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ERRATUM

Erratum to: Biochar application to a fertile sandy clay loam in boreal conditions: effects on soil properties and yield formation of wheat, turnip rape and faba bean

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The original version of this paper unfortunately contained errors.

In the Materials and methods section the description of the ash and elemental concentration of the biochar should be 'The ash content and the total elemental composition of the biochar were determined by dry ashing along the lines of Miller (1996). A 1.5 g sample was dry-ashed in a laboratory muffle furnace (Nabertherm Program Controller C19, Nabertherm, Lilienthal, Germany) by raising the temperature to 500 °C within 2 h and then keeping it at 500 °C for 3 h. Next, the ash was transferred into an Erlenmeyer flask with 100 ml 0.2 M HCl, boiled for 30 min, transferred quantitatively into a 100-ml measurement flask, adjusted to the volume with deionised water, and filtered through a filter paper (Whatman, Grade 589/3, blue ribbon, pore size 2 μm, GE Healthcare, UK). When necessary, dilutions were carried out with 0.2 M HCl. The total elemental concentrations of extracts were analysed by an inductively coupled plasma optical emission spectroscopy (ICP-OES; Thermo-Fisher iCAP3600 MFC Duo, Thermo Fisher Scientific, Cambridge, UK).

In the Results section, the sentences 'The BC had a BET SSA of 34.1 $m^2\ g^{-1}$, pH (H_2O) 10.8, ash content 104.1 g kg^{-1} and VM content 268.2 g kg^{-1}. The contents of total Ca, K and N were 44.4, 32.3 and 6.2 g kg^{-1}, respectively.' should be 'The BC had a BET SSA of 34.1 $m^2\ g^{-1}$, pH (H_2O) 10.8, ash content 55.7 g kg^{-1} and VM content 268.2 g kg^{-1}. The concentrations of total Ca, K and N were 10.0, 4.0 and 6.2 g kg^{-1}, respectively. In the Discussion section, the sentence 'Even though the application of 10 t ha^{-1} BC provided approximately 10 % C addition to the native SOC content in topsoil, as well as notable amounts of easily soluble K, Ca and Mn (183, 56 and 13 kg ha^{-1}, respectively)' should be 'Even though the application of 10 t ha^{-1} BC provided approximately 10 % C addition to the native SOC content in topsoil, as well as notable amounts of total Ca, K, and Mg (100, 40 and 17 kg ha^{-1}, respectively)'.

In Online supplementary material, Table S 2 should be as follows:

The online version of the original article can be found at http://dx.doi/org/10.1007/s11104-013-1851-5.

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Table S 2. Physicochemical properties of the spruce chip biochar, means with standard deviation (SD).

Property[a]	Result $_{total}$	SD	Unit
BET SSA	34.1	0.4	$m^2\ g^{-1}$
pH_{H2O}	10.8	0.2	
Ash	55.7	1.6	$g\ kg^{-1}$
VM	268.2	28.6	$g\ kg^{-1}$
C/N	142		
Al	0.45	0.01	$g\ kg^{-1}$
Ca	10.0	0.18	$g\ kg^{-1}$
Fe	2.9	0.07	$g\ kg^{-1}$
K	4.0	0.18	$g\ kg^{-1}$
Mg	1.7	0.02	$g\ kg^{-1}$
Mn	0.5	0.01	$g\ kg^{-1}$
Na	0.3	0.04	$g\ kg^{-1}$
P	1.1	0.02	$g\ kg^{-1}$
S	0.6	0.01	$g\ kg^{-1}$
C	878	40	$g\ kg^{-1}$
N	6.17	0.46	$g\ kg^{-1}$
Cd	0.30	0.004	$mg\ kg^{-1}$
Co	2.7	0.1	$mg\ kg^{-1}$
Cu	29.2	3.8	$mg\ kg^{-1}$
Ni	84.9	4.1	$mg\ kg^{-1}$
Pb	22.8	30.8	$mg\ kg^{-1}$
Sr	65.8	0.6	$mg\ kg^{-1}$
Zn	145.4	3.4	$mg\ kg^{-1}$

[a] n = 2 for pH, total C and N, n = 6 for VM and ash and n = 3 for other analyses. Abbreviations: BET SSA = specific surface area; VM = volatile matter.

References:

Miller, R.O., 1998. High-temperature oxidation: dry ashing, in: Kalra, Y.P. (Ed.), Handbook of Reference Methods for Plant Analysis.