

**Supplementary Table S1** *The Spearman correlation coefficients for basal respiration and soil nutrient content*

	<b>BR</b>	<b>P<sub>2</sub>O<sub>5</sub></b>	<b>K<sub>2</sub>O</b>	<b>NH<sub>4</sub></b>	<b>NO<sub>3</sub></b>	<b>N<sub>tot</sub></b>	<b>C<sub>tot</sub></b>
<b>BR</b>	1	0.91	0.86	0.78	0.03	0.31	0.23
<b>P<sub>2</sub>O<sub>5</sub></b>	0.91	1	0.85	0.75	0.02	0.23	0.13
<b>K<sub>2</sub>O</b>	0.86	0.85	1	0.81	0.23	0.33	0.37
<b>NH<sub>4</sub></b>	0.78	0.75	0.81	1	0.3	0.36	0.38
<b>NO<sub>3</sub></b>	0.03	0.02	0.23	0.30	1	0.64	0.67
<b>N<sub>tot</sub></b>	0.31	0.23	0.33	0.36	0.64	1	0.9
<b>C<sub>tot</sub></b>	0.23	0.13	0.37	0.38	0.37	0.9	1

**Supplementary Fig. S1** Pairwise comparison of OTUs with significant changes in abundance (according DeSEQ2,  $p_{adj} < 0.05$ ) between sample groups - order level (Log2FoldChange - estimated size effect for current OTUs, Order - taxonomic order for current OTUs).

