

Table S1. Results of the calculation of the 12 assessed measures using both sets of hypothetical scenarios, namely those from Baselga (2010) and the ones suggested in this study (New scenarios), to test the role of species richness differences controlling for the number of shared species.

	β_j	β_{sor}	β_{sim}	β_{jtu}	β_{rich}	$\beta_{rich.s}$	β_{sne}	β_{jne}	β_{-2}	β_r	β_{-3}	$\beta_{-3.s}$
Baselga (2010)												
A1-A2	0.33	0.50	0.00	0.00	0.67	0.50	0.50	0.67	0.00	0.00	0.00	0.00
A1-A3	0.17	0.29	0.00	0.00	0.83	0.71	0.71	0.83	0.00	0.00	0.00	0.00
A2-A3	0.50	0.67	0.00	0.00	0.50	0.33	0.33	0.50	0.00	0.00	0.00	0.00
B1-B2	0.33	0.50	0.50	0.67	0.00	0.00	0.00	0.00	0.50	0.29	0.33	0.50
B1-B3	0.33	0.50	0.50	0.67	0.00	0.00	0.00	0.00	0.50	0.29	0.33	0.50
B2-B3	0.33	0.50	0.50	0.67	0.00	0.00	0.00	0.00	0.50	0.29	0.33	0.50
C1-C2	0.50	0.67	0.00	0.00	0.50	0.33	0.33	0.50	0.00	0.00	0.00	0.00
C1-C3	0.50	0.67	0.00	0.00	0.50	0.33	0.33	0.50	0.00	0.00	0.00	0.00
C2-C3	0.33	0.50	0.50	0.67	0.00	0.00	0.00	0.00	0.50	0.29	0.33	0.50
D1-D2	0.00	0.00	1.00	1.00	0.50	0.50	0.00	0.00	0.33	0.60	0.25	0.50
D1-D3	0.00	0.00	1.00	1.00	0.71	0.71	0.00	0.00	0.17	0.32	0.14	0.29
D2-D3	0.00	0.00	1.00	1.00	0.33	0.33	0.00	0.00	0.50	0.80	0.33	0.67
New scenarios												
X1-X2	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
X1-X3	0.33	0.50	0.50	0.67	0.00	0.00	0.00	0.00	0.50	0.29	0.33	0.50
X1-X4	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.50	1.00
Y1-Y2	0.50	0.67	0.00	0.00	0.50	0.33	0.33	0.50	0.00	0.00	0.00	0.00
Y1-Y3	0.20	0.33	0.50	0.67	0.40	0.33	0.17	0.13	0.25	0.32	0.20	0.33
Y1-Y4	0.00	0.00	1.00	1.00	0.33	0.33	0.00	0.00	0.50	0.80	0.33	0.67
Z1-Z2	0.16	0.28	0.00	0.00	0.84	0.72	0.72	0.84	0.00	0.00	0.00	0.00
Z1-Z3	0.07	0.14	0.50	0.67	0.78	0.72	0.36	0.26	0.08	0.14	0.07	0.14
Z1-Z4	0.00	0.00	1.00	1.00	0.72	0.72	0.00	0.00	0.16	0.31	0.14	0.28