

Supplemental Table S1. Spearman's rank correlation coefficients of relationships between the cumulative N₂O, CH₄, and CO₂ eq emissions and soil properties (means ±SE; n = 4).

| Variable | N | P | K | S | MBC | MBN | EC | pH [†] | TC | TN | Temp | Moisture |
|--------------------|--------|--------|--------|-------|-------|-------|-------|-----------------|--------|--------|--------|----------|
| N ₂ O | -0.216 | 0.192 | -0.017 | 0.194 | 0.104 | 0.184 | 0.269 | -0.119 | 0.361* | 0.440* | 0.03 | 0.154 |
| CH ₄ | 0.140 | -0.192 | 0.049 | 0.251 | 0.214 | 0.344 | 0.258 | -0.26 | 0.405* | 0.367* | -0.026 | 0.030 |
| CO ₂ eq | -0.321 | 0.208 | 0.038 | 0.087 | 0.083 | 0.124 | 0.097 | -0.082 | 0.362* | 0.381* | 0.008 | 0.043 |

Note: Abbreviations: EC, electroconductivity; K, potassium; N, (organic) nitrogen; P, Phosphorus; MBC, microbial biomass carbon; MBN, microbial biomass nitrogen; TC, total carbon; TN, total nitrogen; OM, organic matter.

[†]Soil pH was measured in an 1:5 soil:water (v:v) ratio. Means followed by a common letter within a column are not significantly different (p < 0.05). Significance: *, p < 0.05.