

**Table S2.** Relationship between sexual selection and species richness inferred from phylogenetic least squares (PGLS) regressions in which crown age was added as a covariate.

Predictor	df	Sexual selection metric				Covariate: crown age			
		Estimate	SE	F-value	P-value	Estimate	SE	F-value	P-value
male $I$	26	0.07	0.19	0.125	0.727	0.02	0.01	3.391	0.077
female $I$	26	-0.25	0.36	0.496	0.488	0.02	0.01	3.439	0.075
$\Delta I$ (lnCVR)	26	1.25	0.50	6.197	0.020	0.02	0.01	4.179	0.051
male $I_s$	28	0.12	0.29	0.163	0.689	0.01	0.01	2.420	0.131
female $I_s$	27	-0.22	0.60	0.133	0.718	0.02	0.01	2.817	0.105
$\Delta I_s$ (lnCVR)	28	0.94	0.78	1.474	0.235	0.01	0.01	2.319	0.139
male $\beta_{ss}$ (Fisher's z)	24	1.20	0.53	5.043	0.034	0.01	0.01	3.990	0.057
female $\beta_{ss}$ (Fisher's z)	24	0.37	0.48	0.606	0.444	0.02	0.01	3.596	0.070
$\Delta \beta_{ss}$ (Hedge's $g$ )	24	0.95	0.50	3.637	0.069	0.02	0.01	3.796	0.063