

Table S8. BioGeoBEARS results for each model implemented in the analysis: LnL – log-likelihood values of the run, N – number parameters, d – dispersal rate, e – extinction rate; j – jump dispersal rate, AIC – Akaike Information Criterion and AICc – Corrected Akaike Information Criterion. Best-fitting model in bold. The information of distribution areas used in the analyses followed the available in <http://www.nhm.ac.uk/research-curation/research/projects/bombus> with few modified for the Nearctic, Neotropical and Palaearctic species (see the Figure 1 to the modifications).

Model	LnL	N	d	e	j	AIC	AICc
BAYAREALIKE+J	-505.26	3	0.0013	0.026	0.010	1016.52	1016.63
DEC+J	-569.65	3	0.0050	1.00E-12	0.015	1145.31	1145.42
DIVALIKE+J	-590.40	3	0.0058	1.00E-12	0.014	1186.81	1186.92
DEC	-591.31	2	0.0059	1.00E-12	0	1186.62	1186.68
DIVALIKE	-609.77	2	0.0075	1.00E-12	0	1223.55	1223.60
BAYAREALIKE	-686.68	2	0.01	0.01	0	1377.35	1377.41