**Table S8** Mantel test results for the correlation between fungal community composition and environmental variables.

|  |  |  |
| --- | --- | --- |
| Variablea | r | *P* |
| pH | **0.175**b | 0.020 |
| Mositure | –0.093 | 0.859 |
| TC | 0.108 | 0.125 |
| TN | 0.083 | 0.184 |
| TP | **0.463** | 0.001 |
| TK | 0.057 | 0.252 |
| NH4+-N | 0.006 | 0.461 |
| NO3--N | –0.015 | 0.550 |
| AP | **0.399** | 0.001 |
| AK | –0.036 | 0.642 |

a TC, TN, TP and TK indicate soil total carbon, total nitrogen, total phosphorus and total potassium, respectively; AP and AK indicate soil available phosphorus and available potassium, respectively; NH4+-N, ammonium nitrogen, NO3--N, nitrate nitrogen.

b Values in bold indicate significant correlation (*P* < 0.05).