Supplementary materials

Table S1. Results of PERMANOVA pairwise test for the interaction SAC x habitat. PU – Parco dell'Uccellina, TL - Torre del Lago, SP - Selva Pisana; B1.3 - Shifting coastal dunes, B1.4 - Stable dune grassland, B1.6 - Coastal dune scrub

Contrast	*t* statistic (abundances)	*t* statistic (p/a)
SAC X Habitat		
Within habitat B1.3		
SP, PU	1.5989*	1.9827***
SP, TL	1.9873**	2.0567**
PU, TL	2.4574***	2.6899***
Within habitat B1.4		
SP, PU	3.039***	3.2891***
SP, TL	3.2421***	3.4501***
PU, TL	4.5124***	4.9023**
Within habitat B1.6		
SP, PU	2.2899***	2.1673***
SP, TL	1.2814	1.3863*
PU, TL	1.3692*	1.6392**
Within SAC - SP		
B1.3, B1.4	2.2927**	2.4942***
B1.3, B1.6	3.729***	3.0523***
B1.4, B1.6	3.2398***	2.6614***
Within SAC - PU		
B1.3, B1.4	2.8167***	2.7364***
B1.3, B1.6	3.6221***	3.6202***
B1.4, B1.6	1.8041**	2.0486***
Within SAC - TL		
B1.3, B1.4	4.6232***	5.1913***
B1.3, B1.6	2.3473**	2.5393**
B1.4, B1.6	2.2687***	2.3333***

*$P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

Table S2. SIMPER output reporting species contribution to average between-group dissimilarity (Average), the corresponding standard deviation (SD), average abundances per group (Av.a, Av.b), and the cumulative contribution of the species (Cum. Contr.). NB. only species contributing up to 50% are reported

Species	Average	SD	Av.a	Av.b	Cum. Contr.
B1.3 vs B1.4					
Amm_are	0.07	0.07	1.73	0.49	0.08
Jun_oxy	0.05	0.07	0.20	1.50	0.14
Hel_sto	0.05	0.05	1.01	1.38	0.20
Eup_par	0.05	0.05	1.24	0.21	0.26
Vul_fas	0.04	0.04	0.39	1.30	0.31
Ses_tor	0.04	0.04	0.13	1.16	0.36
Ely_far	0.04	0.04	0.92	0.58	0.40
Pyc_rut	0.04	0.05	0.00	1.04	0.45
Med_lit	0.03	0.03	0.29	0.97	0.49
Ech_spi	0.03	0.04	0.63	0.22	0.52
B1.3 vs B1.6					
Jun_oxy	0.15	0.06	0.20	4.06	0.16
Amm_are	0.07	0.07	1.73	0.00	0.23
Eup_par	0.05	0.05	1.24	0.10	0.28
Hel_sto	0.04	0.05	1.01	0.55	0.33
Pin_pin	0.04	0.06	0.03	0.96	0.37
Ely_far	0.03	0.05	0.92	0.00	0.40
Smi_asp	0.03	0.03	0.00	0.80	0.43
Eri_mul	0.03	0.05	0.00	0.75	0.46
Pis_len	0.02	0.05	0.00	0.57	0.49
Ech_spi	0.02	0.04	0.63	0.00	0.51
B1.4 vs B1.6					
Jun_oxy	0.09	0.07	1.50	4.06	0.11
Hel_sto	0.04	0.04	1.38	0.55	0.16
Vul_fas	0.04	0.03	1.30	0.10	0.21
Ses_tor	0.04	0.03	1.16	0.40	0.25
Pin_pin	0.03	0.05	0.15	0.96	0.29
Pyc_rut	0.03	0.04	1.04	0.08	0.33
Med_lit	0.03	0.03	0.97	0.33	0.36
Smi_asp	0.03	0.03	0.26	0.80	0.39
Eri_mul	0.02	0.04	0.03	0.75	0.42
Cer_glo	0.02	0.02	0.59	0.40	0.45
Pis_len	0.02	0.04	0.02	0.57	0.47
Phl_are	0.02	0.02	0.62	0.10	0.49
Ely_far	0.02	0.03	0.58	0.00	0.51

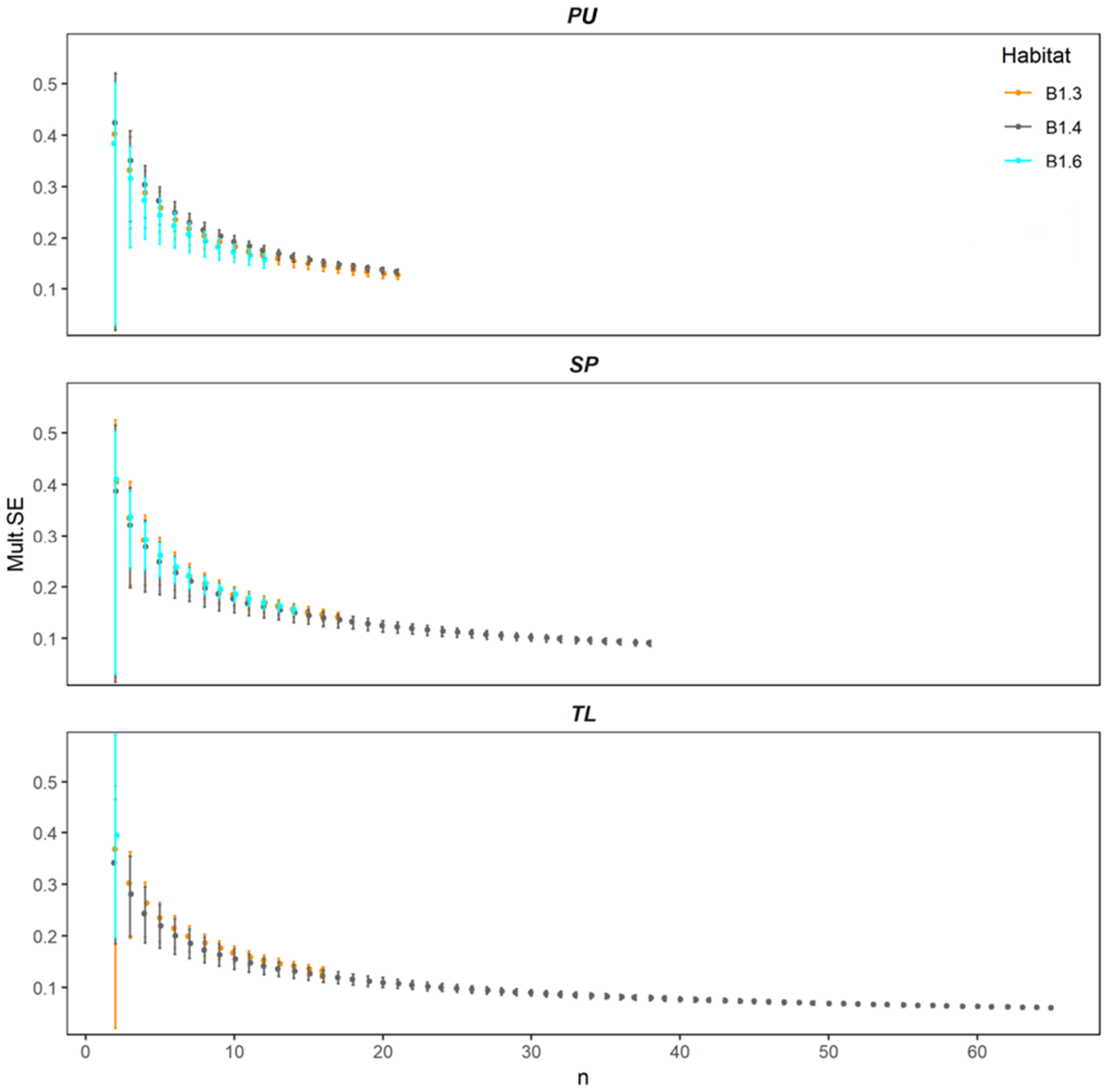

Figure S1. Profile of *pseudo* multivariate dissimilarity-based standard error (*MultSE*) based on Jaccard dissimilarity for each EUNIS habitat type within the three sampling areas. PU = Parco dell'Uccellina, SP = Selva Pisana, TL = Torre del Lago.

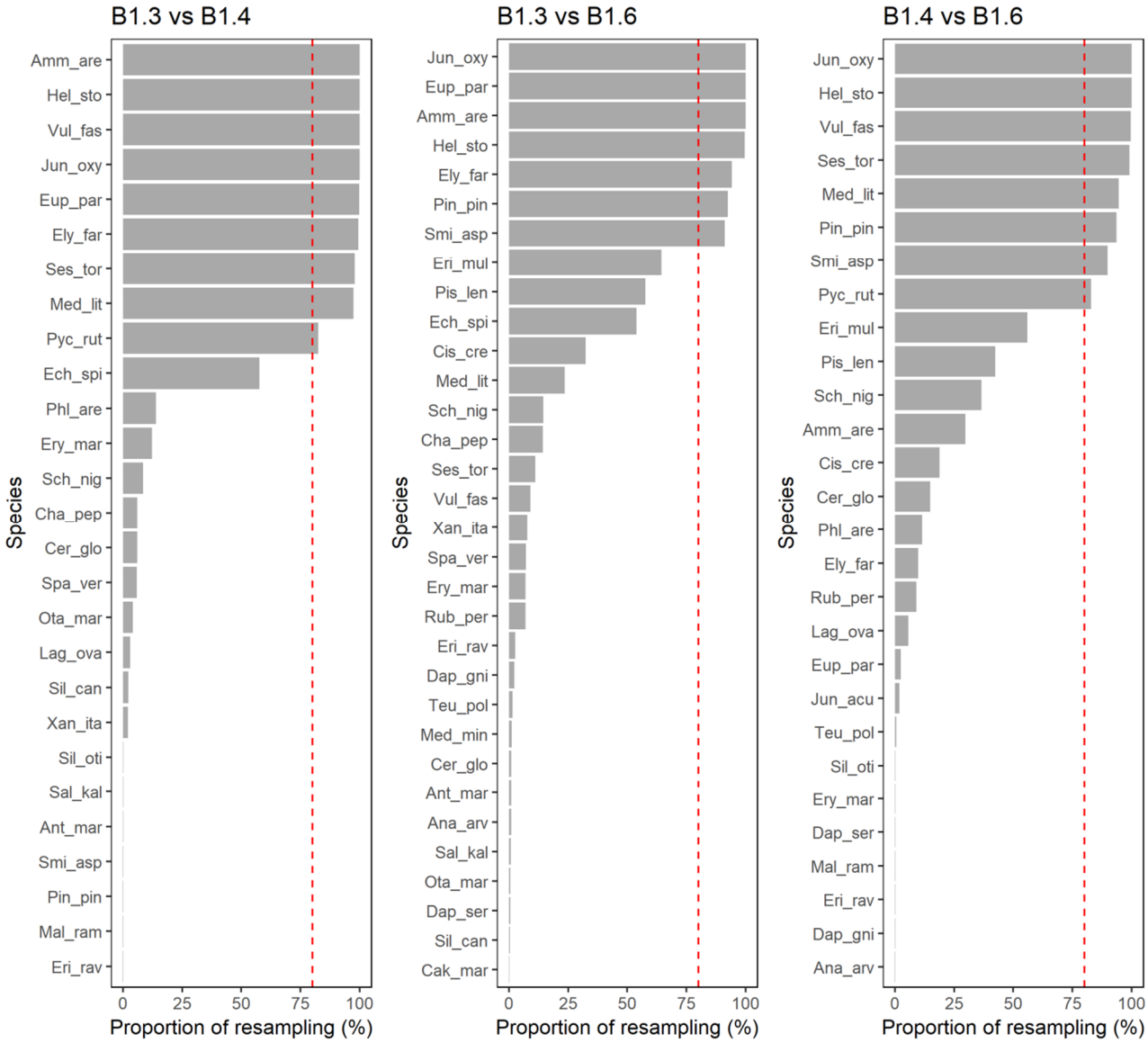

Figure S2. SIMPER output derived from 999 random resampling of the original community based on plot numbers given by decay of *MultSE*. Bar plots represent the proportion of resampling for each species, red dashed lines indicate an 80% contribution.