

Table S3. Relationships between all traits and the scores of the principal components extracted after analysis of the functional and species diversity indices. Pearson *r*-correlation coefficients were derived after the fourth-corner analysis. Only those statistically significant at $P < 0.05$ are presented.

Group of traits	Trait	Func_PC 1	Func_PC 2	Func_PC 3	Func_PC 4	Species richness
Flower sexual syndrome	Bisexual	–	–	–	–	0.14
	Dioecious	–	–	–	–	–
	Monoecious	–	–0.12	–	–0.09	–
	Monoecious/Dioecious	–	–	–	–	–
Raunkiaer plant life- form	Geophytes	–	–	–	–	–
	Hydrophytes	–0.14	–	–	0.13	–
	Helophytes	0.14	–0.18	–	–0.10	–
	Hemipterophytes	–	–	–	–	0.11
	Nanophanerophytes	–	–	–	–	–
	Phanerophytes	–	–	–	–	–
Pollenchores	Therophytes	–0.14	–	–	–	–
	Anemophilous plants	–	–0.14	–	–	–
	Entomophilous plants	–	0.11	–0.15	–	–
	Gametohydrophilous plants	–	–	–	–	–
Diasporochor es	Hydrophilous plants	–	–	–	–	–
	Anemochory	–	–0.14	–	–0.12	–
	Ballistochory	–	–	–	–	–
	Barochory	–	–	–	–	–
	Endozoochory	–	–	–	–	–
	Epizoochory	–	–	–	–	–
Leaf type	Hydrochory	–0.16	–	–	0.13	–
	Capillary	–	–	0.18	0.10	–
	Entire	–	0.12	–0.18	–	–
Life span	Tubular	–	–0.18	–	–0.09	–
	Annual	–0.16	–	–	–	–
	Biennial	–	–	–	–	–
Number of reproductive organs	Perennial	–	–	–	–	–
	High	–	–	–	–	–
	Low	–	–	–	–	–
	Medium	–	–	–	–	–
Vertical shoot architecture	Very High	–	–	–	–	–
	Multiple apical growth points	–0.16	–	–	0.14	–
	Single apical growth point	–	–	–	–	–
CSR ecological strategies	Single basal growth point	0.16	–	–	–0.13	–
	Competitors (C)	–	–0.20	–0.13	–	–
	Stress-tolerators (S)	–	–	–	–0.10	–
	Ruderals (R)	–	0.21	0.13	–	–
	Light	–	–	–0.12	–	–
	Temperatures	–0.23	–	–	–	–

Group of traits	Trait	Func_PC 1	Func_PC 2	Func_PC 3	Func_PC 4	Species richness
Ellenberg indicator values	Continentality	0.15	–	–	–0.09	–
	Humidity	–	–	–	0.11	–0.11
	Acidity	0.19	–	–	–	–
	Nutrients	0.17	–	–	–	–
Disturbance indicator values	Disturbance severity at the whole-community level	–	–	–	–	0.10
	Disturbance severity in the herb layer	–	–	–	–	–
	Disturbance frequency at the whole community level	–0.23	–	–	0.10	–
	Disturbance frequency in the herb layer	–0.20	–	–	–	–
	Mowing frequency	–	–0.12	–	–0.15	–
	Grazing pressure	0.16	–	–	–0.14	0.10
	Soil disturbance	–	–	–	–0.12	–
Naturalness and hemeroby	Naturalness	–	–	–	0.09	–
	Hemeroby	–	–	–	–0.16	–
Reproductive, morphological and physiological traits	Plant height	–	–0.13	–	–	–
	Seed mass	–0.22	–	–	0.12	–
	Leaf thickness	–	–	–	–	–
	Seed number	–	–	–	–0.10	–
	Leaf carbon/nitrogen (C/N) ratio	–	–	–	–	–
	Flowering time	–	–	–	–	–0.11
	Leaf area	–	–0.15	–0.13	–	–
	Specific leaf area	–	0.13	0.10	0.08	–
	Leaf water content per leaf dry mass	–	0.13	–	0.14	–
	Fruit size	–0.14	–	–0.14	0.09	–
	Flexibility	–	–	–	0.17	–
	Dispersal distance class	–	–	0.20	–	–
	Below-ground to above-ground biomass ratio	–	–0.19	–	–	–
	Nodes	–	–	0.16	–	–
	Nitrogen content	–	–	–	–	–
	Leaf texture (Soft/Rigid)	–	–0.14	–	–0.13	–0.12
	Leaf cover (Waxy/Non-waxy)	–	0.12	–	–	–
Growth form	Free-floating, surface	–	–	–	–	–
	Free-floating, submerged	–0.13	–	–	–	–
	Anchored, floating leaves	–	–	–0.16	0.13	–
	Anchored, submerged leaves	–	–	–	0.11	–
	Anchored, emergent leaves	–	–	–	–	–
	Anchored, heterophylly	–	–	–	–	–
Mode of reproduction	Rhizomes	0.17	–0.16	–	–	–
	Fragmentation	–	–	0.16	–	–
	Budding	–	–	–	–	–
	Turions	–	0.12	–	–	–
	Stolons	–	–	–	–	–

Group of traits	Trait	Func_PC	Func_PC	Func_PC	Func_PC	Species richness
		1	2	3	4	s
	Tubers	-0.15	-	-	0.14	-
	Seeds	-	-	-	-0.10	-
	Spores	-	-	-	-	-