**Table S8: p-values of post-hoc tests for differences between the mean *n*-alkane ratio (*n-*C31+*n*-C33)/(*n*-C27+*n*-C31+*n*-C33) and vegetation types (top) and the ratio 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, grey numbers indicate no significant differences in ANOVA.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Vegetation types** | | | | |
|  | **Ah1** | **Ah2** | **Ah1**  **(without beeches)** | **Ah2**  **(without beeches)** |
| dec-grass | **1.5e-8** | **1.5e-5** | **0.008** | **0.03** |
| **Horizons** | | | | |
|  | **dec** | **grass** | **dec (without beeches)** | |
| L-Ah1 | 0.44 | - | 0.34 | |
| L-Ah2 | **0.01** | - | 0.34 | |
| Ah1-Ah2 | 0.19 | 0.64 | 0.34 | |