Table. Phylogenetic signals test for environmental variables based on Pagel's lambda (λ) and Blomberg's K-statistics.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | λ | logL(λ) | logL(λ=0) | *p-value* | K | *p-value* |
| BIO 1 | 0.691493 | -170.439 | 4.51795 | 0.033541 | 0.353316 | 0.247 |
| BIO 2 | 6.84E-05 | -144.85 | -1.17E-03 | 1 | 0.232194 | 0.741 |
| BIO 3 | 0.0665977 | -121.51 | 0.263403 | 0.607792 | 0.204069 | 0.831 |
| BIO 4 | 0.135531 | -302.08 | 0.317187 | 0.573303 | 0.381026 | 0.173 |
| BIO 7 | 0.0411253 | -191.09 | 0.0367501 | 0.847975 | 0.370946 | 0.157 |
| BIO 12 | 0.523719 | -232.03 | 0.980445 | 0.322089 | 0.345593 | 0.241 |
| BIO 15 | 0.17629 | -143.58 | 0.382223 | 0.536416 | 0.345535 | 0.267 |
| BIO 17 | 0.741731 | -185.50 | 3.99848 | 0.0455412 | 0.444794 | 0.042 |
| elevation | 0.299465 | -249.70 | 0.678491 | 0.410107 | 0.383842 | 0.181 |
| nitrogen | 6.84E-05 | -208.73 | -8.09E-05 | 1 | 0.374514 | 0.245 |
| pH | 6.84E-05 | -118.52 | -6.93E-04 | 1 | 0.27911 | 0.559 |
| aridity | 6.84E-05 | -5.87 | -5.96E-04 | 1 | 0.427701 | 0.082 |
| carbon | 6.84E-05 | -154.22 | -2.16E-05 | 1 | 0.405027 | 0.166 |
| coarsefragment | 6.84E-05 | -99.98 | -1.09E-04 | 1 | 0.357604 | 0.212 |
| deciduousbroadleaf | 1.03011 | -113.35 | 9.20184 | 0.00241772 | 0.715796 | 0.025 |
| herbaceous | 1.00187 | -122.14 | -0.0421814 | 1 | 0.537563 | 0.047 |
| needleleaf | 0.703237 | -113.88 | 1.35432 | 0.244525 | 0.426568 | 0.1 |
| sand | 0.632515 | -123.41 | 2.22355 | 0.13592 | 0.578584 | 0.008 |
| soil | 1.03474 | -100.16 | 15.2357 | 9.49E-05 | 0.730002 | 0.006 |