

Supplementary material for:

## Hydrochars Derived from Spent Coffee Grounds as Zn Bio-Chelates for Agronomic Biofortification

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**Table S1.** Zn concentration and quantity of bio-product in each sample.

Sample	Zn (mg kg <sup>-1</sup> soil)	Bio-product (%)
Control A	0	0
Control B	10.00	0
SCG-1	0.02	0.17
H160-1	0.06	0.57
H200-1	0.35	3.01
SCG-Zn-1	10.00	0.17
H160-Zn-1	10.00	0.57
H200-Zn-1	10.00	3.01
SCG-2	0.05	0.5
H160-2	0.05	0.5
H200-2	0.06	0.5
SCG-Zn-2	30.05	0.5
H160-Zn-2	8.74	0.5
H200-Zn-2	1.66	0.5

Control A: only NPK; Control B: commercial chelate + NPK; SCG: spent coffee grounds;

H160: hydrochar at 160 °C; H200: hydrochar at 200 °C; SCG-Zn: SCG bio-chelates;

H160-Zn: H160 bio-chelates; H200-Zn: H200 bio-chelates.

Different numbers in the samples indicate the assay: (1) bio-chelates at 10 mg kg<sup>-1</sup> soil;  
(2) 0.5% of bio-product.