

Supplementary Table 1. Results from the linear model of recent speciation (DR) rates against residual phylogenetic diversity (PD).

Clade	Estimate	R.squared	p.value
amphibians	-2.09E-05	0.005	1.71E-16
birds	-7.24E-05	0.047	6.82E-209
mammals	-0.0001676	0.076	9.96E-274
squamates	-5.74E-05	0.125	0

Supplementary Table 2. Post-hoc analyses comparing DR rates between pairs of focal regions of high and low residual PD.

	taxa	d	UCL (95%)	Z	Pr > d
cradle_australia_oceania:cradle_oriental	amphibians	0.00525528	0.00698079	1.10233047	0.15
cradle_australia_oceania:cradle_south_america	amphibians	0.01561991	0.00578026	3.57674856	0.001
cradle_australia_oceania:museum_africa	amphibians	0.0114298	0.0065061	2.74666907	0.003
cradle_oriental:cradle_south_america	amphibians	0.01036463	0.00647359	2.49136758	0.002
cradle_oriental:museum_africa	amphibians	0.01668508	0.00701332	3.55794931	0.001
cradle_south_america:museum_africa	amphibians	0.02704971	0.00531601	5.46148224	0.001
cradle_north_america:cradle_south_america	birds	0.00267518	0.01626041	-0.7325484	0.755
cradle_north_america:museum_africa_madagascar	birds	0.04391713	0.01936177	3.34503922	0.001
cradle_north_america:museum_australia_oceania_asia	birds	0.05353809	0.01732115	4.1915594	0.001
cradle_south_america:museum_africa_madagascar	birds	0.04124195	0.01537753	3.70799933	0.001
cradle_south_america:museum_australia_oceania_asia	birds	0.05086291	0.01456124	4.46237966	0.001
museum_africa_madagascar:museum_australia_oceania_asia	birds	0.00962096	0.01660227	0.69577414	0.257
cradle_north_america:cradle_south_america1	mammals	0.02791751	0.02450657	1.76948243	0.027
cradle_north_america:museum_africa	mammals	0.00283974	0.02563416	-0.9689377	0.827
cradle_north_america:museum_north_america	mammals	0.02831498	0.03051384	1.43523423	0.072
cradle_south_america:museum_africa1	mammals	0.03075725	0.01946118	2.5414738	0.004
cradle_south_america:museum_north_america	mammals	0.05623249	0.02699161	2.99347373	0.001
museum_africa:museum_north_america	mammals	0.02547524	0.02410014	1.6703083	0.044
cradle_australia:cradle_north_america	squamates	0.04805722	0.01229255	4.67906539	0.001
cradle_australia:cradle_south_america	squamates	0.09239165	0.00982233	7.93397381	0.001
cradle_australia:museum_south_africa	squamates	0.0168303	0.01091905	2.46286027	0.001
cradle_australia:museum_southeast_asia	squamates	0.01053019	0.0096155	1.74174676	0.029
cradle_north_america:cradle_south_america2	squamates	0.04433443	0.01151994	4.8334128	0.001
cradle_north_america:museum_south_africa	squamates	0.06488752	0.01223027	6.1095102	0.001
cradle_north_america:museum_southeast_asia	squamates	0.03752703	0.01114818	4.40339537	0.001
cradle_south_america:museum_south_africa	squamates	0.10922195	0.01094116	8.42007702	0.001
cradle_south_america:museum_southeast_asia	squamates	0.08186147	0.00954673	7.67088747	0.001
museum_south_africa:museum_southeast_asia	squamates	0.02736048	0.01060042	3.63286509	0.001