**Micro-environmental variation of soil microbial biodiversity differs across land use types – implications for field sampling designs**

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**Supplementary Tables**

Table S1. Mean value and standard deviance of soil chemical properties according to soil depth classes in forest, grassland and horticulture lands.

|  |  |  |
| --- | --- | --- |
| **Soil properties** | **Land use** | **Soil depth** |
| **0-5 cm** | **5-10 cm** | **10-20 cm** | **20-40 cm** |
| pH | Forest | 6.27 ± 0.16 | 6.40 ± 0.15 | 6.54 ± 0.13 | 6.63 ± 0.11 |
|  | Grassland | 5.91 ± 0.19 | 6.09 ± 0.21 | 6.29 ± 0.24 | 6.37 ± 0.29 |
|  | Horticulture | 6.95 ± 0.36 | 6.95 ± 0.53 | 7.02 ± 0.49 | 7.05 ± 0.46 |
| EC  | Forest | 245.8 ± 75.5 | 145.0 ± 38.3 | 67.2 ± 14.1 | 45.0 ± 20.9 |
| (uS/cm) | Grassland | 162.4 ± 46.5 | 82.8 ± 25.6 | 57.0 ± 12.8 | 52.1 ± 19.3 |
|  | Horticulture | 256.6 ± 62.5 | 227.4 ± 78.5 | 190.0 ± 106.1 | 133.9 ± 84.3 |
| Total C  | Forest | 144.9 ± 52.1 | 67.5 ± 16.9 | 31.2 ± 6.3 | --- |
| (g/kg) | Grassland | 82.8 ± 47.1 | 31.0 ± 12.4 | 12.1 ± 3.7 | --- |
|  | Horticulture | 48.8 ± 5.6 | 38.2 ± 7.3 | 30.3 ± 13.1 | --- |
| Total N  | Forest | 8.9 ± 2.9 | 4.7 ± 1.1 | 2.1 ± 0.4 | --- |
| (g/kg) | Grassland | 8.7 ± 12.8 | 2.3 ± 0.8 | 0.9 ± 0.2 | --- |
|  | Horticulture | 3.8 ± 0.3 | 3.1 ± 0.5 | 2.5 ± 1.0 | --- |
| C/N | Forest | 16.1 ± 0.9 | 14.4 ± 0.7 | 14.9 ± 1.1 | --- |
|  | Grassland | 13.7 ± 3.3 | 13.5 ± 0.7 | 12.9 ± 0.7 | --- |
|  | Horticulture | 12.8 ± 0.5 | 12.2 ± 0.7 | 11.8 ± 0.8 | --- |