

Supplementary Materials: Sialic Acids: a Highly Important Family of Carbohydrates Overlooked in Environmental Biofilms

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1. Supplementary Information

Table S1. Observed and theoretical masses (averaged from duplicate analyses) for Pse/Leg and Kdn, including their characteristic C-9 marker fragments and water-loss peak masses.

EPS sample	Structure	Observed [M+H] ⁺	Theoretical [M+H] ⁺	Mass error (ppm)	Water loss marker	C-9 marker
Nutrient poor	Pse/Leg	451.182	451.18289	1.97	433.16	297.09
	KDN	385.1231	385.12471	4.18	367.11	313.08
Nutrient enriched	Pse/Leg	451.1823	451.18289	1.31	433.16	297.09
	KDN	385.12445	385.12471	0.68	367.11	313.08

Table S2. Processing data of the raw sequences of the 16S rRNA gene amplicon sequencing indicating the raw reads, reads after low quality read removal (trimmed), after merging of forward and reverse reads (merged) and reads mapped to OTUs (mapped).

Sample	Raw reads	Trimmed	Merged	Mapped
Nutrient poor	64124	64118	63052	57283
Nutrient enriched	55947	55943	55023	50700

Table S3. Alpha diversity analyses on the 16S rRNA gene amplicon sequencing data.

Sample	Reads	Observed OTUs	Shannon Index
Nutrient poor	57028	466	4.8
Nutrient enriched	49849	419	3.6

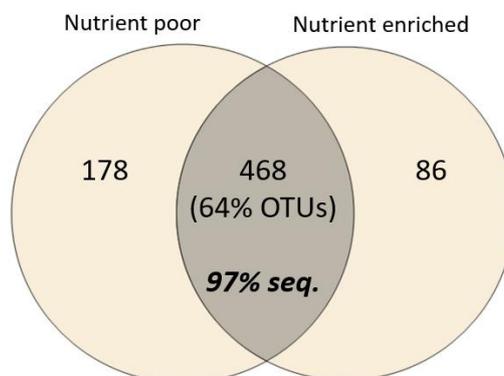


Figure 1. Venn diagram of the nutrient poor and nutrient enriched cooling tower biofilm based on the 16S rRNA gene amplicon sequencing data. 64 % of the OTUs are shared between the two samples. 97 % of the sequences are included in the shared OTUs.