Table S1. Pearson correlation coefficients between five functional traits and 13 soil nutrients for the GTS plot at the species-level (leaf area and seed mass are log10transformed).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Al | B | Ca | Cu | Fe | K | Mg | Mn | P | Zn | N | Nmin | pH |
| Leaf area | r | 0.037  | **-0.251**  | **0.183**  | 0.125  | **-0.348**  | **0.218**  | **0.205**  | **0.240**  | **0.205**  | 0.078  | **0.224**  | **0.140**  | **0.180**  |
| n | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 |
| p | 0.322 | <.001 | 0.011 | 0.059 | <.001 | 0.003 | 0.005 | 0.001 | 0.005 | 0.166 | 0.002 | 0.040 | 0.012 |
| Specific leaf area | r | -0.032  | **-0.133**  | -0.014  | 0.037  | **-0.244**  | **-0.190**  | -0.039  | 0.048  | -0.072  | -0.114  | -0.044  | -0.034  | **0.197**  |
| n | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 |
| p | 0.345 | 0.048 | 0.431 | 0.323 | 0.001 | 0.009 | 0.314 | 0.275 | 0.185 | 0.078 | 0.292 | 0.336 | 0.007 |
| Seed mass | r | 0.018  | 0.103  | 0.037  | **0.158**  | 0.060  | 0.120  | 0.061  | 0.112  | 0.015  | 0.070  | 0.138  | 0.098  | 0.014  |
| n | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 |
|  | p | 0.416 | 0.112 | 0.332 | 0.031 | 0.240 | 0.078 | 0.236 | 0.093 | 0.430 | 0.205 | 0.051 | 0.124 | 0.435 |
| Wood density | r | -0.040  | **0.266**  | -0.057  | 0.029  | **0.297**  | -0.083  | -0.050  | **-0.145**  | -0.024  | 0.112  | -0.050  | -0.023  | **-0.151**  |
| n | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 |
| p | 0.310 | <.001 | 0.239 | 0.359 | <.001 | 0.151 | 0.267 | 0.035 | 0.383 | 0.081 | 0.267 | 0.388 | 0.030 |
| Maximum height | r | -0.050  | 0.010  | 0.035  | 0.039  | -0.001  | 0.126  | 0.039  | 0.059  | 0.049  | -0.039  | 0.019  | 0.008  | -0.039  |
| n | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 | 157 |
| p | 0.267 | 0.451 | 0.332 | 0.314 | 0.495 | 0.058 | 0.314 | 0.232 | 0.271 | 0.314 | 0.407 | 0.460 | 0.314 |

\* Significant correlations are in boldface type (p-value < 0.05).