

Caption of Supplementary data:

Table S1 Physicochemical characteristics of biochar.

Table S2 Physicochemical characteristics of soil used in this work.

Figure S1. Physiochemical properties of biochar: Scanning Electron Microscope (SEM) images (a), the organic functional groups on the surface of biochar (b), elemental analysis (c).

Table S1 Physicochemical characteristics of biochar

Parameters	Biochar
pH	8.18
C	84.8%
H	1.2%
O	12.0%
N	1.0%
S	1.0%
H/C	0.014
O/C	0.142
Particle size (mm)	2-5
BET surface area (m ² /g)	9.17
t-Plot micropore area (m ² /g)	6.28
t-Plot micropore volume (cm ³ /g)	0.0026

Table S2 Physicochemical characteristics of soil used in this work

Depth (cm)	0-20
pH	9.0
Clay (%)	5.9
Silt (%)	87.8
Sand (%)	6.3
Textural classification	Silty loam
organic matter (%)	3.52
Water content (%)	23.8

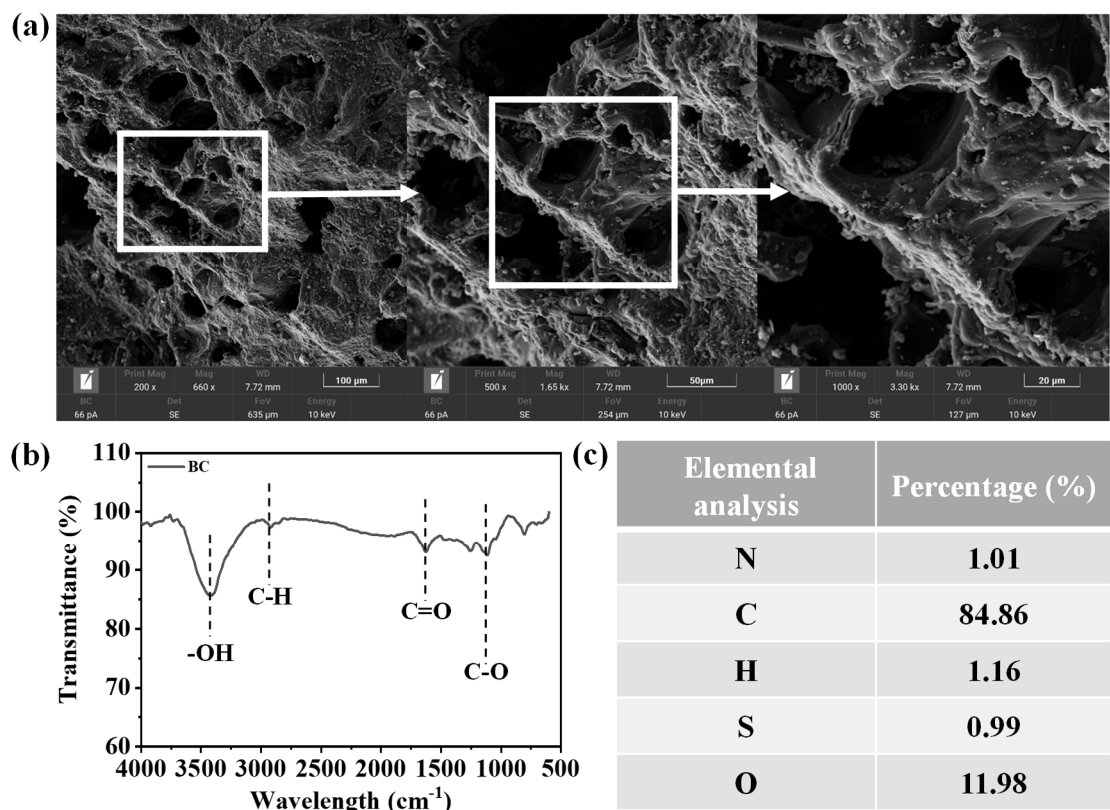


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