Table S1: Results of the Bayesian multiple regressions on clonal diversity and genetic variation within the study plots. The most probable values (MPV) are given together with the effective sample size (ESS) of all parameters. A 90% highest density interval (HDI) was computed for each model parameter (HDIL and HDIU: lower and upper limits of the interval). PDist is the percentage of the posterior distribution that is larger than zero. A credible impact of soil nutrients on clonal diversity and genetic variation is indicated by superscript a and a trend for the impact is indicated by superscript b.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Parameter** | **MPV** | **ESS** | **HDIL** | **HDIU** | **PDist** |
|  |  |  |  |  |  |  |
| **Ss** | Intercept | -0.06 | 19658 | -0.45 | 0.36 | 42.31 |
|  | elevation | -0.05 | 17522 | -0.51 | 0.46 | 44.81 |
|  | P | -0.53 | 14852 | -1.16 | 0.01 | 5.73 |
|  | K | -0.04 | 15844 | -0.55 | 0.46 | 44.02 |
|  | scale | 0.84 | 14905 | 0.55 | 1.31 | - |
|  | normality | 8.06 | 13797 | 1.01 | 69.97 | - |
|  |  |  |  |  |  |  |
| **Sf** | Intercept | -0.02 | 18576 | -0.48 | 0.45 | 45.43 |
|  | elevation | -0.28 | 15097 | -0.89 | 0.29 | 18.26 |
|  | P | 0.03 | 12796 | -0.62 | 0.84 | 57.59 |
|  | K | -0.13 | 15226 | -0.76 | 0.44 | 31.36 |
|  | scale | 0.99 | 15803 | 0.66 | 1.51 | - |
|  | normality | 8.62 | 13514 | 1.00 | 68.29 | - |
|  |  |  |  |  |  |  |
| **G** | Intercept | -0.05 | 18695 | -0.45 | 0.35 | 41.95 |
|  | elevation | -0.09 | 16379 | -0.61 | 0.38 | 37.08 |
|  | **P** | **0.65** | **14053** | **-0.02** | **1.27** | **93.59b** |
|  | **K** | **-0.58** | **15464** | **-1.12** | **-0.10** | **3.33a** |
|  | scale | 0.82 | 13583 | 0.48 | 1.29 | - |
|  | normality | 5.84 | 10650 | 1.00 | 65.06 | - |
|  |  |  |  |  |  |  |
| **R** | Intercept | -0.02 | 17163 | -0.44 | 0.37 | 42.22 |
|  | elevation | -0.05 | 16648 | -0.58 | 0.41 | 39.12 |
|  | **P** | **0.63** | **12960** | **-0.07** | **1.22** | **92.63b** |
|  | **K** | **-0.60** | **15860** | **-1.13** | **-0.09** | **3.35a** |
|  | scale | 0.82 | 13806 | 0.50 | 1.30 | - |
|  | normality | 6.38 | 11368 | 1.00 | 63.69 | - |
|  |  |  |  |  |  |  |
| **Na** | Intercept | 0.02 | 19346 | -0.39 | 0.40 | 49.27 |
|  | elevation | 0.08 | 16593 | -0.45 | 0.53 | 59.20 |
|  | **P** | **0.47** | **14482** | **-0.14** | **1.03** | **90.46b** |
|  | **K** | **-0.74** | **16433** | **-1.25** | **-0.24** | **1.44a** |
|  | scale | 0.82 | 15251 | 0.57 | 1.27 | - |
|  | normality | 9.65 | 14804 | 1.15 | 72.61 | - |
|  |  |  |  |  |  |  |
| **Ne** | Intercept | -0.01 | 20000 | -0.35 | 0.32 | 49.15 |
|  | elevation | 0.17 | 16502 | -0.23 | 0.60 | 76.65 |
|  | **P** | **0.58** | **14833** | **0.11** | **1.10** | **97.34a** |
|  | **K** | **-0.82** | **16701** | **-1.20** | **-0.35** | **0.42a** |
|  | scale | 0.70 | 15852 | 0.48 | 1.06 | - |
|  | normality | 10.81 | 15217 | 1.15 | 73.33 | - |
|  |  |  |  |  |  |  |
| **Ho** | Intercept | 0.03 | 20000 | -0.42 | 0.45 | 51.58 |
|  | elevation | 0.02 | 14548 | -0.51 | 0.58 | 52.06 |
|  | P | 0.66 | 14536 | -0.01 | 1.28 | 94.39 |
|  | K | -0.46 | 15960 | -1.02 | 0.09 | 8.72 |
|  | scale | 0.90 | 15456 | 0.64 | 1.38 | - |
|  | normality | 10.89 | 15895 | 1.20 | 74.51 | - |
|  |  |  |  |  |  |  |
| **He** | Intercept | 0.03 | 20709 | -0.30 | 0.34 | 57.27 |
|  | elevation | 0.15 | 16758 | -0.23 | 0.54 | 74.03 |
|  | **P** | **0.68** | **14408** | **0.20** | **1.14** | **98.59a** |
|  | **K** | **-0.87** | **16713** | **-1.23** | **-0.42** | **0.29a** |
|  | scale | 0.64 | 14676 | 0.42 | 1.03 | - |
|  | normality | 7.26 | 12429 | 1.00 | 68.16 | - |
|  |  |  |  |  |  |  |
| **F** | Intercept | -0.01 | 20000 | -0.50 | 0.46 | 47.60 |
|  | elevation | -0.16 | 16732 | -0.77 | 0.44 | 35.15 |
|  | P | -0.36 | 14514 | -1.06 | 0.38 | 21.18 |
|  | K | 0.26 | 16297 | -0.32 | 0.90 | 80.54 |
|  | scale | 1.01 | 14972 | 0.71 | 1.53 | - |
|  | normality | 10.66 | 14667 | 1.20 | 74.18 | - |
|  |  |  |  |  |  |  |