

Table S1. Incidence of resistant *E. coli* isolates for each antimicrobial compound according to sampling zone

A 4	S	S	S	S	S	S	S	S	S	S	S	S	S	S
A 7	S	S	S	<b>R</b>	S	S	S	S	S	S	S	S	S	S
A 8	S	S	S	<b>R</b>	S	S	S	S	S	S	S	<b>R</b>	S	S
A 9	S	S	S	S	S	S	S	S	S	S	S	S	S	S
A 12	S	S	S	S	S	S	S	S	S	S	S	<b>R</b>	S	S
A 14	<b>R</b>	S	S	S	S	S	S	S	S	S	S	S	S	S
A 15	S	S	<b>R</b>	S	S	<b>R</b>	<b>R</b>	S	S	S	S	S	S	S
A 16	S	S	S	S	S	S	S	S	S	S	S	S	S	S
A 17	S	S	S	S	S	S	S	S	S	S	S	S	S	S
A 18	S	S	<b>R</b>	S	S	S	S	S	S	S	S	S	S	S
A 19	<b>R</b>	<b>R</b>	S	<b>R</b>	S	S	S	S	S	S	S	<b>R</b>	S	S
A 20	S	S	S	<b>R</b>	S	S	S	S	S	S	S	S	S	S
A 21	<b>R</b>	<b>R</b>	S	S	S	S	S	S	S	S	S	S	<b>R</b>	S
A 23	S	S	<b>R</b>	S	S	S	S	S	S	S	S	S	S	S
A 24	S	S	S	S	S	S	S	S	S	S	S	S	S	S
A 25	S	S	<b>R</b>	S	S	S	S	S	S	S	S	S	S	S
A 26	S	S	S	S	S	S	S	S	S	S	S	S	S	S
TOTAL (%)	15.8	15.8	17.5	10.4	1.8	8.8	14	3.5	0	0	8.8	1.8	35.1	1.8

SMX: sulfamethoxazole; TMP: trimethoprim; CIP: ciprofloxacin; TET: tetracycline; MER: meropenem; AZI: Azithromycin; NAL: nalidixic acid; FOT: cefotaxime; CHL: chloramphenicol; TGC: tigecycline; TAZ: ceftazidime; COL: colistin; AMP: ampicillin; GEN: gentamicin. R: resistant; S: susceptible.

Table S2. Presence of antibiotic resistance genes in *E. coli* isolates according to sampling zone.

<i>E. coli</i> isolates	ARGs				
	<i>blaTEM</i>	<i>qnrS</i>	<i>ermB</i>	<i>sull</i>	<i>tetW</i>
VN1	+	+	-	+	-
VN3	+	+	-	+	+
VN4	-	-	-	-	+
VN5	+	-	-	+	-
VN6	+	-	-	+	-
VN7	+	-	-	+	-
VN8	+	-	-	+	-
VN10	+	+	-	+	-
VN11	+	+	-	+	-
VN12	+	-	-	+	-
VN13	+	-	-	+	-
VN14	+	-	-	+	-
VN15	+	-	-	+	-
VN21	+	-	-	+	-
VS 1	+	+	-	+	+
VS 2	+	+	-	+	-
VS 3	+	+	-	+	+
VS 4	+	-	-	+	-
VS 5	+	-	-	+	-
VS 6	+	-	-	+	-
VS 7	+	-	-	+	-
VS 8	+	-	-	+	-
VS 14	+	-	-	-	-
VS 16	+	-	-	-	-
VS 17	-	+	-	+	-
VS 18	+	-	-	+	-
VS 19	+	+	-	+	+
VS 20	+	+	-	+	+
VS 21	+	-	-	+	+
VS 22	+	+	-	+	+
VS 23	+	+	-	+	+
VS 24	-	+	-	+	-
VS 25	+	-	-	+	+
VS 26	+	-	-	+	-
VS 27	+	+	+	+	+
VS 28	+	+	-	+	+
VS 30	+	-	-	+	+
A 1	+	-	-	+	-
A 2	+	-	-	+	-

A 3	+	-	-	+	+	
A 4	+	+	-	+	+	
A 7	+	-	-	+	+	
A 8	+	-	-	+	+	
A 9	+	-	-	+	-	
A 12	+	-	-	+	+	
A 14	+	+	-	+	-	
A 15	+	+	-	+	-	
A 16	+	-	-	+	-	
A 17	+	+	-	+	+	
A 18	+	-	-	+	-	
A 19	+	+	-	+	+	
A 20	-	+	-	-	-	
A 21	+	-	-	+	-	
A 23	+	-	-	+	+	
A 24	+	-	-	+	-	
A 25	+	-	-	+	+	
A 26	+	-	-	+	-	
TOTAL (%)	53 (92.9)	21 (36.8)	3 (5.2)	53 (92.9)	23 (45.1)	

+: gene detected

-: genes not detected

Table S3. Presence of antibiotic resistance genes in water samples according to sampling zone.

Seawater samples	ARGs				
	<i>blaTEM</i>	<i>qnrS</i>	<i>ermB</i>	<i>sull</i>	<i>tetW</i>
VN1	-	-	-	-	-
VN2	+	-	-	+	-
VN3	-	-	-	-	-
VN4	+	+	-	+	+
VN5	-	-	-	-	+
VN6	+	+	-	-	-
VN7	-	-	-	-	-
VN8	-	-	-	+	+
VN9	-	-	-	-	-
VN10	+	+	-	-	-
VN11	-	-	-	-	-
VN12	-	-	-	-	-
VN13	+	+	-	-	+
VN14	+	+	-	-	+
VN15	-	-	-	-	-
VN16	-	-	-	-	-
VN17	-	-	-	-	-
VN18	-	-	-	-	-
VN19	-	-	-	-	-
VN20	-	-	-	-	-
VN21	-	-	-	-	-
VS 1	-	-	-	-	-
VS 2	+	-	-	+	-
VS 3	-	-	-	-	-
VS 4	-	-	-	-	-
VS 5	-	-	-	-	-
VS 6	+	+	-	-	-
VS 7	+	+	-	+	-
VS 8	+	-	-	-	-
VS 9	+	-	-	-	-
VS 10	+	-	-	-	-
VS 11	-	-	-	-	-
VS 12	-	-	-	-	-
VS 13	-	-	-	-	-
VS 14	-	-	-	-	-
VS 15	-	-	-	-	-
VS 16	+	+	-	-	-

VS 17	+	+	-	-	-
VS 18	-	-	-	-	-
VS 19	+	+	-	+	-
VS 20	-	-	-	-	-
VS 21	+	-	-	-	-
VS 22	+	-	-	+	-
VS 23	-	-	-	-	-
VS 24	+	+	-	-	-
VS 25	+	+	-	-	-
VS 26	+	+	-	+	-
VS 27	-	-	-	-	-
VS 28	+	+	-	-	-
VS 29	-	-	-	-	-
VS 30	-	-	-	-	-
A 1	+	-	-	+	-
A 2	-	-	-	-	-
A 3	+	-	-	-	-
A 4	+	-	-	-	-
A 5	+	-	-	+	+
A 6	+	-	-	+	+
A 7	-	-	-	+	+
A 8	-	-	-	-	-
A 9	+	+	-	-	-
A 10	+	+	-	-	-
A 11	-	-	-	-	-
A 12	+	+	-	-	-
A 13	+	-	-	-	+
A 14	-	-	-	+	-
A 15	+	+	+	+	+
A 16	-	-	-	-	-
A 17	+	+	-	+	-
A 18	-	+	-	+	+
A 19	+	-	-	-	-
A 20	-	+	-	-	+
A 21	+	-	-	+	-
A 22	-	-	-	-	-
A 23	+	+	-	-	-
A 24	-	+	-	-	+
A 25	-	+	-	+	-
A 26	+	+	-	-	-
TOTAL (%)	36 (46.7)	25 (32.5)	1 (1.2)	18 (23.4)	13 (16.9)

+: gene detected

-: genes not detected

Table S4. Incidence of resistant *Enterococcus* sp. isolates for each antimicrobial compound according to sampling zone.

Enterococci isolates	Antimicrobial											
	AMP	CHL	CIP	DAP	ERY	GEN	LIN	QUIN/DAL	TEI	TET	TGC	VAN
VN2	S	S	S	S	S	S	S	S	S	S	S	S
VN3	S	S	S	S	S	S	S	S	S	S	S	S
VN4	S	S	S	S	S	S	S	S	S	S	S	S
VN5	S	S	S	S	S	S	S	S	S	S	S	S
VN6	S	S	S	S	S	S	S	S	S	S	S	S
VN8	S	S	S	S	S	S	S	S	S	S	S	S
VN8	S	S	S	S	S	S	S	S	S	S	S	S
VN10	S	S	S	S	S	S	S	S	S	S	S	S
VN10	S	S	S	S	S	S	S	S	S	S	S	S
VS6	S	S	S	S	S	S	S	S	S	S	S	S
VS7	S	S	S	S	S	S	S	S	S	S	S	S
VS8	S	S	S	S	S	S	S	S	S	S	S	S
VS10	S	S	S	S	S	S	S	S	S	S	S	S
VS16	S	S	S	S	S	S	S	S	S	S	S	S
VS17	S	S	S	S	S	S	S	S	S	R	S	S
VS19	S	S	S	S	S	S	S	S	S	R	S	S
VS21	S	S	S	S	S	S	S	S	S	R	S	S
VS24	S	S	S	S	S	S	S	S	S	R	S	S
VS25	S	S	S	S	S	S	S	S	S	S	S	S
VS26	S	S	S	R	S	S	S	S	S	S	S	S
VS28	S	S	S	S	S	S	S	S	S	S	S	S
A1	S	S	S	S	S	S	S	S	S	R	S	S
A3	S	S	S	S	S	S	S	S	S	S	S	S
A4	S	S	S	S	S	S	S	S	S	S	S	S
A9	S	S	S	S	S	S	S	S	S	R	S	S
A15	S	S	S	S	S	S	S	S	S	S	S	S
A17	S	S	S	S	S	S	S	S	S	S	S	S
A18	S	S	S	S	S	S	S	S	S	S	S	S
A20	S	S	S	S	S	S	S	S	S	S	S	S
A26	S	S	S	S	S	S	S	S	S	S	S	S
TOTAL (%)	0	0	0	3.3	0	0	0	0	0	20	0	0

AMP: ampicillin; CHL: chloramphenicol; CIP: ciprofloxacin; DAP: daptomycin; SMX: sulfamethoxazole; ERY: erythromycin; GEN:

gentamicin, LIN: Linezolid; QUIN/DAL: quinopristin/dalfopristin; TEI: teicoplanin; TET: tetracycline; TGC: tigecycline; VAN:

vancomycin. R: resistant; S: susceptible

Table S5. Presence of antibiotic resistance genes in *Enterococcus* sp. isolates according to sampling zone.

Enterococci	ARGs				
	<i>blaTEM</i>	<i>qnrS</i>	<i>ermB</i>	<i>sull</i>	<i>tetW</i>
VN2	-	-	-	-	-
VN3	+	-	-	-	-
VN4	-	-	-	-	-
VN5	-	-	+	-	-
VN6	+	-	-	-	-
VN8	-	+	-	-	-
VN8	-	-	-	-	-
VN10	+	-	-	-	-
VN10	-	-	-	-	-
VS6	-	-	-	-	-
VS7	-	-	-	-	-
VS8	+	-	-	-	-
VS10	-	-	-	-	-
VS16	-	-	-	-	-
VS17	-	-	-	-	-
VS19	-	-	+	-	-
VS21	-	-	-	-	-
VS24	-	-	-	-	-
VS25	-	-	-	-	-
VS26	-	-	-	-	-
VS28	-	-	-	-	-
A1	+	-	-	-	-
A3	-	-	-	-	-
A4	+	-	-	-	-
A9	+	-	-	-	+
A15	+	-	-	-	-
A17	+	-	-	-	-
A18	+	-	-	-	-
A20	+	-	-	-	-
A26	+	-	-	-	-
TOTAL (%)	40	3.3	6.6	0	3.3

+: gene detected

-: genes not detected