**Table S9: p-values of post-hoc tests for differences between the mean OEP and vegetation types (top) and OEP and horizons within the same vegetation type (bottom), p<0.05 indicates a significant relationship at the 95% confidence level (bold values), con= coniferous trees, dec= deciduous trees, grass= grasslands, L: litter, Ah1= topsoil 1 (0-3 cm), Ah2= topsoil 2 (3-10 cm), columns containing the phrase “without beeches” only comprise dec locations L15, L19, L 22, L25, L26-1, L26-2.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Vegetation types** | | | | | | |
|  | **con** | **dec** | **grass** | **dec (without beeches)** | | |
| L-Ah1 | 0.20 | **0.002** | - | 0.11 | | |
| L-Ah2 | 0.07 | **0.0003** | - | 0.25 | | |
| Ah1-Ah2 | 0.84 | **1.9e-09** | 0.33 | **0.005** | | |
| **Horizons** | | | | | | |
|  | **L** | **Ah1** | **Ah2** | **L**  **(without beeches)** | **Ah1**  **(without beeches)** | **Ah2**  **(without beeches)** |
| con-dec | **0.02** | 0.26 | 0.56 | 0.40 | 0.10 | 0.56 |
| con-grass | - | **6.6e-05** | **0.0004** | - | 0.20 | **0.0004** |
| dec-grass | - | **4.9e-09** | **0.0004** | - | **3.0e-9** | **0.0004** |