

Table S2. Principal components analysis on ground variables.

The coverage (%) of vegetation, litter, rocky and bare ground were measured. Principal components analysis (PCA) was carried out for the ground variables in order to prevent multicollinearity issue in further analysis.

Table S2 a. Variance of components in the principal components analysis

	PC1	PC2	PC3	PC4
Variance	2.00	1.17	0.83	0.00
Percentage (%) of explained variance	49.87	29.30	20.62	0.22
Cumulative percentage (%) of explained variance	49.87	79.16	99.78	100.00

Table S2 b. Components matrix in the principal components analysis.

Variable	PC1	PC2	PC3
vegetation	-1.00	0.03	-0.02
litter	0.66	-0.65	0.38
rock	0.73	0.44	-0.53
bare	0.19	0.75	0.63