

Table S3: Biogeographic model fit statistics from BioGeoBEARS for the estimation with node constraint. The node between the outgroup (core Arecoids) and the POS-clade was constraint to the range Southeast Asia/Eurasia, based on [Baker & Couvreur \(2013a\)](#). The first part of the model name corresponds to the range evolution model: dec (DEC), dl (DIVALIKE), b (BAYAREALIKE); and the second part of the model name to the dispersal probability models: no dispersal probability constraints (M_0), dispersal probability constraints as in [Baker & Couvreur \(2013a\)](#) (B: M_B), dispersal probability constraints as in [Federman & al. \(2015\)](#) (F: M_F). LnL: Log likelihood; numparams: number of parameters in the model; d: estimated dispersal rate; e: estimated extinction (=extirpation) rate; AICc: AICc score; AICc_wt: AICc weight.

Model name	LnL	numparams	d	e	AICc	AICc_wt
dec_M0	-6.83469	2	0.002406	1.00E-12	18.41938	0.055809
dl_M0	-4.63746	2	0.002406	1.00E-12	14.02493	0.50228
b_M0	-10.9953	2	0.004102	0.015244	26.74061	0.000871
dec_DB	-8.0139	2	0.005695	1.00E-12	20.77781	0.017162
dl_DB	-5.81668	2	0.005694	1.00E-12	16.38336	0.154461
b_DB	-11.867	2	0.011254	0.015711	28.48407	0.000364
dec_DF	-7.56709	2	0.003229	1.00E-12	19.88417	0.02683
dl_DF	-5.36986	2	0.003228	1.00E-12	15.48973	0.241473
b_DF	-11.145	2	0.005125	0.015307	27.03999	0.000749