Table S1. Properties of biochar used in study. Average values are given ±SD for triplicate measurements where available. Full details on methods used are given in prior studies by Sifton et al. [21] and Liao et al. [45].

Property (units)	Value
Feedstock species	Spruce (*Picea* sp.), pine (*Pinus* sp.), fir (*Abies* sp.)
Pyrolysis temperature (°C)	625
Pyrolysis process	Continuous slow pyrolysis
Particle size (mm)	<0.042
Ash (%)	10.58 ± 1.25
Bulk density (g cm^{-3})	0.158
pH	7.88 ± 0.03
Electrical conductivity (μS cm^{-1})	86.07 ± 1.63
C (%)	82.40 ± 0.35
N (%)	0.30 ± 0.00
P (%)	0.013 ± 0.001
K (%)	0.200 ± 0.020
Ca (%)	1.083 ± 0.153
Mg (%)	0.243 ± 0.064
Na (%)	0.101 ± 0.027
Cu (%)	0.002 ± 0.000
Fe (%)	0.587 ± 0.168
Mn (%)	0.064 ± 0.019
Mo (%)	0.0004 ± 0.0001
Zn (%)	0.005 ± 0.001
Moisture content (%)	3.09 ± 0.06
Volatile matter (%)	41.59 ± 0.80
Fixed carbon (%)	44.74 ± 1.14
Initial contact angle (°)	60.23 ± 0.26