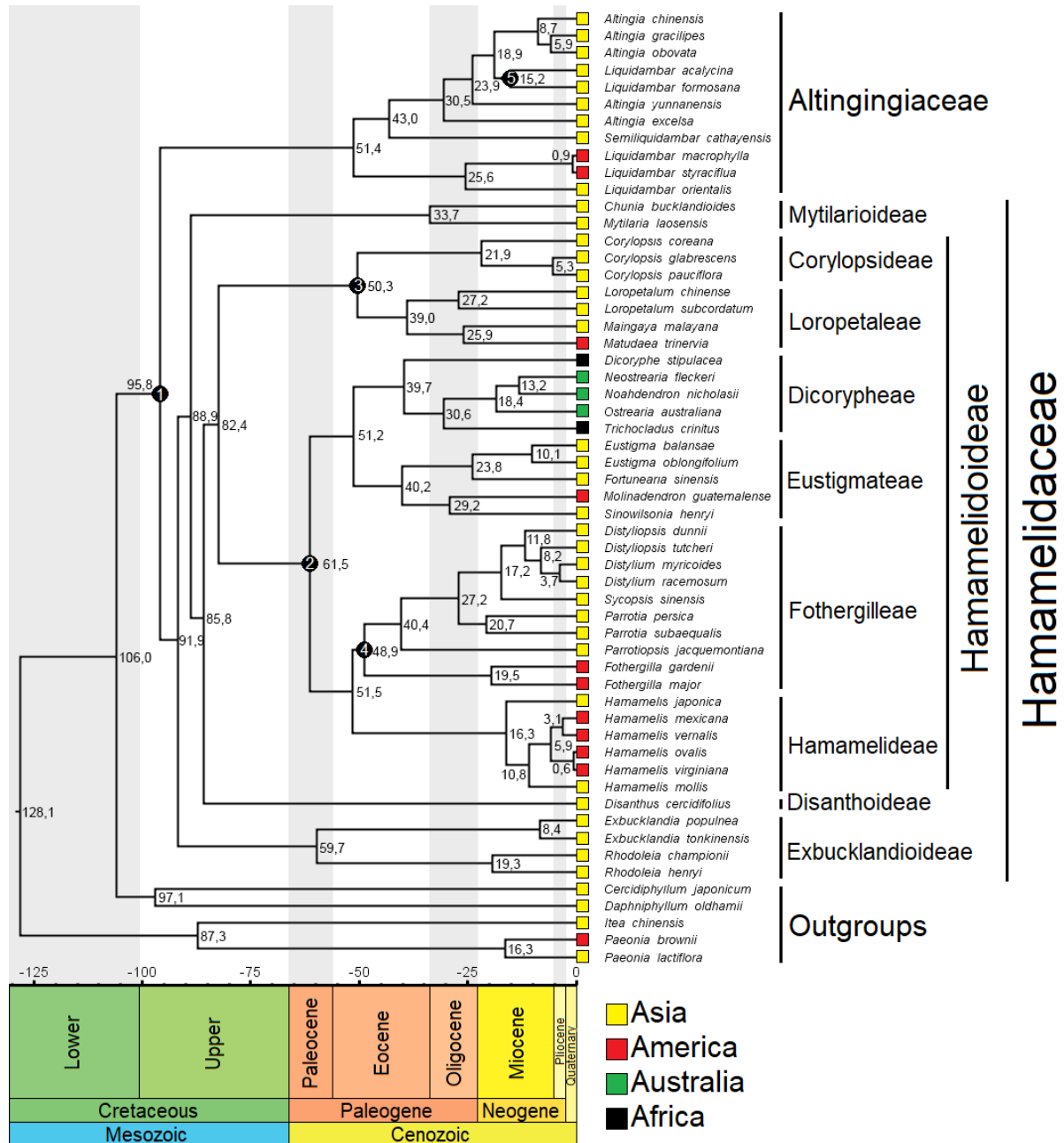
Supplement 1.2 Phylogeny of Hamamelidaceae s. l. based on maximum parsimony analysis in MEGA X software. Numbers at nodes are the maximum parsimony bootstraps. Branches corresponding to partitions reproduced in less than 50 % bootstrap replicates are collapsed. Average bootstrap is 85,8 %.



Supplement 1.3. Phylogeny of Hamamelidaceae s. l. based on maximum likelihood analysis in MEGA X software. Numbers at nodes are the maximum likelihood bootstraps. Branches corresponding to partitions reproduced in less than 50 % bootstrap replicates are collapsed. Average bootstrap is 83,1 %.



Supplement 1.4 Chronogram of Hamamelidaceae s.l. based on bayesian probability in BEAST v2.5.2 software. Numbers at nodes are average divergence times. Average posterior probability is 0,986. Numbers in black circles indicate calibration points used in the estimation of divergence times.



Supplement 1.5 Chronogram of Hamamelidaceae s.l. based on bayesian probability in BEAST v2.5.2 software. Numbers at nodes indicate 95% highest probability density credibility intervals. Average posterior probability is 0,986. Numbers in black circles indicate calibration points used in the estimation of divergence times.

