

Accepted Manuscript

Improved screening of biochar compounds for potential toxic activity with microbial biosensors

Oliver G.G. Knox, Hedda J. Weitz, Peter Anderson, Maria Borlinghaus, James Fountaine



PII: S2352-1864(17)30115-3
DOI: <https://doi.org/10.1016/j.eti.2017.12.007>
Reference: ETI 184

To appear in: *Environmental Technology & Innovation*

Received date: 7 April 2017
Revised date: 28 November 2017
Accepted date: 22 December 2017

Please cite this article as: Knox O.G.G., Weitz H.J., Anderson P., Borlinghaus M., Fountaine J., Improved screening of biochar compounds for potential toxic activity with microbial biosensors. *Environmental Technology & Innovation* (2018), <https://doi.org/10.1016/j.eti.2017.12.007>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

1 **Improved screening of biochar compounds for potential toxic**
2 **activity with microbial biosensors**

3
4 Oliver G.G. Knox^{1*}, Hedda J. Weitz², Peter Anderson³, Maria Borlinghaus⁴ and
5 James Fountaine^{1,5}.

6
7 ¹Scotland's Rural College, King's Buildings, Edinburgh, EH9 3JG

8 ²Institute of Biological and Environmental Sciences, University of Aberdeen,
9 Cruickshank Building, Aberdeen, AB24 3UU

10 ³Strathclyde Eco Innovation Unit (SEIU), Faculty of Engineering University of
11 Strathclyde, G1 1XW

12 ⁴UK Biochar Research Centre, University of Edinburgh, The King's Buildings,
13 Edinburgh, EH9 3JN

14 ⁵Syngenta, Jealott's Hill International Research Centre, Bracknell, Berkshire RG42
15 6EY

16
17 *Corresponding author: Oliver Knox email: oknox@une.edu.au

18 Present address: School of Environmental and Rural Science, University of New
19 England, Armidale, NSW, 2351

20
21 **Abstract**

22 Biochar is a carbon rich product destined for agricultural use, which can be
23 produced using an array of feedstock and pyrolysis conditions. As such, the resultant
24 biochar product can exhibit characteristics that result in either beneficial or

Download English Version:

<https://daneshyari.com/en/article/8858080>

Download Persian Version:

<https://daneshyari.com/article/8858080>

[Daneshyari.com](https://daneshyari.com)