













SUPPLEMENTARY MATERIAL

Assessment of water quality using physicochemical and bacteriological parameters in Oued Mchera (Bouregreg Basin, Morocco)

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Table S1. Spatio-temporal variation of physicochemical and bacteriological parameters of the water of Oued Mchera

Station	Period	<i>T</i> (°C)	pH	<i>EC</i> ($\mu\text{S}\cdot\text{cm}^{-1}$)	<i>DO</i>	<i>BOD</i> ₅	NO_3^-	K^+	Na^{2+}	Mg^{2+}	FC	<i>Esche- richia coli</i>	TC
S1	wet	18.05 ±0.5	8.72 ±0.5	923.52 ±35	3.13 ±0.5	11.71 ±0.5	1.28 ±0.05	11.17 ±0.7	94.06 ±10	37.31 ±5	2700	2300	2300
	dry	33.99 ±1.0	8.55 ±0.5	8300 ±100	3.8 ±0.7	16.13 ±0.7	4.34 ±0.25	7.81 ±0.5	1678.6 ±54	121.45 ±10	81	0	0
S2	wet	17.50 ±0.5	8.22 ±0.5	1380 ±40	3.05 ±0.5	48.95 ±1	0.69 ±0.05	18.02 ±0.5	127.21 ±15	52.32 ±5	3600	1600	1600
	dry	26.98 ±1.5	7.6 ±0.5	2143 ±50	0.98 ±0.25	650.33 ±5	9.3 ±0.25	23.46 ±1	298.91 ±20	48.6 ±5	1000	970	970
S3	wet	14.97 ±0.5	8.29 ±0.25	1386 ±35	3.06 ±0.25	9.83 ±0.5	3.98 ±0.05	11.11 ±0.5	137.12 ±15	64.43 ±10	2700	1600	1600
	dry	27.98 ±1.5	7.99 ±0.5	3543 ±43	4.01 ±0.5	22.54 ±1	7.44 ±0.5	4.68 ±0.05	575.17 ±17	97.02 ±10	4500	100	100
S4	wet	16.98 ±0.5	8.78 ±0.25	1346 ±35	3.06 ±0.7	10.33 ±1	0.94 ±0.05	10.83 ±0.50	141.91 ±15	57.71 ±5	3700	2000	2000
	dry	32.50 ±1.5	7.59 ±0.5	2750 ±45	4.01 ±0.5	20.02 ±1.5	7.45 ±0.5	4.45 ±0.5	570.43 ±25	95.67 ±10	4500	100	100
S5	wet	17.25 ±0.5	8.69 ±0.5	1283 ±40	3.12 ±0.5	9.16 ±1	1.75 ±0.02	10.34 ±1	120.62 ±10	53.99 ±5	3100	1800	1800
	dry	32.23 ±1.0	7,65 ±0.5	2152 ±40	4.02 ±0.25	22.5 ±1.5	7.35 ±0.5	10.10 ±1	540.56 ±25	93.24 ±7	4500	100	100

Explanations: pH = potential of hydrogen, *T* = temperature, *EC* = electrical conductivity, *DO* = dissolved oxygen, *BOD*₅ = biochemical oxygen demand test run for 5 days, FC = faecal coliform, TC = total coliform.

Source: own study.

Table S2. Correlation matrix between studied variables

Factor	<i>T</i>	pH	<i>EC</i>	<i>DO</i>	<i>BOD</i> ₅	NO ₃ ⁻	K ⁺	Na ²⁺	Mg ²⁺	CF	<i>Escherichia coli</i>	CT
<i>T</i>	1.000											
pH	-0.615	1.000										
<i>EC</i>	0.698*	-0.012	1.000									
<i>DO</i>	0.371	0.045	0.323	1.000								
<i>BOD</i> ₅	0.109	-0.449	-0.062	-0.869**	1.000							
NO ₃ ⁻	0.731*	-0.869**	0.277	-0.078	0.525	1.000						
K ⁺	-0.355	-0.111	-0.338	-0.892**	0.763*	-0.034	1.000					
Na ²⁺	0.780**	-0.103	0.986**	0.390	-0.091	0.335	-0.377	1.000				
Mg ²⁺	0.828**	-0.314	0.821**	0.664*	-0.299	0.469	-0.641*	0.874**	1.000			
CF	-0.064	-0.261	-0.529	0.508	-0.463	0.001	-0.418	-0.456	-0.010	1.000		
<i>Escherichia coli</i>	-0.938**	0.672*	-0.681*	-0.434	-0.044	-0.770**	0.403	-0.750*	-0.897**	-0.043	1.000	1.000
CT	-0.938**	0.672*	-0.681*	-0.434	-0.044	-0.770**	0.403	-0.750*	-0.897**	-0.043	1.000	1.000

Explanations: * = the correlation is significant at level 0.05 (bilateral), ** = the correlation is significant at level 0.01 (bilateral), pH, *T*, *EC*, *DO*, *BOD*₅, FC, TC as in Tab. S1.

Source: own study.