

**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	-17.83570417	2	0.004969	0.007781075	40.37729	0.084279
dl_M0	-15.53472106	2	0.004282	0.003797482	35.77532	0.841442
b_M0	-20.91993505	2	0.007103	0.021126139	46.54575	0.003857
dec_MB	-20.86584014	2	0.01236	0.008122437	46.43756	0.004071
dl_MB	-18.76244678	2	0.010283	0.003936585	42.23078	0.033361
b_MB	-24.35164979	2	0.019032	0.022819529	53.40918	0.000125
dec_MF	-19.61982629	2	0.01	0.01	43.94553	0.014154
dl_MF	-19.43938328	2	0.011001	0.010109206	43.58465	0.016953
b_MF	-21.7059387	2	0.013197	0.023127749	48.11776	0.001758