

Supplementary figures

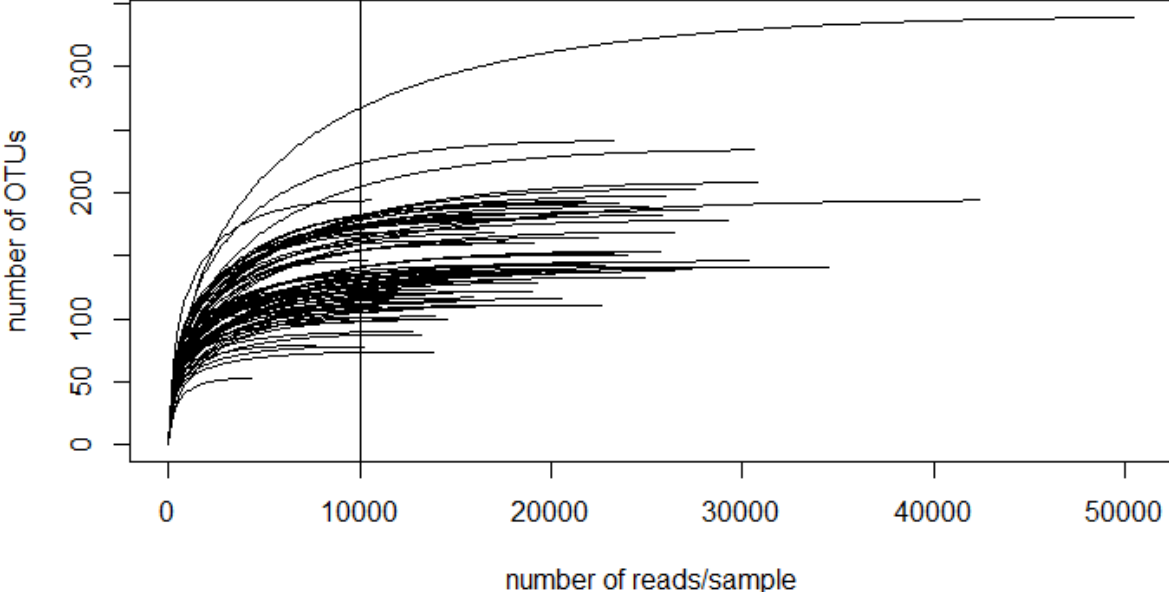


Figure S1: Rarefaction curve (OTUs per reads/samples). The rarefaction value is 10,000 reads.





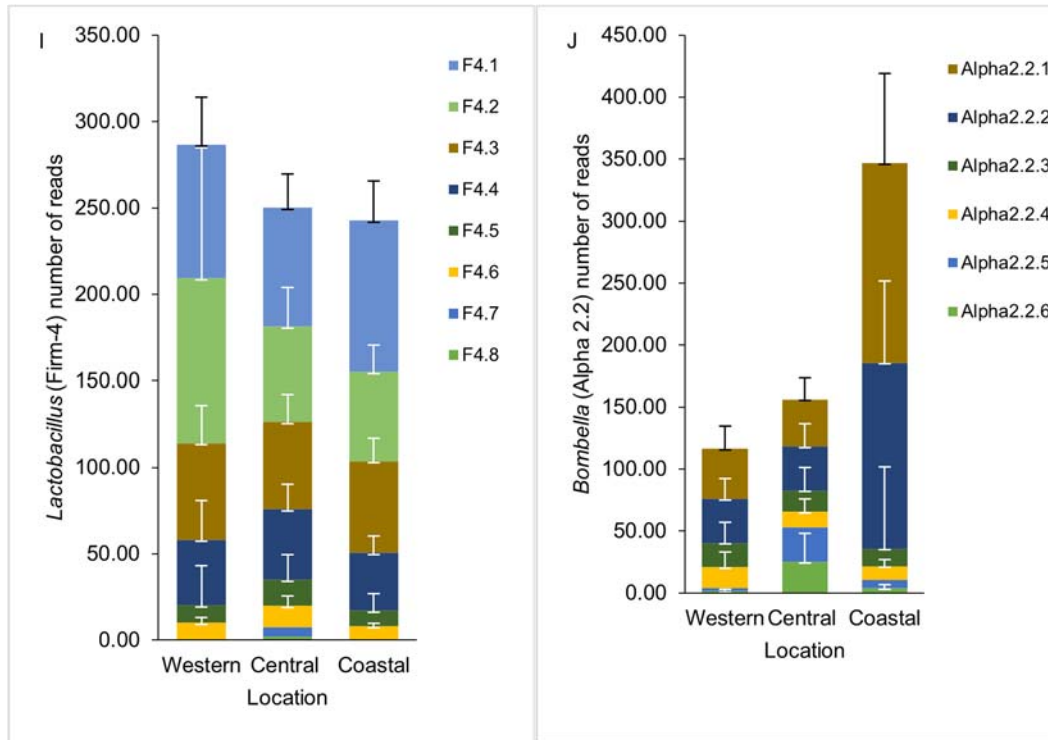


Figure S2: Amplicon sequence variant (ASV) relative abundance of the main bacteria core members.

Table S2: Most abundant environmental bacterial abundance and prevalence.

Environmental bacterial abundance (%) and prevalence (%)							
		Western		Central		Coastal	
		Abundance	Prevalence	Abundance	Prevalence	Abundance	Prevalence
Environmental bacterial genus	<i>Pseudomonas</i>	3.1	87.2	1.2	77.9	2.3	62.8
	<i>Acidovorax</i>	3.4	87.2	2.4	81.4	0.6	61.6
	<i>Spiroplasma</i>	2.2	83.7	3.9	76.7	0.0	54.7
	<i>Gluconobacter</i>	1.9	93.0	1.5	90.7	1.8	89.5
	<i>Acinetobacter</i>	0.0	79.1	3.8	75.6	0.0	55.8
	<i>Klebsiella</i>	1.2	86.0	0.6	79.1	0.7	64.0
	<i>Fructobacillus</i>	1.4	88.4	0.8	84.9	0.3	70.9
	<i>Enterobacter</i>	0.8	84.9	0.3	74.4	0.4	58.1
	<i>Weissella</i>	1.8	82.6	0.1	73.3	0.0	52.3
	<i>Tatumella</i>	0.6	90.7	0.5	87.2	0.3	77.9

**Table S3: PERMANOVA analysis showed no bacterial community variation among locations.  $R^2 = 0.03074$ ,  $P = 0.198$ .**

Group 1	Group 2	F.Model	R <sup>2</sup>	p-value	p-adjusted
Western	Coastal	1.378317	0.02282801	0.136	0.408
Western	Central	1.110891	0.02638013	0.346	1.000
Coastal	Central	1.570429	0.02324137	0.060	0.180

**Table S4: Pairwise comparisons of bacterial relative abundance showed significant variation of *Gilliamella* among locations. Statistical significance are indicated with different letters.**

Pairwise Comparison						
		F-	P-	Western	Central	Coastal
		value	value			
Bacterial genus	<i>Gilliamella</i>	3.105	0.0501	b	ab	a
	<i>Snodgrassella</i>	0.18	0.836	a	a	a
	<i>Frischella</i>	2.156	0.122	a	a	a
	<i>Lactobacillus</i> (Firm-5)	0.675	0.512	a	a	a
	<i>Bartonella</i>	0.38	0.685	a	a	a
	<i>Apibacter</i>	1.756	0.179	a	a	a
	<i>Commensalibacter</i> (Alpha 2.1)	0.908	0.407	a	a	a
	<i>Bifidobacter</i>	1.821	0.168	a	a	a
	<i>Lactobacillus</i> (Firm-4)	0.776	0.464	a	a	a
	<i>Bombella</i> (Alpha 2.2)	0.461	0.632	a	a	a