**Table S1. Commission number, abbreviation and corresponding substrate of soil extracellular enzymes**

|  |  |  |  |
| --- | --- | --- | --- |
| EEAs | Abbreviation | ECN | Corresponding substrate |
| β-1,4-glucosidase | BG | 3.2.1.21 | 4-MUB-β-D-glucoside |
| β-D-cellobiohydrolase | CBH | 3.2.1.91 | 4-MUB-β-D-cellobioside |
| β-N-acetylglucosaminidase | NAG | 3.2.1.14 | 4-MUB-N-acetyl-β-D-glucosaminide |
| Leucine-aminopeptidase | LAP | 3.4.11.1 | L-leucine-7-amido-4-methylcoumarin hydrochloride |
| Alkaline phosphatase | AP | 3.1.3.1 | 4-MUB-phosphate |

**Figure S1.** Soil total nutrients stoichiometry characteristics



**Figure S2.** Soil dissolved nutrients stoichiometry characteristics



**Figure S3.** Soil microbial biomass stoichiometry characteristics



**Figure S4.** Soil extracellular enzyme stoichiometry characteristics

