Table S3. Values of parameters and the Akaike information criterion (AIC) for different diversification models fitted to the time-calibrated phylogeny.

Model description	Model name	Parameters	AIC	ΔAIC
Constant-rate models	Pure birth (Yule)	λ=0.492	-101.68	0.99
	Constant-rate birth–death (BD)	λ=0.276 μ=0.639	-102.52	0.15
Variable-rate models assuming different speciation rates within specified time intervals	Yule2rate	λ1=0.484 t1=0.060 λ2=0.750	-100.93	1.74
	Yule3rate	λ1=0.567 t1=2.828 λ2=0.195 t2=1.305 λ3=0.644	-101.55	1.12
	Yule4rate	λ1=0.138 t1=5.099 λ2=0.934 t2=3.199 λ3=0.229 t3=1.305 λ4=0.644	-102.67	0.00
	Yule4rate	λ1=0.138 t1=5.099 λ2=0.934 t2=3.199 λ3=0.274 t3=1.024 λ4=5.511 t4=1.017 λ5=0.642	-100.22	2.45
Variable-rate model assuming decreasing diversification through time in relation to increasing diversity with exponential fitting	DDX	λ=0.264 x=-0.219	-100.92	1.75
Variable-rate model assuming decreasing diversification through time in relation to increasing diversity with logistic fitting	DDL	λ=0.492 k=799068	-99.68	2.99
Variable-rate model assuming decreasing diversification through time caused by decreasing speciation rate	SPVAR	λ=0.770 μ=0.491 k=0.001	-100.51	2.16
Variable-rate model assuming decreasing diversification through time caused by increasing extinction rate	EXVAR	λ=0.763 μ=0.487 z=383.01	-100.52	2.15
Variable-rate model assuming decreasing diversification through time caused by decreasing speciation rate and increasing extinction rate	BOTHVAR	λ=0.770 μ=0.491 k=0.001 z=384.43	-98.51	4.16

λ, speciation; μ, extinction; t, time of rate-shift in millions of years ago; x, parameter controlling the magnitude of the rate change; K, parameter analogous to the 'carrying capacity' parameter in population ecology; k, parameter of the exponential change in speciation rate; z, parameter of the exponential change in extinction rate.