

1 SUPPLEMENTARY MATERIALS

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4 **S1.** Microbial water quality detected in treatment plants from the Northern and Southern
5 areas of Culiacán, Sinaloa, México.

Zone	Sampling point	Microor-ganism	Microbiological concentration by sampling month (CFU·100 mL ⁻¹)							
			January	February	March	April	May	June	July	August
Northern	Source of water supply	TC	900	270	440	2200	2500	15000	1200	15000
		EC	230	130	130	730	290	930	470	3200
		PA	400	9000	350	1000	280	180	1100	22000
	Distribution box water	TC	0	0	0	0	0	0	0	0
		EC	0	0	0	0	0	0	0	0
		PA	0	0	0	0	0	2	3	160
	Drinking water	TC	0	0	0	0	0	0	1	0
		EC	0	0	0	0	0	0	1	0
		PA	0	0	0	0	0	0	0	0
Southern	Source of water supply	TC	370	90	420	430	3800	3200	240	4700
		EC	120	41	70	40	1800	40	100	800
		PA	270	200	190	7	70	0	110	350
	Distribution box water	TC	0	0	0	0	0	27	6	0
		EC	0	0	0	0	0	0	6	0
		PA	0	0	0	0	0	0	0	0
	Drinking water	TC	0	0	0	0	0	0	2	1
		EC	0	0	0	0	0	0	2	0
		PA	0	0	0	0	0	0	1	0

6 TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*

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9 **S2.** Descriptive statistics of the microbiological quality of the water in treatment plants from
 10 the Northern and Southern area of Culiacán, Sinaloa, México.

Zone	Sampling point	Microorganism	N	Mean (CFU 100 mL ⁻¹)	Standard error	Median	Coefficient of variation (%)
Northern	Plant inlet (Supply water)	TC	8	4677	2264	1704	136.91
		EC	8	1800	1123	376	176.49
		PA	8	3476	2655	950	216.06
	Plant outlet (Drinking water)	TC	8	0.125	0.125	0.00	282.84
		EC	8	0.125	0.125	0.00	282.84
		PA	8	0.00	0.00	0.00	*
Southern	Plant inlet (Supply water)	TC	8	1644	667	427	114.76
		EC	8	286	217	72	214.14
		PA	8	147.8	43.5	147.5	83.24
	Plant outlet (Drinking water)	TC	8	0.37	0.26	0.00	198.41
		EC	8	0.25	0.25	0.00	282.84
		PA	8	0.12	0.12	0.00	282.84

11 TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*.

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19 **S3.** Descriptive statistics of the microbiological quality of water used and consumed in
 20 households from the Northern and Southern areas of Culiacán, Sinaloa, México.

Zone	Sample	Microorganism	N	Mean (CFU·100 mL ⁻¹)	Standard error	Median	Coefficient of variation (%)
Northern	Tap water	TC	120	5.16	1.96	0.00	417.21
		EC	120	0.08	0.05	0.00	771.34
		PA	120	6.13	2.93	0.00	522.73
	Bottled water	TC	120	89.80	37.80	0.00	460.82
		EC	120	0.00	0.00	0.00	*
		PA	120	3055	2357	0.00	845.18
	Dispenser water	TC	120	165	115.00	0.00	764.81
		EC	120	0.39	0.22	0.00	618.62
		PA	120	2641	2078	0.00	861.97
Southern	Tap water	TC	120	5.88	3.22	0.00	598.93
		EC	120	0.408	0.33	0.00	907.20
		PA	120	33.90	12.90	0.00	416.58
	Bottled water	TC	120	102.2	48.50	0.00	520.17
		EC	120	0.37	0.33	0.00	976.63
		PA	120	32.90	13.60	0.00	453.33
	Dispenser water	TC	120	171.2	45.90	1.00	293.83
		EC	120	0.692	0.45	0.00	725.63
		PA	120	52.50	23.00	0.00	478.99

21 TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*.

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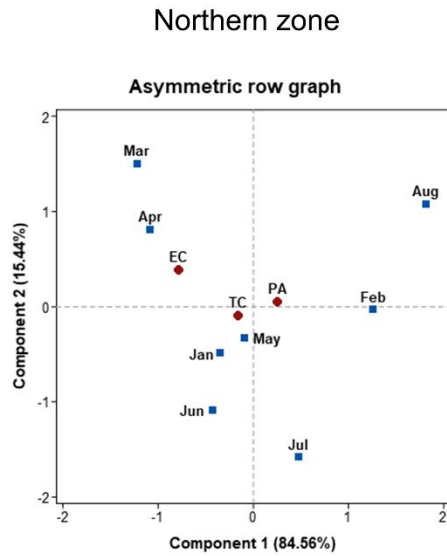
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26 **S4.** Contribution Table. Simple Correspondence Analysis. Association between
 27 microorganisms and the type of water samples.

Zone	Contributions	Variable	Cal	Total	Inertia	Component 1			Component 2		
						Coord	Corr	Contr	Coord	Corr	Contr
Northern	Row	TC	1.000	0.503	0.137	-0.089	0.940	0.132	0.023	0.060	0.365
		EC	1.000	0.046	0.843	0.755	0.997	0.860	0.038	0.003	0.094
		PA	1.000	0.451	0.020	0.023	0.384	0.008	-0.029	0.616	0.541
	Column	D	1.000	0.405	0.380	0.170	0.987	0.384	0.019	0.013	0.210
		B	1.000	0.333	0.592	-0.234	0.998	0.604	0.011	0.002	0.062
		T	1.000	0.261	0.027	0.036	0.399	0.011	-0.044	0.601	0.727
Southern	Row	TC	1.000	0.586	0.161	0.023	0.142	0.036	-0.057	0.858	0.378
		EC	1.000	0.056	0.519	0.316	0.791	0.648	0.163	0.209	0.296
		PA	1.000	0.358	0.320	-0.087	0.626	0.316	0.068	0.374	0.326
	Column	D	1.000	0.440	0.320	0.092	0.852	0.431	-0.038	0.148	0.129
		B	1.000	0.401	0.369	-0.110	0.961	0.560	-0.022	0.039	0.039
		T	1.000	0.159	0.311	0.022	0.019	0.009	0.161	0.981	0.831

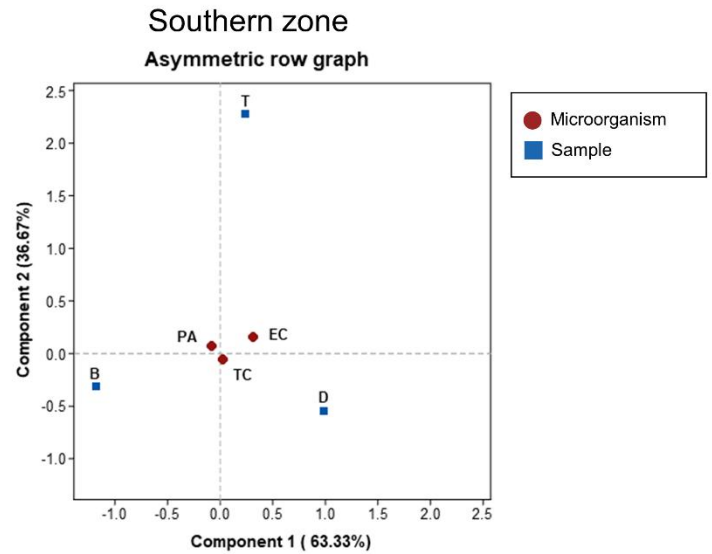
28 TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*; T: tap; B: bottled; D: Dispenser.

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Contingency table

	D	B	T	Total
CT	29	29	19	77
EC	5	0	2	7
PA	28	22	19	69
Total	62	51	40	153



Contingency table

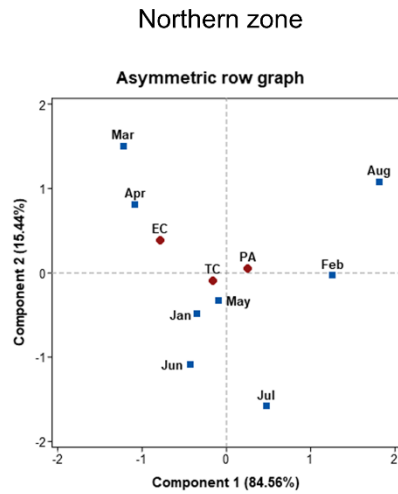
	D	B	T	Total
CT	63	54	19	136
EC	7	3	3	13
PA	32	36	15	83
Total	102	93	37	232

S5. Simple Correspondence Analysis. Association between microorganisms and the type of water samples. TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*; T: tap; B: bottled; D: Dispenser.

46 **S6.** Contribution Table. Simple Correspondence Analysis. Association between
 47 microorganisms and sampling month.

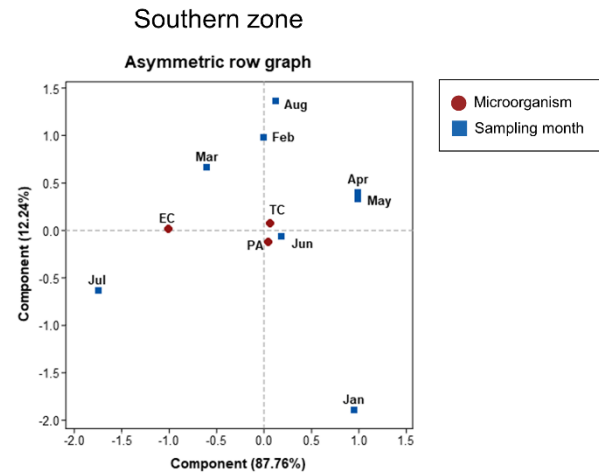
Zone	Contributions	Variable	Cal	Total	Inertia	Component 1			Component 2			
						Coord	Corr	Contr	Coord	Corr	Contr	
Northern	Row	TC	1.000	0.500	0.202	-0.160	0.757	0.181	-0.091	0.243	0.319	
		EC	1.000	0.046	0.423	-0.783	0.797	0.399	0.395	0.203	0.555	
		PA	1.000	0.454	0.375	0.256	0.948	0.420	0.060	0.052	0.126	
	Column	Jan	1.000	0.132	0.018	-0.094	0.746	0.016	-0.055	0.254	0.030	
		Feb	1.000	0.066	0.089	0.336	1.000	0.105	-0.003	0.000	0.000	
		Mar	1.000	0.112	0.181	-0.326	0.782	0.167	0.172	0.218	0.255	
		Apr	1.000	0.132	0.144	-0.289	0.907	0.155	0.093	0.093	0.087	
		May	1.000	0.151	0.003	-0.024	0.302	0.001	-0.036	0.698	0.015	
		Jun	1.000	0.158	0.053	-0.113	0.457	0.029	-0.123	0.543	0.186	
		Jul	1.000	0.099	0.057	0.128	0.335	0.023	-0.180	0.665	0.247	
		Aug	1.000	0.151	0.454	0.486	0.939	0.504	0.124	0.061	0.179	
	Southern	Row	TC	1.000	0.586	0.084	0.068	0.462	0.044	0.073	0.538	0.370
			EC	1.000	0.056	0.827	-1.016	1.000	0.943	0.015	0.000	0.001
			PA	1.000	0.358	0.089	0.048	0.131	0.013	-0.123	0.869	0.629
Column		Jan	1.000	0.151	0.187	0.237	0.647	0.138	-0.175	0.353	0.541	
		Feb	1.000	0.151	0.018	-0.001	0.000	0.000	0.091	1.000	0.147	
		Mar	1.000	0.095	0.035	-0.149	0.854	0.034	0.062	0.146	0.042	
		Apr	1.000	0.121	0.106	0.245	0.978	0.118	0.037	0.022	0.019	
		May	1.000	0.108	0.094	0.245	0.984	0.105	0.031	0.016	0.012	
		Jun	1.000	0.095	0.003	0.046	0.984	0.003	-0.006	0.016	0.000	
		Jul	1.000	0.194	0.535	-0.435	0.982	0.599	-0.058	0.018	0.077	
Aug	1.000	0.086	0.021	0.031	0.057	0.001	0.126	0.943	0.161			

48 TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*.



Contingency table

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
CT	11	4	9	11	12	14	8	7	76
EC	1	0	2	2	1	1	0	0	7
PA	8	6	6	7	10	9	7	16	69
Total	20	10	17	20	23	24	15	23	152



Contingency table

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
CT	19	22	13	18	16	13	22	13	136
EC	0	2	2	0	0	1	7	1	13
PA	16	11	7	10	9	8	16	6	83
Total	35	35	22	28	25	22	45	20	232

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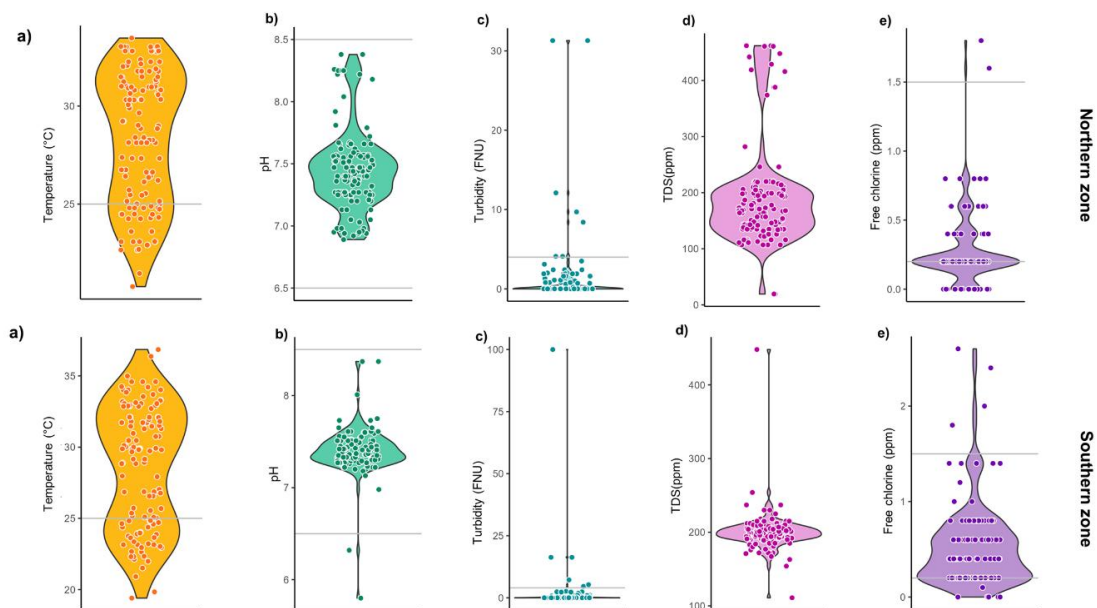
51 **S7.** Simple Correspondence Analysis. Association between microorganisms and sampling
 52 month. TC: thermotolerant coliforms; EC: *E. coli*; PA: *P. aeruginosa*.

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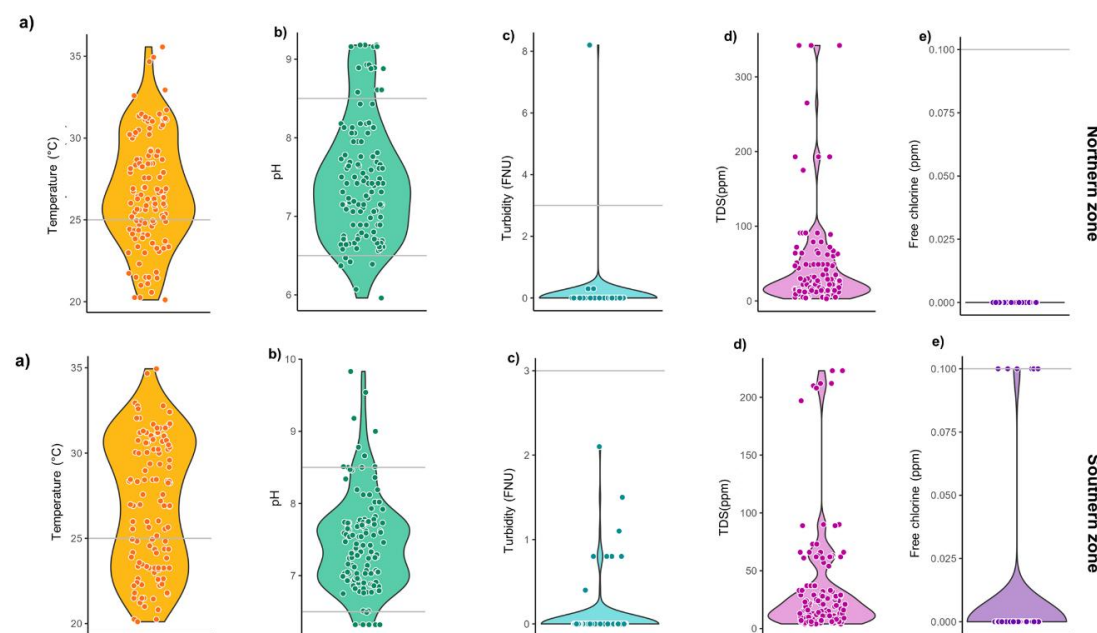
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Tap water



Bottled water



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57 **S8.** Physicochemical quality of water in households from the Northern and Southern areas
 58 of Culiacán, Sinaloa, México. a) temperature; b) pH; c) turbidity; d) total dissolved solids; e)
 59 free chlorine.