**Table S2.** **Summary of mixed effects models for infiltration capacity at saturation in September.** Results for the infiltration rate as affected by sand content in 0-10 cm depth (Sand), plant species richness (SR), plant functional group richness (FG), grasses (GR), legumes (LEG), small herbs (SH), tall herbs (TH), interaction Sand x LEG and earthworm treatment (E) as well as the interaction terms E x SR and E x FGfor measurements in September.

|  |  |
| --- | --- |
|  | **September** |
| **Source** | 0 m |
|  | L-ratio | p |  |
| Sand | **8.41** | **0.004** | ↓ |
| SR (log-linear) | <0.01 | 0.969 |  |
| FG (linear) | 0.10 | 0.750 |  |
|  GR | 2.73 | 0.294 |  |
|  LEG | **6.96** | **0.033** | ↑ |
|  SH | 1.34 | 0.494 |  |
|  TH | 0.06 | 0.802 |  |
|  Sand×LEG | **12.67** | **0.002** |  |
| E | 0.24 | 0.628 |  |
| E×SR(log-linear) | 0.21 | 0.646 |  |
| E×FG (linear) | 0.25 | 0.615 |  |

Models were fitted by stepwise inclusion of fixed effects. Likelihood ratio tests were applied to assess model improvement (L ratio) and the statistical significance of the explanatory terms (p values). For GR, LEG, SH and TH the adjusted p-values according to the Holm procedure are given in the table. Significant effects are marked in bold. Arrows indicate increase (↑) or decrease (↓).