

Supplementary Tables and Figures

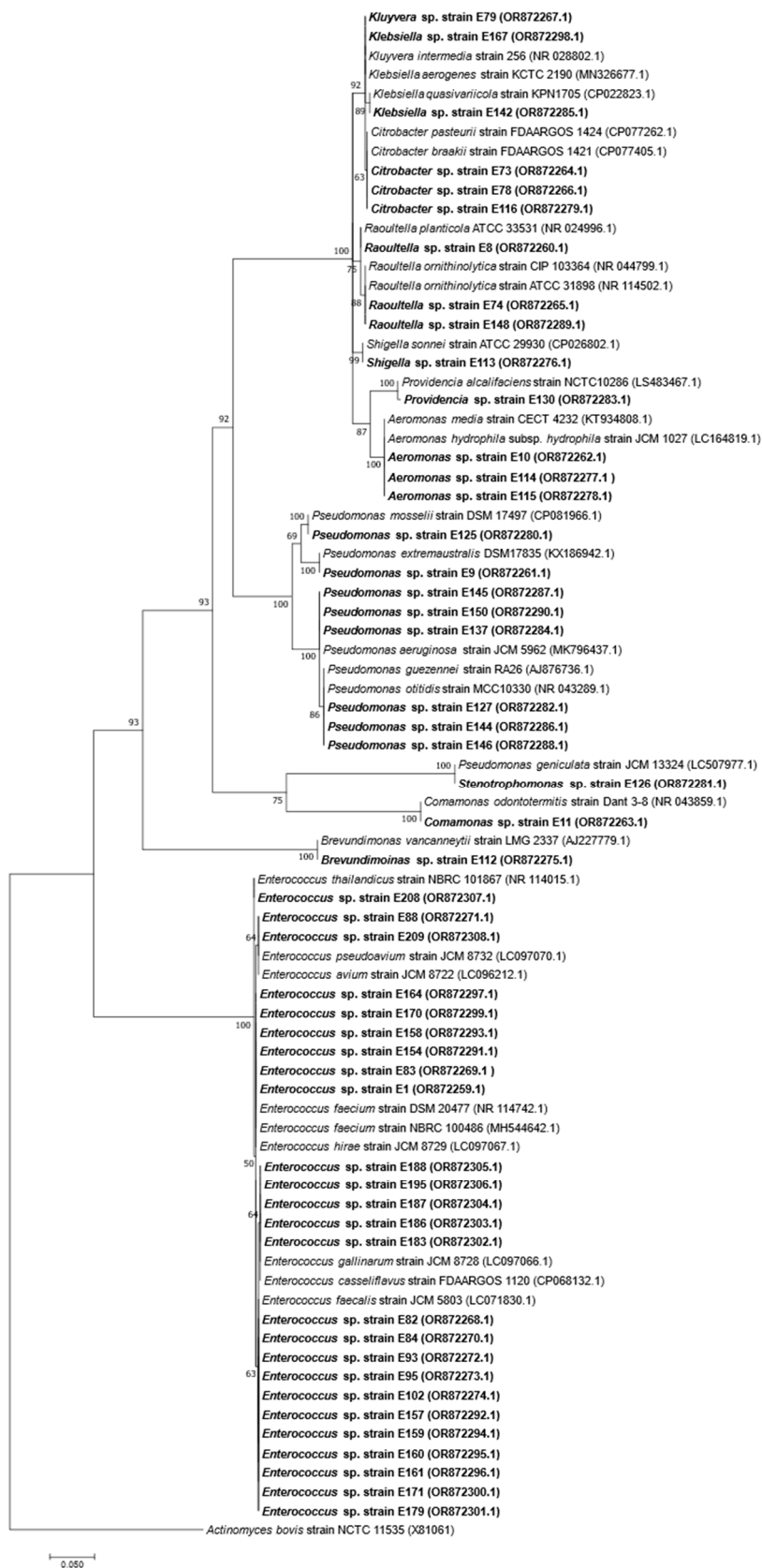
Table S1. Isolation conditions and NCBI closest described species for each isolate.

Isolate ID	Isolation Media	Isolation Antibiotic	Sampling site	Identification	Closest described		
					Accession	% Pairwise Identity	Description
E10	MacConkey	None	B	<i>Aeromonas</i> sp.	KT934808.1	100	<i>Aeromonas media</i> strain CECT 4232
E114	MacConkey	Ciprofloxacin	A	<i>Aeromonas</i> sp.	LC164819.1	99.84	<i>Aeromonas hydrophila</i> subsp. <i>hydrophila</i> strain JCM 1027
E115	MacConkey	Ciprofloxacin	A	<i>Aeromonas</i> sp.	LC164819.1	99.84	<i>Aeromonas hydrophila</i> subsp. <i>hydrophila</i> strain JCM 1027
E112	MacConkey	Imipenem	B	<i>Brevundimonas</i> sp.	AJ227779.1	100	<i>Brevundimonas vancouveriensis</i> strain LMG 2337
E73	MacConkey	Ciprofloxacin	C	<i>Citrobacter</i> sp.	CP077405.1	99.92	<i>Citrobacter braakii</i> strain FDAARGOS 1421
E78	MacConkey	Ciprofloxacin	C	<i>Citrobacter</i> sp.	CP077405.1	99.62	<i>Citrobacter braakii</i> strain FDAARGOS 1421
E116	MacConkey	Ciprofloxacin	A	<i>Citrobacter</i> sp.	CP077262.1	99.59	<i>Citrobacter pasteurii</i> strain FDAARGOS 1424
E11	MacConkey	None	B	<i>Comamonas</i> sp.	NR_043859.1	100	<i>Comamonas odontotermitis</i> strain Dant 3-8
E1	Mannitol	None	D	<i>Enterococcus</i> sp.	MH544642.1	100	<i>Enterococcus faecium</i> strain NBRC 100486
E82	Slanetz	None	A	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E83	Slanetz	None	A	<i>Enterococcus</i> sp.	LC097067.1	100	<i>Enterococcus hirae</i> strain JCM 8729
E84	Slanetz	None	A	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E88	Slanetz	None	B	<i>Enterococcus</i> sp.	LC097070.1	99.82	<i>Enterococcus pseudoavium</i> strain JCM 8732
E93	Slanetz	None	D	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E95	Slanetz	None	D	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E102	Mannitol	None	B	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E154	Slanetz	None	A	<i>Enterococcus</i> sp.	LC097067.1	100	<i>Enterococcus hirae</i> strain JCM 8729
E157	Slanetz	None	B	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E158	Slanetz	None	B	<i>Enterococcus</i> sp.	MH544642.1	100	<i>Enterococcus faecium</i> strain NBRC 100486
E159	Slanetz	None	B	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E160	Slanetz	None	D	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E161	Slanetz	None	D	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E164	Mannitol	None	A	<i>Enterococcus</i> sp.	NR_114742.1	99.93	<i>Enterococcus faecium</i> strain DSM 20477
E170	Mannitol	None	A	<i>Enterococcus</i> sp.	LC097067.1	100	<i>Enterococcus hirae</i> strain JCM 8729
E171	Mannitol	None	A	<i>Enterococcus</i> sp.	LC071830.1	100	<i>Enterococcus faecalis</i> strain JCM 5803

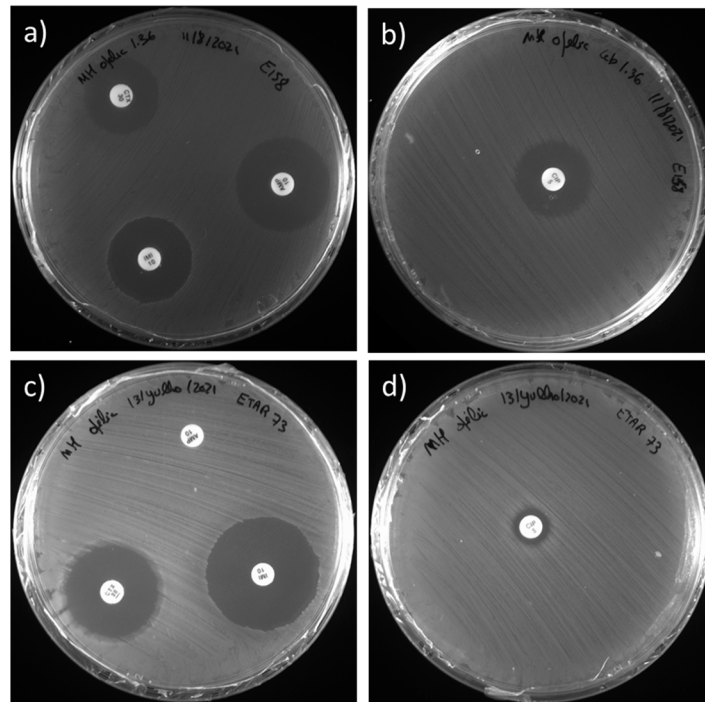
E179	Mannitol	None	B	<i>Enterococcus</i> sp.	LC071830. 1	100	<i>Enterococcus faecalis</i> strain JCM 5803
E183	Mannitol	Vancomycin	B	<i>Enterococcus</i> sp.	LC097066. 1	99.92	<i>Enterococcus gallinarum</i> strain JCM 8728
E186	Mannitol	Vancomycin	B	<i>Enterococcus</i> sp.	CP068132. 1	100	<i>Enterococcus casseliflavus</i> strain FDAARGOS_1120
E187	Mannitol	Vancomycin	B	<i>Enterococcus</i> sp.	CP068132. 1	100	<i>Enterococcus casseliflavus</i> strain FDAARGOS_1120
E188	Mannitol	Vancomycin	B	<i>Enterococcus</i> sp.	CP068132. 1	100	<i>Enterococcus casseliflavus</i> strain FDAARGOS_1120
E195	Mannitol	None	D	<i>Enterococcus</i> sp.	LC097066. 1	99.92	<i>Enterococcus gallinarum</i> strain JCM 8728
E208	Slanetz	Vancomycin	C	<i>Enterococcus</i> sp.	NR_11401 5.1	100	<i>Enterococcus thailandicus</i> strain NBRC 101867
E209	Slanetz	Vancomycin	C	<i>Enterococcus</i> sp.	LC096212. 1	99.92	<i>Enterococcus avium</i> strain JCM 8722
E142	MacConkey	Ciprofloxacin	D	<i>Klebsiella</i> sp.	CP022823. 1	99.43	<i>Klebsiella quasivariicola</i> strain KPN1705
E167	Mannitol	None	A	<i>Klebsiella</i> sp.	MN326677. 1	99.84	<i>Klebsiella aerogenes</i> KCTC 2190
E79	MacConkey	Ciprofloxacin	C	<i>Kluyvera</i> sp.	NR_02880 2.1	99.33	<i>Kluyvera intermedia</i> strain 256
E130	MacConkey	Ciprofloxacin	B	<i>Providencia</i> sp.	LS483467. 1	99.46	<i>Providencia alcalifaciens</i> strain NCTC10286
E9	MacConkey	None	B	<i>Pseudomonas</i> sp.	KX186942. 1	100	<i>Pseudomonas extremaustralis</i> strain DSM 17835
E125	MacConkey	Imipenem	A	<i>Pseudomonas</i> sp.	CP081966. 1	99.92	<i>Pseudomonas mosselii</i> strain DSM 17497
E127	MacConkey	Imipenem	A	<i>Pseudomonas</i> sp.	NR_04328 9.1	99.57	<i>Pseudomonas otitidis</i> strain MCC10330
E137	MacConkey	Imipenem	B	<i>Pseudomonas</i> sp.	MK796437. 1	100	<i>Pseudomonas aeruginosa</i> strain JCM 5962
E144	MacConkey	Imipenem	D	<i>Pseudomonas</i> sp.	NR_04328 9.1	99.92	<i>Pseudomonas otitidis</i> strain MCC10330
E145	MacConkey	Imipenem	D	<i>Pseudomonas</i> sp.	MK796437. 1	100	<i>Pseudomonas aeruginosa</i> strain JCM 5962
E146	MacConkey	Imipenem	D	<i>Pseudomonas</i> sp.	AJ876736. 1	99.69	<i>Pseudomonas guezenei</i> strain RA26T
E150	MacConkey	Imipenem	C	<i>Pseudomonas</i> sp.	MK796437. 1	100	<i>Pseudomonas aeruginosa</i> strain JCM 5962
E8	MacConkey	None	A	<i>Raoultella</i> sp.	NR_02499 6.1	100	<i>Raoultella planticola</i> ATCC 33531
E74	MacConkey	Ciprofloxacin	C	<i>Raoultella</i> sp.	NR_11450 2.1	99.92	<i>Raoultella ornithinolytica</i> strain ATCC 31898
E148	MacConkey	Ciprofloxacin	C	<i>Raoultella</i> sp.	NR_04479 9.1	99.85	<i>Raoultella ornithinolytica</i> strain CIP 103364
E113	MacConkey	Ciprofloxacin	A	<i>Shigella</i> sp.	CP026802. 1	100	<i>Shigella sonnei</i> strain ATCC 29930
E126	MacConkey	Imipenem	A	<i>Stenotrophomonas</i> sp.	LC507977. 1	99.63	[<i>Pseudomonas</i>] <i>geniculata</i> JCM 13324

Table S2. Results of the antimicrobial susceptibility testing. S – susceptible, R – resistant, I – intermediate, – – not determined.

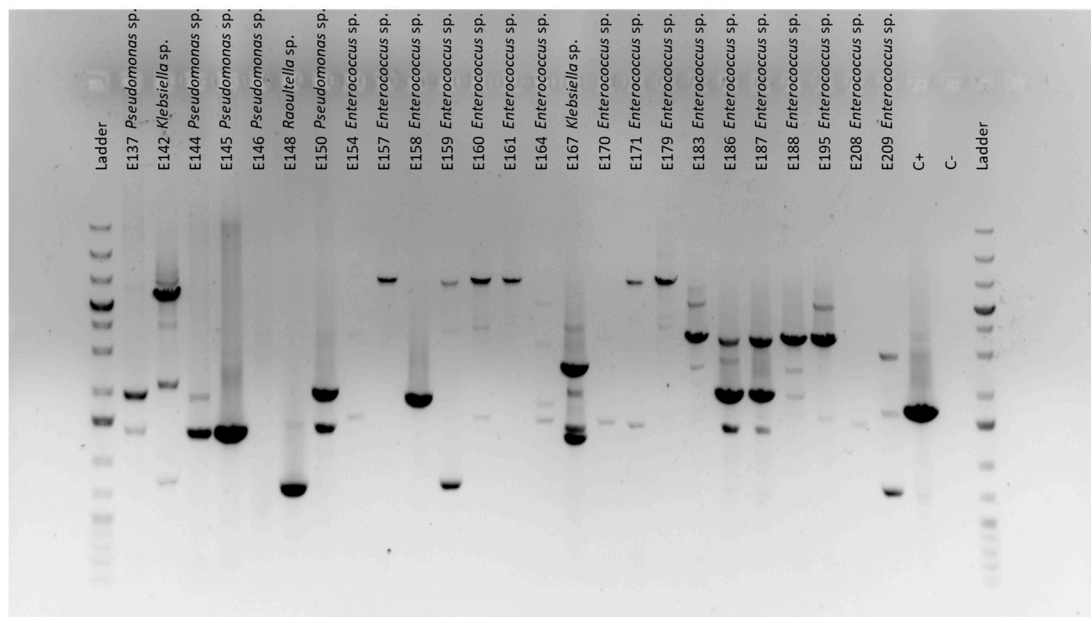
Isolate ID	Identification	Ampicillin	Cefotaxime	Imipenem	Tetracycline	Vancomycin	Gentamicin	Ciprofloxacin							
E10	<i>Aeromonas</i> sp.	0	S	36	S	36	S	22	-	S	16	S	29		
E114	<i>Aeromonas</i> sp.	0	S	40	S	25	S	26	-	I	14	S	25		
E115	<i>Aeromonas</i> sp.	0	S	35	S	28	I	13	-	S	15	R	15		
E112	<i>Brevundimonas</i> sp.	0		11		10		12	-		15		33		
E73	<i>Citrobacter</i> sp.	R	0	I	24	S	29	R	0	-	I	14	R	9	
E78	<i>Citrobacter</i> sp.	I	14	S	33	S	34	S	20	-	S	15	S	25	
E116	<i>Citrobacter</i> sp.	I	15	I	25	S	23	I	14	-	I	13	I	19	
E11	<i>Comamonas</i> sp.	0		35		33		15	-		13		21		
E1	<i>Enterococcus</i> sp.	S	24		23		10	R	14	S	25		19	I	17
E82	<i>Enterococcus</i> sp.	S	25		18		17	R	10	I	16		11	S	23
E83	<i>Enterococcus</i> sp.	S	30		25		32	S	20	S	21		10	S	25
E84	<i>Enterococcus</i> sp.	S	35		25		28	R	12	S	17		10	S	23
E88	<i>Enterococcus</i> sp.	S	31		29		40	S	21	S	25		15	S	27
E93	<i>Enterococcus</i> sp.	S	30		17		27	S	20	S	17		10	S	21
E95	<i>Enterococcus</i> sp.	S	29		20		30	I	17	I	16		11	I	20
E102	<i>Enterococcus</i> sp.	S	25		16		24	I	17	I	16		11	I	19
E154	<i>Enterococcus</i> sp.	S	30		25		28	I	18	S	20		12	S	25
E157	<i>Enterococcus</i> sp.	S	26		23		28	S	20	I	16		11	S	21
E158	<i>Enterococcus</i> sp.	S	25		19		22	S	19	S	19		14	I	20
E159	<i>Enterococcus</i> sp.	S	23		20		25	I	16	S	18		9	I	20
E160	<i>Enterococcus</i> sp.	S	26		26		25	R	12	S	17		10	I	20
E161	<i>Enterococcus</i> sp.	S	27		26		30	R	12	S	18		11	S	21
E164	<i>Enterococcus</i> sp.	S	29		24		25	R	11	S	19		11	I	17
E170	<i>Enterococcus</i> sp.	S	25		15		20	R	11	S	18		10	S	21
E171	<i>Enterococcus</i> sp.	S	23		19		25	R	11	I	16		9	S	28
E179	<i>Enterococcus</i> sp.	S	20		18		20	R	11	I	16		8	S	21
E183	<i>Enterococcus</i> sp.	S	25		16		26	S	20	S	18		14	S	22
E186	<i>Enterococcus</i> sp.	S	22		12		20	I	18	S	17		11	S	22
E187	<i>Enterococcus</i> sp.	S	25		12		24	S	19	S	17		13	I	20
E188	<i>Enterococcus</i> sp.	S	24		15		25	S	20	S	19		13	S	24
E195	<i>Enterococcus</i> sp.	S	24		14		24	S	19	S	17		13	S	21
E208	<i>Enterococcus</i> sp.	S	25		18		25	I	15	S	18		15	S	21
E209	<i>Enterococcus</i> sp.	S	24		23		34	S	19	S	23		13	S	30
E142	<i>Klebsiella</i> sp.	R	0	S	30	S	25	R	10		-	I	14	R	11
E167	<i>Klebsiella</i> sp.	R	0	I	24	R	18	S	16		-	I	14	S	25
E79	<i>Kluyvera</i> sp.	R	12	S	28	S	31	S	19		-	I	14	I	19
E130	<i>Providencia</i> sp.	R	0	S	36	S	25	R	7		-	S	16	S	23
E9	<i>Pseudomonas</i> sp.		0		0	I	25		14		-		11	R	18
E125	<i>Pseudomonas</i> sp.		0		14	I	20		11		-		14	I	27
E127	<i>Pseudomonas</i> sp.		0		20	R	19		16		-		19	I	37
E137	<i>Pseudomonas</i> sp.		0		15	S	24		8		-	I	13	S	35
E144	<i>Pseudomonas</i> sp.		0		22	R	17		16		-		16	I	40
E145	<i>Pseudomonas</i> sp.		0		16	S	26		9		-	I	13	S	35
E146	<i>Pseudomonas</i> sp.		0		23	I	21		16		-		18	I	32
E150	<i>Pseudomonas</i> sp.		0		18	S	21		8		-	R	12	S	37
E8	<i>Raoultella</i> sp.	R	0	S	30	S	32	S	21		-	S	15	S	33
E74	<i>Raoultella</i> sp.	R	0	S	31	S	29	S	19		-	I	14	S	21
E148	<i>Raoultella</i> sp.	R	0	S	29	S	30	R	9		-	S	15	I	19
E113	<i>Shigella</i> sp.	R	0	S	30	S	32	S	17		-	R	0	R	14
E126	<i>Stenotrophomonas</i> sp.		0		8		0		9		-		13		14



Supplementary Figure S1. Phylogenetic 16S rRNA gene sequence-based dendrogram of isolates from the WWTP and closest type strains. *Actinomyces bovis* strain NCTC 11535 was used as an outgroup. The scale bar refers to 0.05 substitutions per nucleotide position.



Supplementary Figure S2. Examples of the results of the antibiotic susceptibility assays: a) and b) for a susceptible strain *Enterococcus* sp. E158; c) and d) for a multidrug resistant strain, *Citrobacter* sp. E73.



Supplementary Figure S3. Example of representative gel electrophoresis for PCR amplification of class 1 integron.