

HCH Removal in a Biochar-Amended Biofilter

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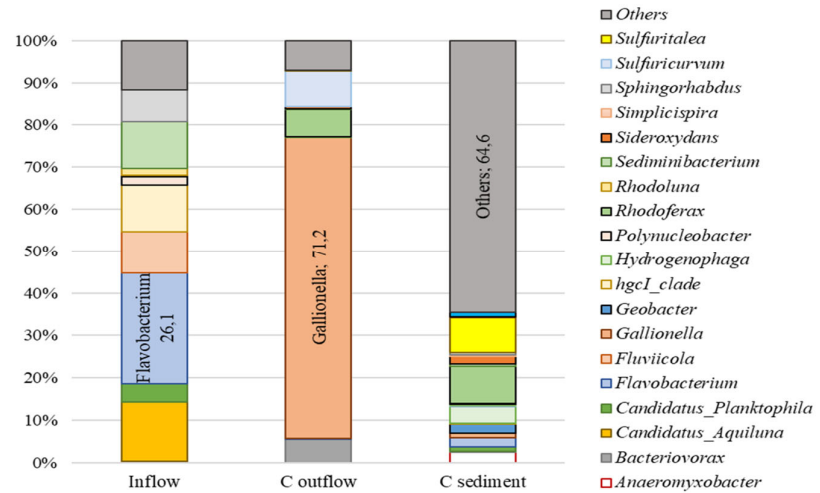


Figure S1. Relative representation of microorganisms at family level (abundance > 5 %) in the control biofilter C inflow, C outflow and C sediment samples in September 26th 2018.

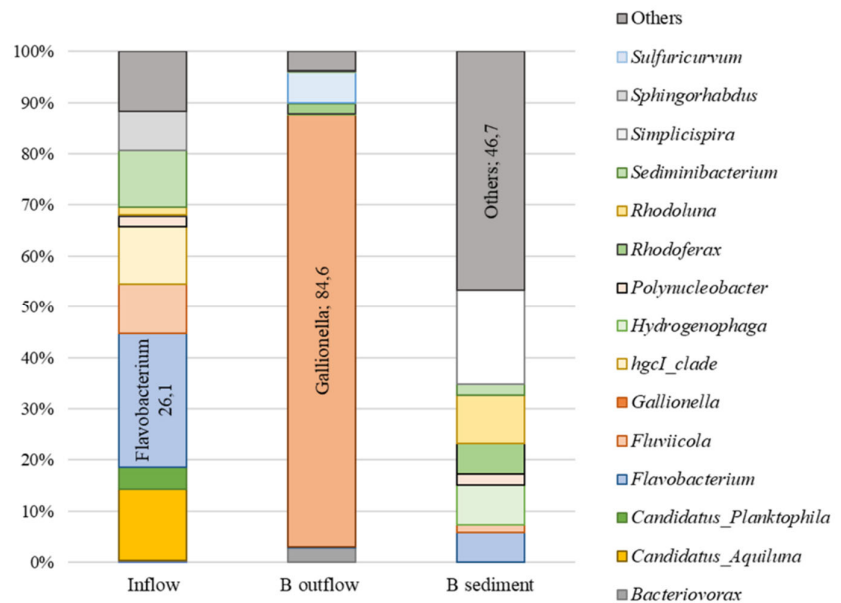


Figure S2. Relative representation of microorganisms at family level (abundance > 5 %) in the biochar biofilter B inflow, B outflow and B sediment samples in September 26th 2018.

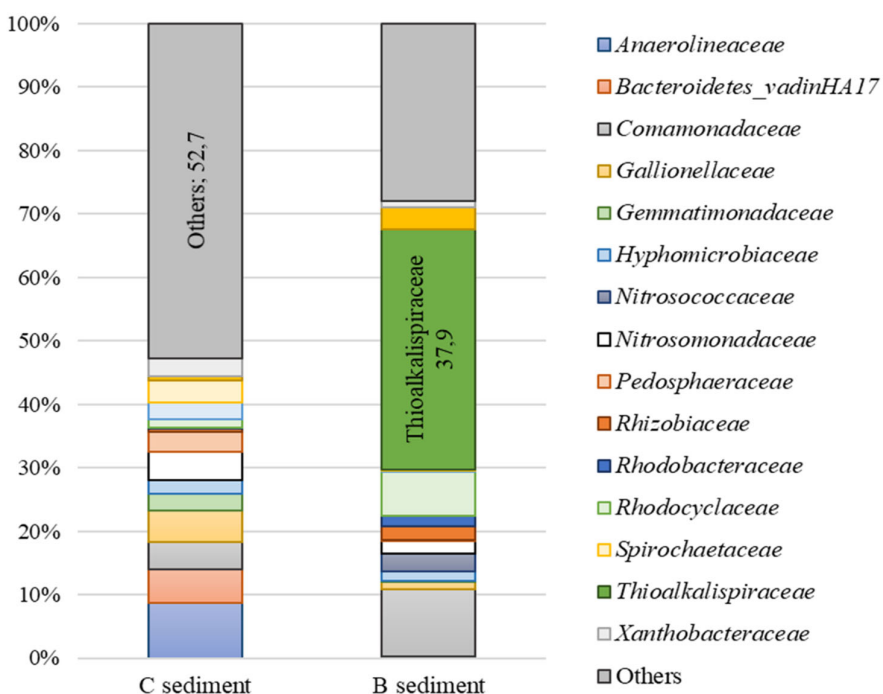


Figure S3. Relative representation of microorganisms at family level (abundance > 2 %) in the sediment samples of control biofilter C and biochar biofilter B in November 1st 2019.

Table S1. Concentration of HCH isomers during experiment (LOQ < 0.01 µg L⁻¹).

Month		HCH isomers concentration, µg L ⁻¹				
		α-HCH	β-HCH	γ-HCH	δ-HCH	ε-HCH
August, 2018	Inflow	14.0	2.8	15.1	118.3	15.5
	C	7.8	1.5	8.9	67.3	12.4
	B	3.6	0.8	3.9	26.4	4.1
September, 2018	Inflow	10.3	2.2	8.5	122.2	13.2
	C	1.2	1.5	1.3	23.6	12.5
	B	< LOQ	0.2	< LOQ	1.0	1.1
October, 2018	Inflow	7.4	1.6	3.8	131.0	12.3
	C	0.4	1.2	0.5	14.9	10.8
	B	< LOQ	< LOQ	< LOQ	1.2	1.0
November, 2018	Inflow	7.5	3.6	4.7	110.4	14.3
	C	0.9	2.1	0.7	16.7	11.6
	B	0.0	< LOQ	0.0	1.7	1.3

December, 2018	Inflow	5.2	1.4	2.1	79.8	12.4
	C	1.5	1.4	1.3	32.0	11.1
	B	< LOQ	0.2	< LOQ	1.9	1.1
January, 2019	Inflow	4.5	1.9	3.0	51.3	8.2
	C	1.1	1.3	1.0	22.6	8.0
	B	< LOQ	< LOQ	< LOQ	0.4	0.6
February, 2019	Inflow	8.6	2.6	6.3	117.7	14.3
	C	2.2	1.7	2.4	44.9	11.7
	B	< LOQ	0.3	0.1	1.5	0.7
March, 2019	Inflow	10.9	4.4	8.4	74.1	11.5
	C	0.7	1.7	0.8	14.6	8.8
	B	0.0	< LOQ	< LOQ	1.2	1.0
April, 2019	Inflow	8.1	2.4	7.4	76.1	10.1
	C	0.4	1.1	0.4	9.9	8.1
	B	< LOQ	0.2	0.1	0.7	1.0
May, 2019	Inflow	9.8	2.0	9.6	84.9	13.2
	C	6.1	1.4	6.5	53.4	11.3
	B	1.7	0.9	1.5	16.5	3.9

Table S2. Concentration of Chlorobenzenes (CLBs) during experiment.

Month		Chlorobenzenes' concentration, µg L ⁻¹										
		Benzen	CIB	1.3-diCLB	1.4-diCLB	1.2-diCLB	1.3.5-triCLB	1.2.4-triCLB	1.2.3-triCLB	1.2.4.5+1.2.3.5-tetraCLB	1.2.3.4-tetraCLB	penta-CLB
	LOQ	< 1	< 0.2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.015	< 0.01	< 0.015
August, 2018	Inflow	4.8	268.0	57.9	260.7	62.7	9.2	43.2	18.5	0.6	0.4	< LOQ
	C	< LOQ	1.3	26.9	128.6	27.1	3.9	19.1	8.0	0.3	0.2	< LOQ
	B	< LOQ	9.2	10.7	37.3	11.8	1.9	9.8	3.0	0.1	0.1	< LOQ
September, 2018	Inflow	< LOQ	23.2	129.3	120.5	102.6	19.2	139.1	17.2	2.9	1.7	0.4
	C	< LOQ	< LOQ	33.5	20.2	8.9	13.8	9.6	11.2	0.3	0.6	< LOQ
	B	< LOQ	< LOQ	0.6	0.6	1.6	< LOQ	6.4	2.1	< LOQ	< LOQ	< LOQ
October, 2018	Inflow	1.0	143.0	168.4	415.0	81.4	41.6	70.9	4.6	9.6	2.8	2.3
	C	< LOQ	< LOQ	22.8	14.6	2.3	17.7	1.4	2.2	0.5	0.8	0.6
	B	< LOQ	< LOQ	0.4	0.6	1.1	0.2	< LOQ	0.4	< LOQ	< LOQ	< LOQ
November, 2018	Inflow	< LOQ	< LOQ	328.1	< LOQ	75.3	50.9	114.0	3.2	10.2	3.9	4.1
	C	< LOQ	< LOQ	92.2	1.3	3.6	30.1	7.6	2.1	0.9	1.5	1.2
	B	< LOQ	< LOQ	0.4	0.5	3.6	0.2	2.5	0.4	< LOQ	0.0	0.1
December, 2018	Inflow	< LOQ	101.0	44.5	170.7	35.2	5.0	37.8	0.4	0.6	0.3	< LOQ
	C	< LOQ	< LOQ	21.0	2.3	1.6	4.6	2.2	0.4	< LOQ	0.2	< LOQ
	B	< LOQ	< LOQ	0.1	< LOQ	0.6	0.1	0.4	0.1	< LOQ	< LOQ	< LOQ
January, 2019	Inflow	< LOQ	25.0	87.2	313.4	45.1	16.3	64.1	2.8	1.6	2.1	0.4
	C	< LOQ	< LOQ	21.6	8.5	3.2	8.9	6.7	1.3	< LOQ	0.7	0.3
	B	< LOQ	< LOQ	0.1	< LOQ	0.2	0.2	2.5	< LOQ	< LOQ	< LOQ	< LOQ
February, 2019	Inflow	< LOQ	93.0	55.0	251.5	45.3	6.9	36.9	4.0	0.4	0.7	< LOQ
	C	< LOQ	< LOQ	19.3	6.8	7.2	3.1	9.5	1.2	0.1	0.4	< LOQ
	B	< LOQ	< LOQ	0.2	0.4	1.0	0.2	4.8	< LOQ	< LOQ	< LOQ	< LOQ
March, 2019	Inflow	3.0	136.0	32.8	111.1	27.0	3.7	37.4	3.2	0.5	0.8	< LOQ

[illegible]