

Soil	Depth (cm)	SOM (%)	pH <sub>H<sub>2</sub>O</sub>	Moisture (wt %)	16s (gene copies g <sup>-1</sup> )	ITS2 (gene copies g <sup>-1</sup> )	O <sub>2</sub> consumption (μM g <sup>-1</sup> d <sup>-1</sup> )
Temperate coniferous	0-6	78	3.8	45	$6.2 \times 10^{10} \pm 2.8 \times 10^{10}$	$5.5 \times 10^8 \pm 6.9 \times 10^7$	9
Temperate beech	0-5	20	3.9	46	$4.2 \times 10^{10} \pm 1.2 \times 10^{10}$	$3.7 \times 10^7 \pm 1.7 \times 10^7$	5
Arctic heath	0-6	36	5.3	51	$2.8 \times 10^{10} \pm 4.5 \times 10^{10}$	$7.0 \times 10^7 \pm 1.5 \times 10^6$	14
Bare Arctic	0-5	3.6	7.3	8.1	$2.2 \times 10^9 \pm 1.1 \times 10^9$	$2.4 \times 10^6 \pm 6.8 \times 10^5$	0.3