Suplementary tables

Table S1 Guideline values for maximum concentration (μg l^{-1}) of metals in water

Element	WHO	Rulebook on hygiene correctness of water for drinks, (Official Rule of the SRJ no. 42/98 and 44/99)	Rulebook on quality etc., requirements for natural mineral, spring, and table water, (Official Rule of Serbia and Montenegro no. 53/05)	WT sample from our study
Al	200	200	200	5724
As	10	10	10	n.d.
B	-	1000	1000	n.d.
Ca	-	200000	150000	8774
Cd	3	3	3	0.30
Co	NM	NM	NM	0.51
Cr	50	50	50	5.35
Cu	2000	2000	2000	2.09
Fe	NGL[1]	300	200	2815
K	-	12000	-	1544
Mg	50000	50000	50000	3419
Mn	400	50	50	18
Na	200000	150000	200000	3243
Ni	70	20	20	1.85
Pb	10	10	10	1.35
Se	-	10	10	2.44
Zn	NGL[2]	NGL[2]	NGL[2]	10.37

NM - Not mentioned, NGL[1] - No Guideline, because it occurs in drinking-water at concentrations well below those at which toxic effects may occur; NGL[2] - No Guideline, because it is not of health concern at concentrations normally observed in drinking water, but may affect the acceptability of water at concentration above 300 μg l^{-1}

Table S2 Preliminary identification of *E. coli* according to biochemical tests and Microgen GNA+B-ID tests

	Isolate								
Reaction	*E. coli* V1	*E. coli* V2	*E. coli* V3	*E. coli* V4	*E. coli* V5	*E. coli* V6	*E. coli* V7	*E. coli* V8	*E. coli* V9
Catalase	+	+	+	+	+	+	+	+	+
Oxidase	-	-	-	-	-	-	-	-	-
Lysine	+	+	+	+	+	+	+	+	+
Ornithine	+	+	+	+	+	+	+	+	+
H_2S	+-	+-	+-	+	+	+	+	+	+
Glucose	+	+	+	+	+	+	+	+	+
Mannitol	+	+	+	+	+	+	+	+	+
Xylose	+	+	+	+	+	+	+	+	+
ONPG	+	+	+	+	+	+	+	+	+
Indole	+	+	+	+	+	+	+	+	+
Urease	-	-	-	-	-	-	-	-	-
VP	-	-	-	-	-	-	-	-	-
Citrate	-	-	-	-	-	-	-	-	-
TDA	-	-	-	-	-	-	-	-	-
Gelatin	-	-	-	-	-	-	-	-	-
Malonate	-	-	-	-	-	-	-	-	-
Inositol	-	-	-	-	-	-	-	-	-
Sorbitol	+	+	+	+	+	+	+	+	+
Rhamnose	+	+	+	+	+	+	+	+	+
Sucrose	+	+	+	+	+	-	-	-	-
Lactose	+	+	+	+	+	+	+	+	+
Arabinose	+	+	+	+	+	+	+	+	+
Adonitol	-	-	-	-	-	-	-	-	-
Raffinose	+	+	+	+	+-	+-	+	+	+
Salicin	-	-	-	-	-	-	-	-	-
Arginine	+	+	+	-	+	+	+	+	+

+ positive reaction; - negative reaction; +- weekly positive reaction

Table S3 Preliminary identification of other coliforms according to biochemical tests and Microgen GNA+B-ID tests

Reaction	Isolate										
	Citrobacter braakii V1	*Acinetobacter* spp.	*Acinetobacter calcoaceticus* V2	*Acinetobacter calcoaceticus* V6	*Aeromonas* spp.	*Aeromonas bestiarum* V11	*Raoultella ornithinolytica* V4	*Raoultella ornithinolytica* V5	*Raoultella ornithinolytica* V10	*Enterobacter cloacae* V7	*Enterobacter cloacae* V9
Catalase	+	+	+	+	+	+	+	+	+	+	+
Oxidase	-	-	-	-	+	+	-	-	-	-	-
Lysine	+	+	-	-	+	+	+	+	+	+	+
Ornithine	+	-	-	-	-	-	-	-	-	-	-
H_2S	+	-	-	-	+	-	-	-	-	-	-
Glucose	+	-	-	-	+	+	+	+	+	+	+
Mannitol	+	-	-	-	+	+	+	+	+	+	+
Xylose	+	-	-	-	+	+	+	+	+	+	+
ONPG	+	-	-	-	+	-	+	+	+	+	+
Indole	+	-	-	-	+	+	-	-	-	+	+
Urease	-	-	-	-	+	+	+	+	+	-	-
VP	-	-	-	-	+	-	+	+	+	+	+
Citrate	-	-	-	-	+	-	+	+	+	-	-
TDA	-	-	-	-	-	-	-	-	-	-	-
Gelatin	-	-	-	-	-	-	-	-	-	-	-
Malonate	-	-	-	-	-	+	-	-	-	-	-
Inositol	-	-	-	-	+	+	+	+	+	-	-
Sorbitol	+	-	-	-	+	+	+	+	+	+	+
Rhamnose	+	-	-	-	+	-	+	+	+	+	+
Sucrose	+	-	-	-	+	+	+	+	+	+	+
Lactose	+	-	-	-	-	-	-	-	-	+	+
Arabinose	+	-	+	+	+	+	+	+	+	+	+
Adonitol	-	-	-	-	+	+	+	+	+	-	-
Raffinose	-	-	-	-	+	+	+	+	+	+	+
Salicin	-	-	-	-	+	+	+	+	+	+	+
Arginine	+	-	-	-	+	+	+	+	+	-	-

+ positive reaction; - negative reaction

Table S4 The distribution of coliform bacteria genera through water samples

Genera of bacteria	Origin of water sample		
	WS	WR	WT
Escherichia	+	+	+
Aeromonas	+	+	-
Citrobacter	+	+	+
Raoultella	+	+	-
Enterobacter	+	-	-
Acinetobacter	+	+	-
Enterococcus	+	+	+

"+"- genera presented; "-"- genera not presented

Table S5 Sensitivity to antibiotics of tested isolates

Antibiotics/isolate	Amoxicillin	Tetracycline	Chloramphenicol	Cefotaxime	Streptomycin
E. coli V1	4 (R)	19 (S)	22 (S)	20 (S)	10 (R)
E. coli V2	10 (R)	19 (S)	24 (S)	22 (S)	10 (R)
E. coli V3	3 (R)	20 (S)	20 (S)	22 (S)	8 (R)
E. coli V4	2 (R)	19 (S)	20 (S)	18 (S)	8 (R)
E. coli V5	10 (R)	20 (S)	26 (S)	20 (S)	10 (R)
E. coli V6	6 (R)	20 (S)	26 (S)	20 (S)	10 (R)
E. coli V7	10(R)	20 (S)	28 (S)	20 (S)	10 (R)
E. coli V8	8 (R)	19 (S)	22 (S)	22 (S)	10 (R)
E. coli V9	6 (R)	20 (S)	20 (S)	20 (S)	8 (R)
C. braakii V1	2(R)	20(S)	22(S)	20(S)	2(R)
Acinetobacter spp.	/	30(S)	32(S)	26(S)	15(S)
A. calcoaceticus V2	/	22(S)	30(S)	20(S)	20(S)
A. calcoaceticus V6	/	20(S)	22(S)	20(S)	16(S)
Aeromonas spp.	/	22(S)	20(S)	24(S)	10(R)
*A. bestiarum*V11	/	20(S)	24(S)	20(S)	12(R)
*R. ornithinolytica*V4	/	22(S)	22(S)	20(S)	14(R)
*R. ornithinolytica*V5	/	20(S)	24(S)	22(S)	10(R)
R. ornithinolytica V10	/	20(S)	20(S)	18(S)	18(S)
E. cloacae V7	/	20(S)	20(S)	20(S)	14(S)
E. cloacae V9	/	22(S)	20(S)	20(S)	16(S)

Inhibition zones are given in mm; S-sensitive; R-resistant; /-no inhibition zone

Table S6 The ability to form biofilm

Isolates	Growth absorbance
E. coli V1	0.16
E. coli V2	0.04
E. coli V5	0.04
E. coli V6	0.09
E. coli V7	0.08
E. coli V8	0.19
E. coli V9	0.16
E. cloacae V7	0.17
E. cloacae V9	0.16
R. ornithinolytica V10	0.14
A. bestiarum V11	0.24

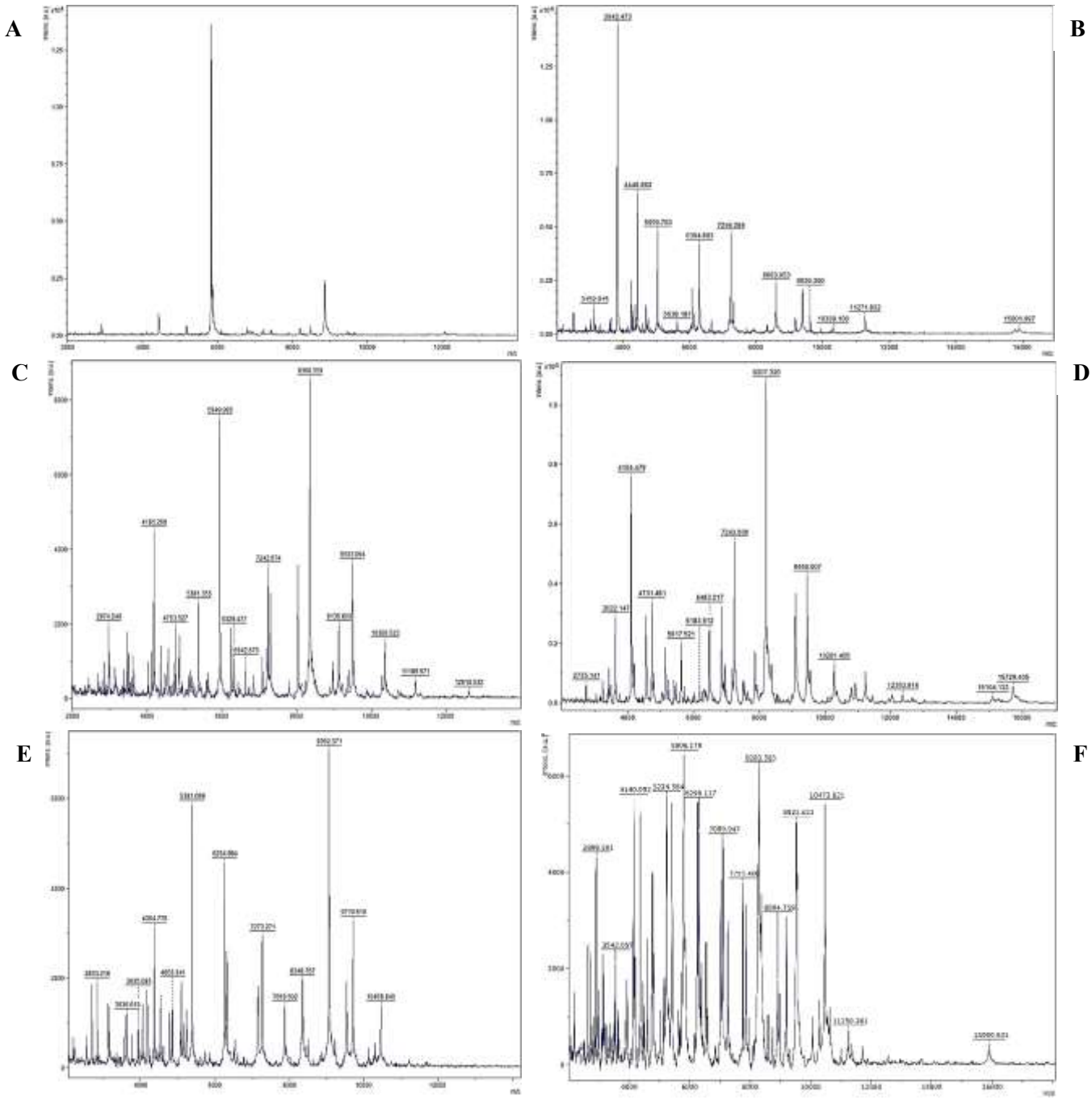
Table S7 Factor coordinates of the variables, based on correlation

Variable	Factor 1	Factor 2
COD	-0.999	-0.049
pH	-0.917	-0.398
Har	-0.999	0.021
EC	-0.916	0.400
Al	-0.803	0.596
As	-0.754	-0.657
Ca	-0.957	0.290
Cd	-0.900	-0.435
Co	-0.754	-0.657
Cr	-0.886	0.463
Cu	-0.181	0.983
Fe	-0.801	0.599
K	-0.960	-0.280
Li	-0.902	0.432
Mg	-0.946	0.325
Mn	0.958	-0.286
Na	-0.980	0.198
Ni	-0.567	-0.824
P	-0.988	-0.151
Pb	-0.948	-0.316
S	0.988	0.152
Se	-0.420	0.907
Zn	-0.250	0.968
^{40}K	-0.571	-0.821
^{222}Rn	-0.946	0.324
E. coli	-0.754	-0.657
TCB	-0.218	-0.976

Table S8 Instrumental operating conditions for ICP-OES

Parameter	Value
Radio frequency power (RF)	1150 W
Plasma view	Axial
Nebulizer	Standard glass concentric
Spray chamber	Standard glass cyclonic
Pump tubing (Tygon®)	Sample (Orange-White) Drain (White-White)
Ceramic centre tube	2 mm
Purge gas	Argon
Nebulizer argon flow	0,50 L min^{-1}
Auxiliary argon flow	0,5 L min^{-1}
Coolant argon flow	12 L min^{-1}
Sample flush time	30 s
Analysis pump rate	50 rpm
Integration times	
Low (166 -230 nm)	15 s
High (230-847 nm)	5 s
Analysis mode	Speed
Software	iTEVA

Supplementary figures



Supplementary Figure S1. Mass spectra of **A** – *A. calcoaceticus*; **B** – *A. bestiarum*; **C**– *E. cloacae*; **D** – *R. ornithinolytica*; **E** – *E. coli*; **F** – *C. braakii*