

**Supplementary material**

**Effect of pollution on early diatom colonisation on artificial substrata in urban lowland streams**

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**Table S1. Parameters for the logistic model (S-curve) fitted for the total density of diatoms in the biofilm at each site**

$K$ , natural logarithm of the carrying capacity;  $r$ , growth rate;  $X_{50}$ , Time (h) at which the variable reaches 50% of the carrying capacity;  $P$ , statistical significance (significant values in bold)

Parameters (logistic model-S curve)				
Site	$K$	$r$	$X_{50}$	$P$
LI	12.266	-1.294	0.959	<b>0.001</b>
HI	10.760	-1.322	0.916	<b>0.001</b>

**Table S2. Results of SIMPER (Similarity Percentages – species contributions) test showing the average dissimilarity values and the species contribution for each site at  $T_0$  and  $T_5$  considering the diatoms assemblages found in glass, sediment and water**

LI, low impact site, HI, high impact site; NPAL, *Nitzschia palea*; NAMP, *Nitzschia amphibian*; NUMB, *Nitzschia umbonata*; NPAE, *Nitzschia paleacea*; GPAR, *Gomphonema parvulum*; SPUP, *Sellaphora pupula*; ESBM, *Eolimna subminuscula*

Site/time	Glass v. Sediment			Glass v. Water			Sediment v. Water		
	Average dissimilarity	Species	Contribution (%)	Average dissimilarity	Species	Contribution (%)	Average dissimilarity	Species	Contribution (%)
LI/ $T_0$	86.68	NPAL	44.45	71.12	NAMP	33.48	37.47	NPAL	39.73
		NAMP	28.31		NPAL	33.21		NUMB	25.89
		NUMB	10.49		NUMB	11.81		NPAE	7.39
LI/ $T_5$	44.19	NPAL	33.49	38.47	NUMB	22.47	29.39	NPAL	26.13
		NUMB	25.65		NPAL	20.87		NUMB	13.32
		NAMP	8.72		NAMP	14.08		NAMP	6.59
HI/ $T_0$	82.2	NAMP	40.88	83.37	NAMP	40.69	26.93	NPAL	18.01
		GPAR	17.93		GPAR	17.94		SPUP	16.06
		SPUP	11.93		NPAL	7.96		GPAR	10.43
HI/ $T_5$	59.77	SPUP	26.66	54.24	ESBM	17.08	38.33	SPUP	38.33
		ESBM	15.96		NPAL	16.92		NUMB	10.31
		NAMP	13.82		NAMP	14.38		NPAL	8.89
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