

Supplementary Materials

Table S1. Properties of poultry litter used for biochar production. Values are means \pm standard deviation (n=3).

Properties	Value	
Moisture (%)	30.2 \pm 0.67	
pH-H ₂ O	8.49 \pm 0.02	
EC (mS cm ⁻¹) ¹	6.74 \pm 0.11	
Bulk density (g cm ⁻³)	0.42 \pm 0.01	
WHC (g g ⁻¹)	1.95 \pm 0.02	
Hydrophobicity class	Slightly hydrophobic	
C (%) ²	46.3 \pm 0.6	
N (%)	3.54 \pm 0.08	
C:N ratio	13.09 \pm 0.28	
NO ₃ -N (mg kg ⁻¹)	5.44 \pm 0.09	
NH ₄ -N (g kg ⁻¹)	2.630 \pm 0.033	
SRP (g kg ⁻¹)	0.929 \pm 0.035	
Elemental composition	Total (mg kg ⁻¹)	Water soluble (mg kg ⁻¹)
Al	587 \pm 67	42.18 \pm 1.1
As	1.3 \pm 0.28	0.55 \pm 0.01
Ca	21500 \pm 350	467.62 \pm 13.54
Cd	0.30 \pm 0.00	BDL
Co	0.93 \pm 0.06	0.37 \pm 0.01
Cr	5.42 \pm 0.4	0.78 \pm 0.03
Cu	637 \pm 49	262.2 \pm 17.62
Fe	163 \pm 63	118.55 \pm 5.46
K	32983 \pm 1484	22064 \pm 525
Mg	6617 \pm 252	323.82 \pm 12.59
Mn	442 \pm 22	11.72 \pm 0.31
Mo	3.65 \pm 0.48	1.57 \pm 0.06
Na	6867 \pm 451	4585 \pm 50
Ni	8.83 \pm 0.35	6.17 \pm 0.11
P	16317 \pm 681	1290 \pm 9
Pb	0.73 \pm 0.19	BDL
S	5483 \pm 153	3252 \pm 110
Se	1.75 \pm 0.23	0.42 \pm 0.02
Ti	0.38 \pm 0.19	0.62 \pm 0.06
Zn	680 \pm 40	66 \pm 1.14

¹ EC, electrical conductivity; WHC, water holding capacity at -33KPa; NO₃-N, nitrate nitrogen; NH₄-N, ammonium nitrogen; SRP, soluble reactive phosphorus; BDL, below detection limit.

² All concentrations of all nutrients and elements are on dry-weight basis.