

Table S2. Physicochemical properties of the sediments after incubation

Time (day)	SMX concentration ($\mu\text{g L}^{-1}$)	NH_4^+ ($\mu\text{mol kg}^{-1}$)	NO_3^- ($\mu\text{mol kg}^{-1}$)	NO_2^- ($\mu\text{mol kg}^{-1}$)	TOC (mg g^{-1})
1	0	187.22 $\pm$ 1.11 ^{bcd}	7.74 $\pm$ 0.32 ^d	0.88 $\pm$ 0.01 ^e	9.57 $\pm$ 0.02 ^b
	0.05	186.11 $\pm$ 3.33 ^d	8.06 $\pm$ 0.16 ^{cd}	0.90 $\pm$ 0.01 ^{de}	9.63 $\pm$ 0.09 ^{ab}
	0.5	186.67 $\pm$ 1.11 ^{cd}	8.22 $\pm$ 0.32 ^{bcd}	0.94 $\pm$ 0.01 ^{bc}	9.7 $\pm$ 0.02 ^{ab}
	5	190.00 $\pm$ 1.11 ^{abc}	8.55 $\pm$ 0.48 ^{abc}	0.92 $\pm$ 0.01 ^{cd}	9.74 $\pm$ 0.02 ^{ab}
	50	190.56 $\pm$ 1.67 ^{ab}	8.87 $\pm$ 0.32 ^{ac}	0.95 $\pm$ 0.03 ^{ab}	9.88 $\pm$ 0.01 ^a
	1000	191.11 $\pm$ 1.11 ^a	9.03 $\pm$ 0.32 ^a	0.98 $\pm$ 0.02 ^a	9.65 $\pm$ 0.36 ^{ab}
3	0	125.00 $\pm$ 1.67 ^e	5.97 $\pm$ 0.32 ^c	0.69 $\pm$ 0.02 ^d	9.41 $\pm$ 0.02 ^d
	0.05	133.33 $\pm$ 0.56 ^d	6.29 $\pm$ 0.16 ^c	0.80 $\pm$ 0.03 ^c	9.46 $\pm$ 0.03 ^d
	0.5	135.56 $\pm$ 0.55 ^d	6.61 $\pm$ 0.16 ^b	0.81 $\pm$ 0.02 ^c	9.52 $\pm$ 0.02 ^c
	5	138.89 $\pm$ 2.22 ^c	6.77 $\pm$ 0.16 ^b	0.83 $\pm$ 0.01 ^{bc}	9.54 $\pm$ 0.04 ^{cd}
	50	143.33 $\pm$ 1.67 ^b	7.42 $\pm$ 0.32 ^a	0.85 $\pm$ 0.02 ^b	9.65 $\pm$ 0.02 ^a
	1000	147.22 $\pm$ 1.67 ^a	7.74 $\pm$ 0.32 ^a	0.88 $\pm$ 0.01 ^a	9.57 $\pm$ 0.05 ^b
7	0	125.00 $\pm$ 1.67 ^e	4.19 $\pm$ 0.16 ^e	0.67 $\pm$ 0.05 ^d	9.29 $\pm$ 0.04 ^d
	0.05	133.33 $\pm$ 0.56 ^d	4.68 $\pm$ 0.16 ^d	0.71 $\pm$ 0.02 ^{cd}	9.38 $\pm$ 0.04 ^c
	0.5	135.56 $\pm$ 0.56 ^d	5.16 $\pm$ 0.16 ^c	0.76 $\pm$ 0.02 ^{bc}	9.5 $\pm$ 0.02 ^b
	5	138.89 $\pm$ 2.22 ^c	5.81 $\pm$ 0.32 ^b	0.82 $\pm$ 0.01 ^{ab}	9.54 $\pm$ 0.04 ^{ab}
	50	143.33 $\pm$ 1.67 ^b	5.64 $\pm$ 0.16 ^b	0.82 $\pm$ 0.03 ^a	9.58 $\pm$ 0.02 ^a
	1000	147.22 $\pm$ 1.67 ^a	6.45 $\pm$ 0.16 ^a	0.80 $\pm$ 0.02 ^{ab}	9.54 $\pm$ 0.05 ^{ab}
14	0	86.11 $\pm$ 1.67 ^e	3.22 $\pm$ 0.32 ^c	0.58 $\pm$ 0.01 ^b	9.14 $\pm$ 0.03 ^d
	0.05	87.22 $\pm$ 1.11 ^e	3.87 $\pm$ 0.16 ^b	0.62 $\pm$ 0.05 ^{ab}	9.05 $\pm$ 0.02 ^e
	0.5	91.67 $\pm$ 1.67 ^d	4.35 $\pm$ 0.16 ^a	0.63 $\pm$ 0.01 ^a	9.19 $\pm$ 0.01 ^c
	5	96.11 $\pm$ 2.22 ^c	4.19 $\pm$ 0.16 ^{ab}	0.65 $\pm$ 0.02 ^a	9.26 $\pm$ 0.03 ^b
	50	105.56 $\pm$ 1.67 ^b	4.35 $\pm$ 0.16 ^a	0.62 $\pm$ 0.01 ^{ab}	9.31 $\pm$ 0.01 ^a
	1000	111.11 $\pm$ 1.67 ^a	3.87 $\pm$ 0.16 ^b	0.66 $\pm$ 0.01 ^a	9.33 $\pm$ 0.02 ^a
21	0	91.11 $\pm$ 0.56 ^d	3.39 $\pm$ 0.32 ^b	0.45 $\pm$ 0.01 ^c	8.96 $\pm$ 0.04 ^c
	0.05	95.00 $\pm$ 1.11	4.03 $\pm$ 0.16 ^a	0.48 $\pm$ 0.03 ^d	9.05 $\pm$ 0.02 ^b
	0.5	91.67 $\pm$ 1.11 ^d	4.52 $\pm$ 0.16 ^a	0.41 $\pm$ 0.01 ^c	9.1 $\pm$ 0.02 ^a
	5	96.11 $\pm$ 1.11 ^c	4.35 $\pm$ 0.16 ^a	0.51 $\pm$ 0.01 ^b	9.03 $\pm$ 0.02 ^b
	50	98.89 $\pm$ 1.11 ^b	4.03 $\pm$ 0.16 ^{ab}	0.53 $\pm$ 0.02 ^{ab}	9 $\pm$ 0.01 ^{bc}
	1000	115.56 $\pm$ 1.67 ^a	4.19 $\pm$ 0.64 ^a	0.56 $\pm$ 0.01 ^a	9 $\pm$ 0.03 ^{bc}
28	0	75.00 $\pm$ 1.11 ^e	2.58 $\pm$ 0.16 ^b	0.39 $\pm$ 0.02 ^d	9.08 $\pm$ 0.04 ^b
	0.05	86.67 $\pm$ 1.11 ^c	3.06 $\pm$ 0.16 ^{ab}	0.45 $\pm$ 0.01 ^c	9.16 $\pm$ 0.02 ^a
	0.5	82.22 $\pm$ 3.89 ^d	3.06 $\pm$ 0.32 ^{ab}	0.50 $\pm$ 0.01 ^{ab}	9.17 $\pm$ 0.02 ^a
	5	88.33 $\pm$ 2.22 ^c	3.39 $\pm$ 0.16 ^a	0.52 $\pm$ 0.01 ^a	9.15 $\pm$ 0.03 ^a
	50	95.00 $\pm$ 1.67 ^b	3.55 $\pm$ 0.48 ^a	0.45 $\pm$ 0.01 ^c	9.05 $\pm$ 0.02 ^b
	1000	101.67 $\pm$ 1.11 ^a	3.06 $\pm$ 0.32 ^{ab}	0.46 $\pm$ 0.06 ^{bc}	9 $\pm$ 0.03 ^c

The letters in the superscript indicate significant differences ($p < 0.05$) at different times.

TOC is total organic carbon.