



Table S1. Nutritional loads per pot arising from the application of novel microbial consortia and biochar.

Nutritional element	Nutritional load [mg pot ⁻¹]				Biochar
	Microbial consortium A		Microbial consortium B		
	Single application	Double application	Single application	Double application	
Carbon	39.5	55.3	42.5	59.5	9394.0
Nitrogen	0.75	1.05	0.25	0.35	16.7
Phosphorus	8.25	11.55	8.25	11.55	204.4
Potassium	1152.5	1613.5	1177.5	1648.5	124.6

Table S2. Shoot nutrient contents (%) of wheat plants grown in heated or unheated soil being inoculated once (1x) or twice (2x) with one of the two microbial consortia (MC_A or MC_B), not inoculated (CON), or inoculated with autoclaved MC (MC_C_AC). The data show the mean of the main effects for each trial. Different small letters after values indicate significant differences between treatments; Tukey test ($p < 0.05$).

Parameters	Wheat shoot nutrient contents (%)					
	N content		P content		K content	
	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
MC_A_1x	2.37	2.90	0,31	0,28	5.17 b	5.80 a
MC_A_2x	2.49	2.98	0,32	0,30	5.15 b	5.73 a
MC_B_1x	2.52	3.00	0,32	0,30	5.36 ab	5.79 a
MC_B_2x	2.37	2.94	0,30	0,31	5.36 ab	5.75 a
CON	2.38	2.62	0,34	0,32	5.48 a	5.18 b
MC_A_AC	2.33	2.68	0,33	0,34	5.50 a	5.54 ab
Unheated soil	1.98 b	2.07 b	0.31 b	0.29 b	4.94 b	5.26 b
Heated soil	2.84 a	3.64 a	0.33 a	0.33 a	5.73 a	6.01 a
Deficiency thresholds [43]	3	3	0.3	0.3	2	2