**S1 Table.** Selected topographic and spatial variables from Partial Multiple Regression and Partial Redundancy according to forward selection. Univariate attributes: 1) std. richness (standardised richness, residuals of regression between abundance and richness); 2) abundance (sum of the abundance of the species per plot); and biomass (sum of biomass of the species per plot). Multivariate attributes (species x plots): 1) C. Incidence (composition based on incidence); C. Abundance (composition based on abundance); and C. Biomass (composition based on biomass). Topographic variables: Elevation (*h*); Slope (*G*); Profile curvature (*kv*); Plan curvature (*kh*); Height above the nearest drainage (*HAND*). Spatial variables: Principal Coordinates of Neighbour Matrices (PCNM 1, PCNM 2, PCNM 3, PCNM 4, and PCNM 5).

|  |  |  |
| --- | --- | --- |
|  | Topographic variables | Spatial variables |
| *Std. Richness* |  |  |
|  Total | None selected | None selected |
|  Common(1-22) | *h, HAND* | None selected |
|  Rare(137-230) | None selected | None selected |
|  |  |  |
| *Abundance* |  |  |
|  Total | None selected | PCNM 2, PCNM 3 |
|  Common(1-22) | *kh* | PCNM 4 |
|  Rare(137-230) | None selected | PCNM 2, PCNM 3 |
|  |  |  |
| *Biomass* |  |  |
|  Total | *h, G* | PCNM 1, PCNM 2 |
|  Common(1-35) | *h* | PCNM 1 |
|  Rare(136-230) | None selected | None selected |
|  |  |  |
| *C.* *Incidence* |  |  |
|  Total | *h, HAND, kv* | PCNM 1, PCNM 2, PCNM 3, PCNM 4, PCNM 5 |
|  Common(1-22) | *h, G* | PCNM 1 |
|  Rare(137-230) | *G* | PCNM 1 |
|  |  |  |
|  *C.* *Abundance* |  |  |
|  Total | *h, HAND, kv* | PCNM 1, PCNM 2, PCNM 3, PCNM 4, PCNM 5 |
|  Common(1-22) | *G, HAND, kv* | PCNM 1, PCNM 2, PCNM3, PCNM 5 |
|  Rare(137-230) | *G, HAND* | PCNM 1 |
|  |  |  |
| *C. Biomass* |  |  |
|  Total | *h, G*  | PCNM 1, PCNM 2 |
|  Common(1-35) | *h, G* | PCNM 1, PCNM2 |
|  Rare(136-230) | None selected | None selected |