**Table S1**. Pearson correlation coefficients between soil nematode community characteristics and soil physicochemical properties

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | pH | SM | SOC | TN | NH4+-N | NO3--N | MBC | MBN |
| TNEM | -0.10 | -0.04 | 0.34 | 0.29 | 0.27 | -0.22 | -0.25 | 0.04 |
| Ba | 0.01 | 0.13 | 0.42 | 0.39 | 0.35 | 0.04 | -0.11 | -0.03 |
| Fu | -0.09 | -0.37 | -0.08 | -0.20 | 0.22 | -0.33 | -0.24 | 0.01 |
| PP | -0.21 | 0.21 | **0.46\*** | **0.49\*** | -0.05 | -0.24 | -0.19 | 0.09 |
| OP | 0.13 | -0.27 | -0.01 | 0.03 | 0.36 | -0.19 | -0.28 | 0.26 |
| H´ | -0.23 | 0.30 | **0.53\*** | 0.41 | **0.54\*** | 0.09 | 0.32 | -0.45 |
| J´ | -0.22 | 0.18 | 0.26 | 0.21 | 0.32 | 0.26 | **0.59\*\*** | **-0.49\*** |
| λ | 0.24 | -0.32 | **-0.52\*** | -0.42 | -0.40 | -0.19 | **-0.54\*** | **0.57\*** |
| SR | -0.06 | 0.30 | 0.35 | 0.25 | 0.39 | 0.05 | 0.08 | -0.25 |
| TD | -0.02 | -0.05 | 0.07 | -0.08 | 0.35 | 0.12 | 0.30 | -0.21 |
| NCR | 0.21 | 0.43 | 0.45 | **0.57\*** | 0.07 | **0.52\*** | 0.23 | -0.10 |
| EI | -0.30 | -0.17 | -0.21 | -0.32 | 0.06 | **-0.55\*** | -0.24 | 0.02 |
| SI | -0.06 | -0.21 | -0.03 | -0.14 | 0.16 | -0.02 | 0.27 | -0.07 |
| WI | 0.19 | -0.35 | -0.19 | -0.24 | 0.15 | -0.13 | -0.12 | 0.05 |
| MI | 0.10 | -0.31 | -0.17 | -0.26 | 0.23 | -0.06 | 0.02 | 0.01 |
| PPI | -0.37 | 0.29 | 0.39 | **0.53\*** | 0.39 | -0.15 | 0.01 | 0.27 |
| PPI/MI | -0.11 | 0.14 | 0.09 | 0.22 | -0.22 | -0.13 | -0.18 | 0.14 |

\**P<0.05*; \*\**P<0.01*; TNEM: total nematode abundance; Ba, Fu, PP and OP indicated the absolute abundance of bacterivores, fungivores, plant parasites and omnivores-predators, respectively. H': Shannon diversity index; J’: Pielou evenness index; λ: Simpson dominance index; SR: Margalef richness index; TD: trophic diversity; NCR: nematode channel ratio; WI: Wasilewska index; MI: maturity index; PPI: plant parasites index; PPI/MI: plant parasites index / maturity index. SM, soil moisture; SOC, soil organic carbon; TN, soil total nitrogen; NH4+-N, soil ammonium nitrogen; NO3--N, soil nitrate nitrogen; MBC, microbial biomass carbon; MBN, microbial biomass nitrogen.