

Supplementary File

Supplementary Table S1: Number of reads and the relative abundance of each OTU in the three tested populations

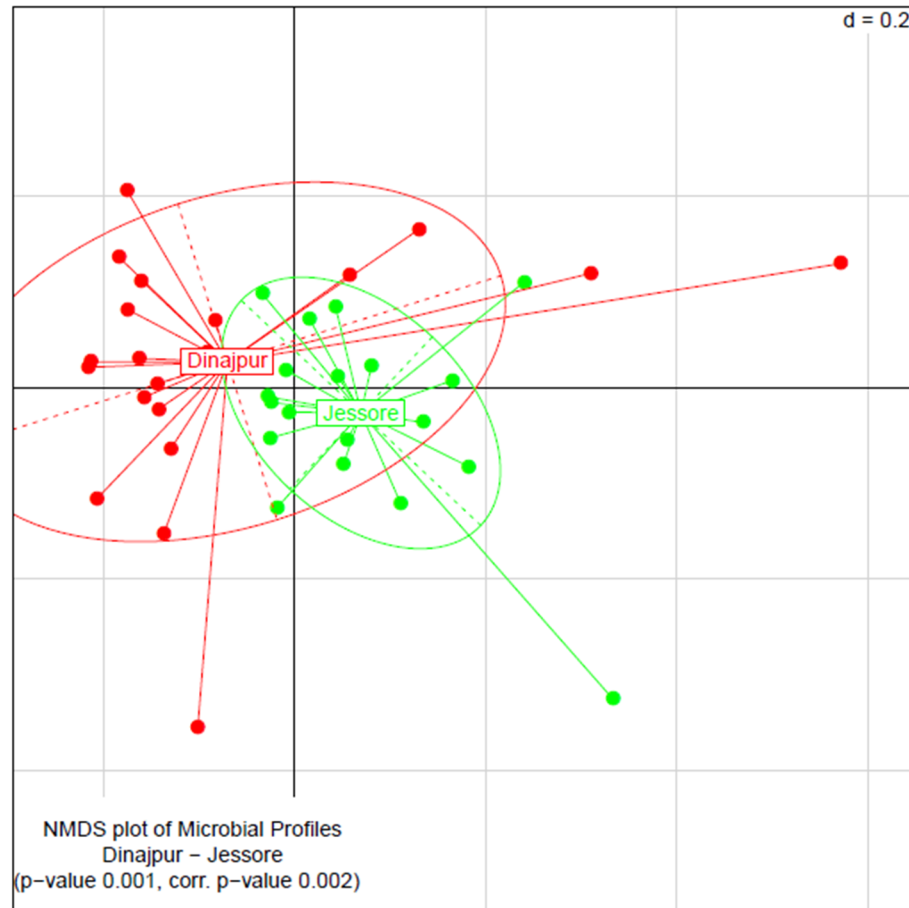
#OTU	Genus	Number of reads			Relative abundance		
		Dinajpur	Rajshahi	Jessore	Dinajpur	Rajshahi	Jessore
Otu1	<i>Dysgonomonas</i>	350132	196943	180832	0.3667	0.2046	0.1896
Otu10	<i>Candidatus Schmidhempelia</i>	11283	10284	14942	0.0118	0.0107	0.0157
Otu104	<i>Klebsiella</i>	2467	1691	1371	0.0026	0.0018	0.0014
Otu11	<i>Pectobacterium</i>	2658	9798	17903	0.0028	0.0102	0.0188
Otu119	<i>Orbus</i>	760	2252	1457	0.0008	0.0023	0.0015
Otu12	<i>Chishuiella</i>	7872	9357	13924	0.0082	0.0097	0.0146
Otu123	<i>Enterobacter</i>	3599	680	503	0.0038	0.0007	0.0005
Otu13	uncultured Orbaceae	0	0	26511	0.0000	0.0000	0.0278
Otu14	<i>Orbus</i>	7578	17776	12366	0.0079	0.0185	0.0130
Otu15	<i>Dysgonomonas</i>	960	13710	1169	0.0010	0.0142	0.0012
Otu16	<i>Pectobacterium</i>	1898	8014	5608	0.0020	0.0083	0.0059
Otu17	<i>Gilliamella</i>	227	4232	914	0.0002	0.0044	0.0010
Otu18	<i>Carnimonas</i>	0	346	4351	0.0000	0.0004	0.0046
Otu19	<i>Morganella</i>	238	4873	502	0.0002	0.0051	0.0005
Otu2	<i>Orbus</i>	86950	100386	151112	0.0911	0.1043	0.1584
Otu20	<i>Pectobacterium</i>	4610	2458	3712	0.0048	0.0026	0.0039
Otu200	<i>Candidatus Schmidhempelia</i>	2147	719	1617	0.0022	0.0007	0.0017
Otu21	<i>Desulfovibrio</i>	1216	1099	1047	0.0013	0.0011	0.0011
Otu22	<i>Dysgonomonas</i>	320	1737	1113	0.0003	0.0018	0.0012
Otu23	<i>Lactococcus</i>	3661	0	0	0.0038	0.0000	0.0000
Otu26	<i>Orbus</i>	4143	16988	14840	0.0043	0.0176	0.0156
Otu280	<i>Klebsiella</i>	2612	801	2703	0.0027	0.0008	0.0028
Otu281	<i>Klebsiella</i>	2380	499	699	0.0025	0.0005	0.0007
Otu29	<i>Citrobacter</i>	23809	29274	22734	0.0249	0.0304	0.0238
Otu3	<i>Vagococcus</i>	87985	78421	25611	0.0921	0.0815	0.0269
Otu302	<i>Empedobacter</i>	1760	782	649	0.0018	0.0008	0.0007
Otu319	<i>Escherichia</i>	1121	743	1272	0.0012	0.0008	0.0013
Otu320	<i>Citrobacter</i>	2423	1598	1077	0.0025	0.0017	0.0011

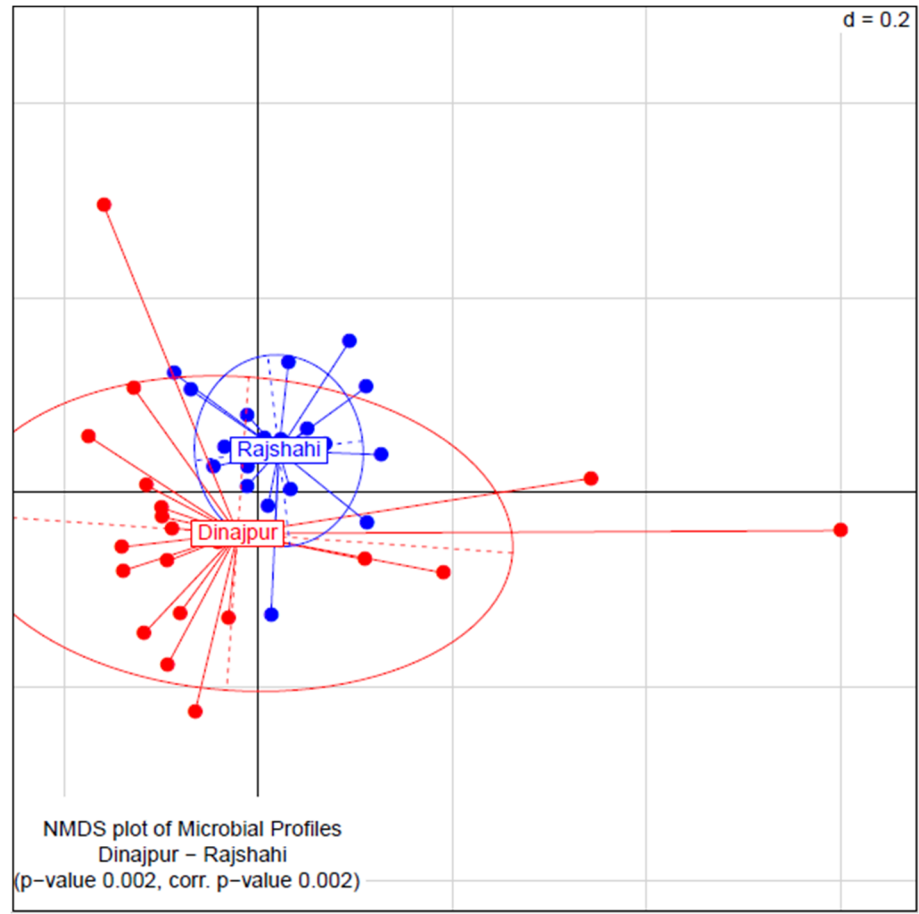
Otu33	<i>Enterobacter</i>	11201	18300	12627	0.0117	0.0190	0.0132
Otu379	<i>Enterobacter</i>	2518	1077	7447	0.0026	0.0011	0.0078
Otu4	Enterobacteriaceae;Ambiguous_taxa	92609	149446	115852	0.0970	0.1552	0.1215
Otu40	<i>Orbus</i>	3701	3544	4810	0.0039	0.0037	0.0050
Otu45	<i>Klebsiella</i>	2047	422	1223	0.0021	0.0004	0.0013
Otu47	<i>Klebsiella</i>	4484	8769	9433	0.0047	0.0091	0.0099
Otu488	<i>Klebsiella</i>	1051	1081	1804	0.0011	0.0011	0.0019
Otu49	<i>Desulfovibrio</i>	279	1464	2658	0.0003	0.0015	0.0028
Otu5	<i>Providencia</i>	67508	31351	17249	0.0707	0.0326	0.0181
Otu52	<i>Shimwellia</i>	1333	946	1304	0.0014	0.0010	0.0014
Otu53	<i>Orbus</i>	3155	1089	1647	0.0033	0.0011	0.0017
Otu59	<i>Desulfovibrio</i>	61	4471	7183	0.0001	0.0046	0.0075
Otu6	<i>Desulfovibrio</i>	902	19174	45848	0.0009	0.0199	0.0481
Otu7	<i>Citrobacter</i>	58784	122492	153589	0.0616	0.1272	0.1610
Otu70	<i>Klebsiella</i>	21603	18064	32968	0.0226	0.0188	0.0346
Otu72	<i>Klebsiella</i>	5830	18748	9983	0.0061	0.0195	0.0105
Otu8	<i>Orbus</i>	58612	14849	10526	0.0614	0.0154	0.0110
Otu9	<i>Dysgonomonas</i>	2034	30924	5498	0.0021	0.0321	0.0058
Otu97	<i>Empedobacter</i>	2365	1134	1612	0.0025	0.0012	0.0017
	Sum per area	954886	962806	953800			
	Total Reads		2871492				

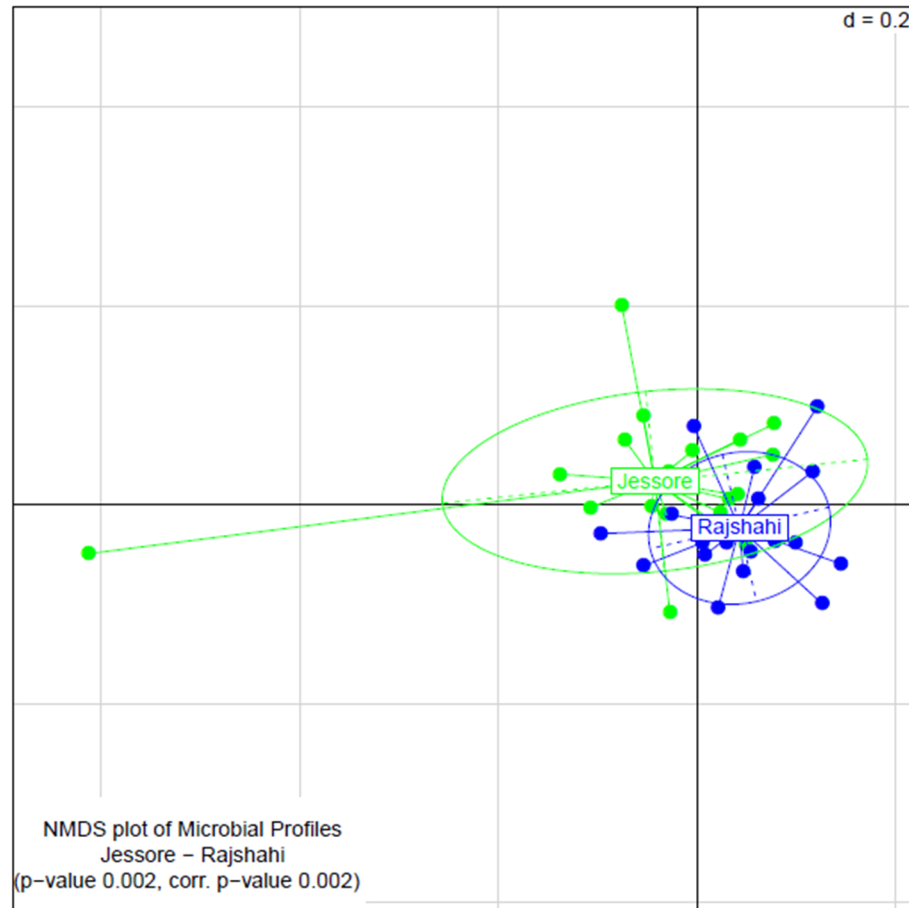
Supplementary Table S2: Nineteen OTUs remained unassigned and were classified at lower similarities. These unassigned OTUs could potentially belong to new uncharacterized taxa. The column titled “Taxonomy assigned at” contains the % similarity threshold that each sequence was classified during taxonomy assignment.

OTU	Identified as	Taxonomy assigned at
Otu1	Dysgonomonadaceae; <i>Dysgonomonas</i>	90 (potential new genus)
Otu10	Orbaceae; <i>Candidatus</i> <i>Schmidhempelia</i>	94 (potential new species)
Otu14	Orbaceae; <i>Orbus</i>	94 (potential new species)
Otu15	Dysgonomonadaceae; <i>Dysgonomonas</i>	94 (potential new species)
Otu18	Halomonadaceae; <i>Carnimonas</i>	94 (potential new species)
Otu21	Desulfovibrionaceae; <i>Desulfovibrio</i>	90 (potential new genus)
Otu22	Dysgonomonadaceae; <i>Dysgonomonas</i>	94 (potential new species)
Otu40	Orbaceae; <i>Orbus</i>	94 (potential new species)
Otu49	Desulfovibrionaceae; <i>Desulfovibrio</i>	90 (potential new genus)
Otu52	Enterobacteriaceae; <i>Shimwellia</i>	94 (potential new species)

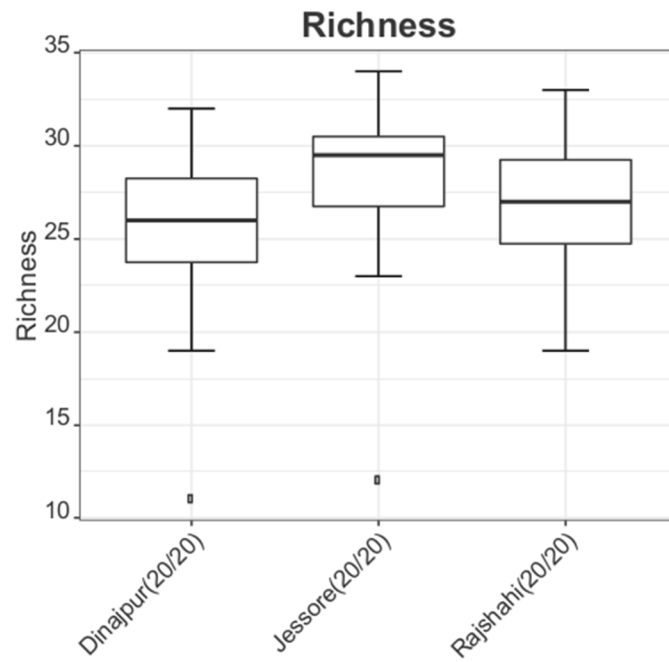
Otu53	Orbaceae; <i>Orbus</i>	94 (potential new species)
Otu59	Desulfovibrionaceae; <i>Desulfovibrio</i>	94 (potential new species)
Otu97	Weeksellaceae; <i>Empedobacter</i> ;	81 (potential new family)
Otu119	Orbaceae; <i>Orbus</i>	90 (potential new genus)
Otu123	Enterobacteriaceae; <i>Enterobacter</i>	90 (potential new genus)
Otu200	Orbaceae; <i>Candidatus</i> <i>Schmidhempelia</i>	94 (potential new species)
Otu302	Weeksellaceae; <i>Empedobacter</i>	81 (potential new family)
Otu319	Enterobacteriaceae; <i>Escherichia-Shigella</i>	94 (potential new species)
Otu488	Enterobacteriaceae; <i>Klebsiella</i>	94 (potential new species)







Supplementary Figure S1: Pairwise non-metric multidimensional scaling (NMDS) plot of bacterial communities for *Z. cucurbitae* samples collected from Dinajpur (red), Jessore (green) and Rajshahi (blue). All p-values are below 0.05 indicating statistically significant differences. 'd' indicates dissimilarity scale of the grid (d=0.2 mean that the distance between two grid lines represents approximately 20% dissimilarity between the samples).

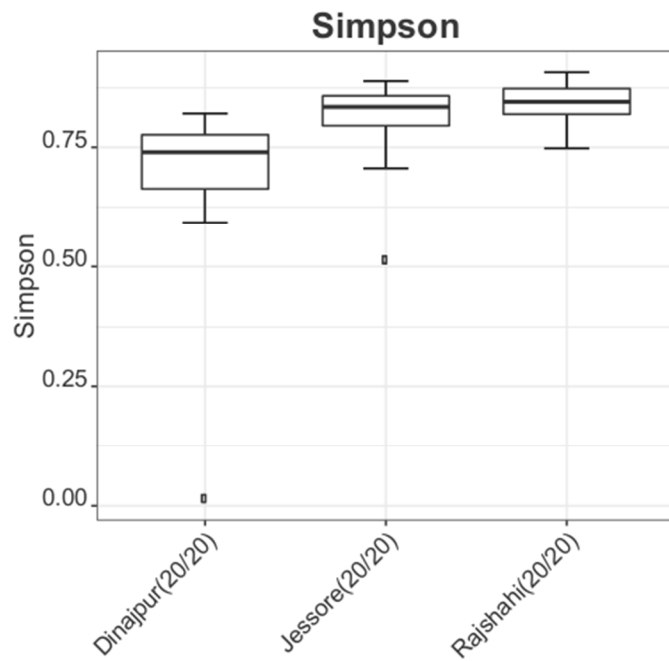


Kruskal-Wallis Rank Sum Test – all groups

	p-value	Adj. p-value
Richness	0.0487	0.138

Wilcoxon Rank Sum Test – pairwise

Groups	p-value	Adj. p-value
1-2	0.0166	0.0498

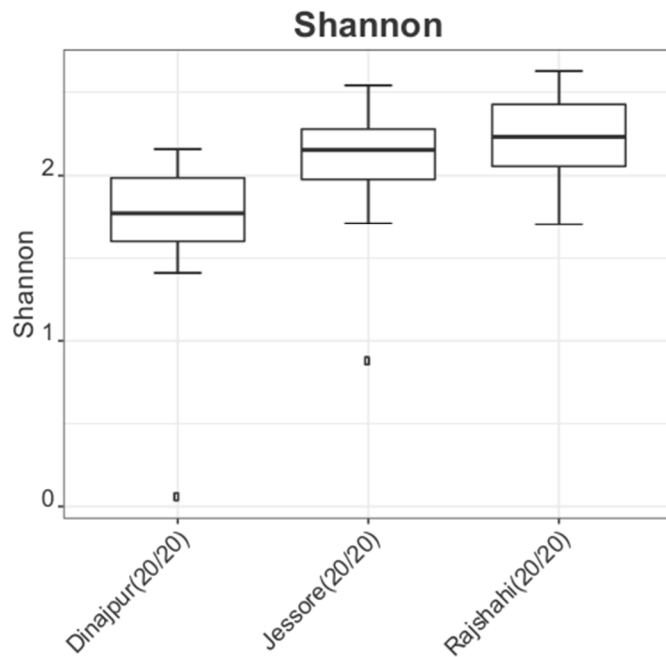


Kruskal-Wallis Rank Sum Test – all groups

	p-value	Adj. p-value
Simpson	0	0

Wilcoxon Rank Sum Test – pairwise

Groups	p-value	Adj. p-value
1-2	0	0
1-3	0	0

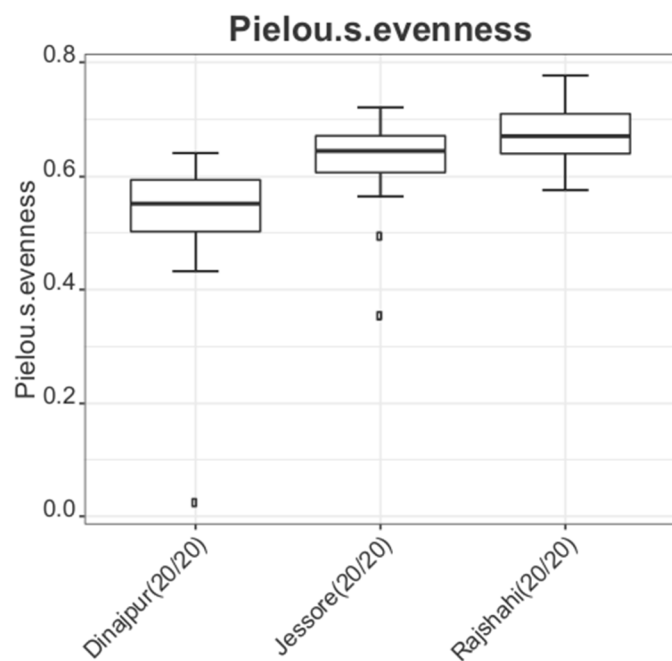


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Shannon	0	0

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	2e-04	3e-04
1-3	0e+00	0e+00

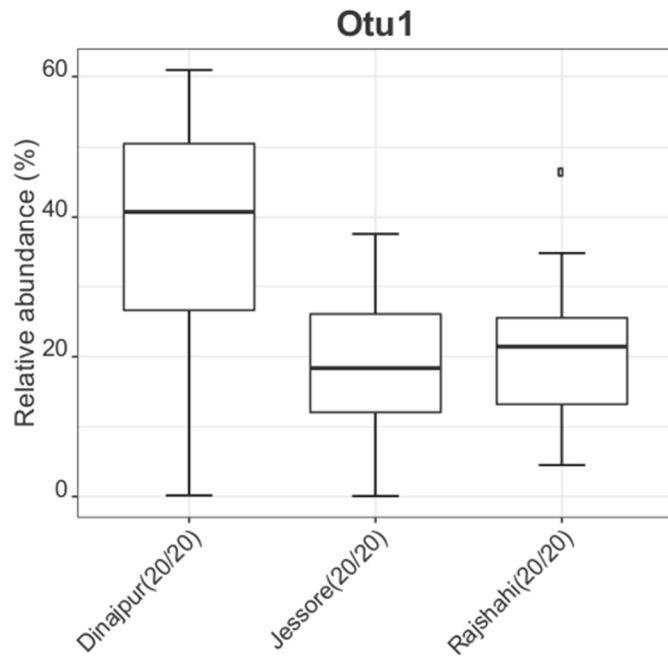


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Pielou.s.evenness	0	0

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	0.0001	0.0002
1-3	0.0000	0.0000
2-3	0.0491	0.0491

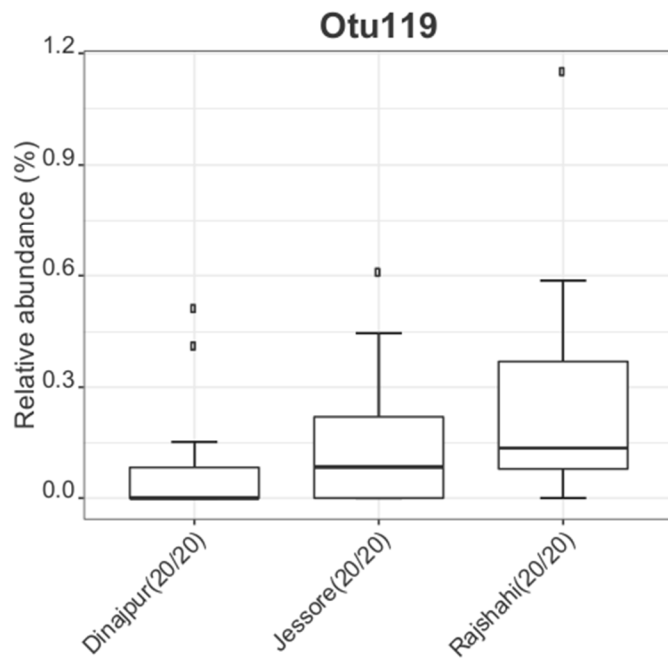


Kruskal-Wallis Rank Sum Test - all group

	p-value	Adj. p-value
Otu1	0.0011	0.0094

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	6e-04	0.0018
1-3	2e-03	0.0030

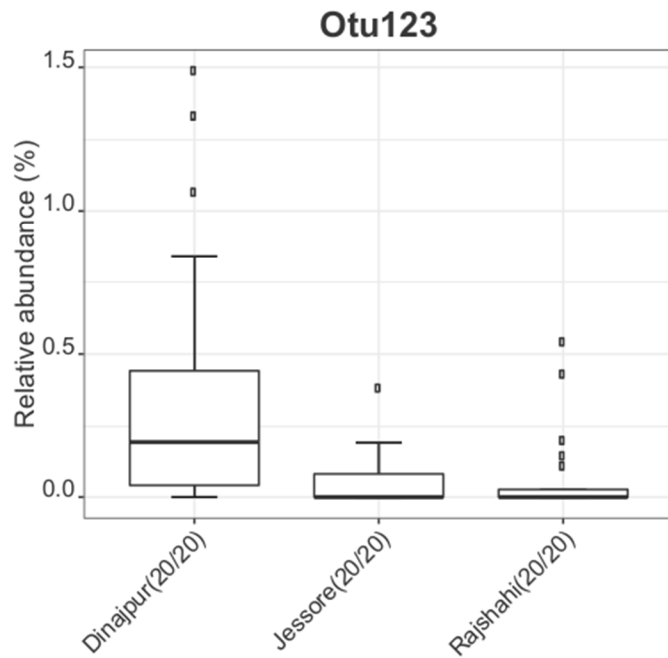


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu119	0.0283	0.0902

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-3	0.0086	0.0258

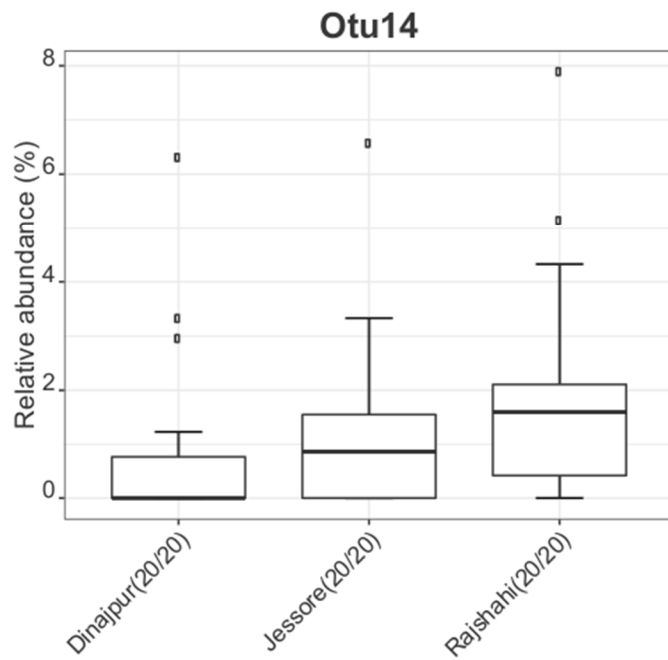


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu123	6e-04	0.0061

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	0.001	0.003
1-3	0.002	0.003



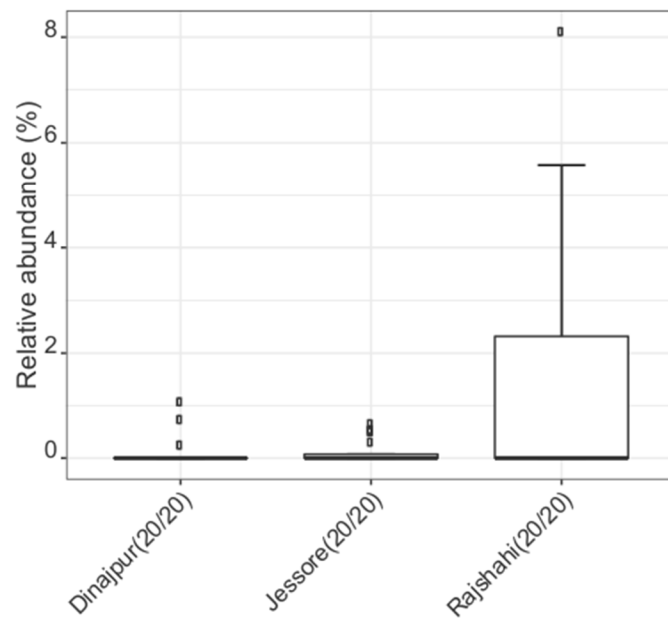
Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu14	0.0261	0.0902

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-3	0.0107	0.0321

Otu15



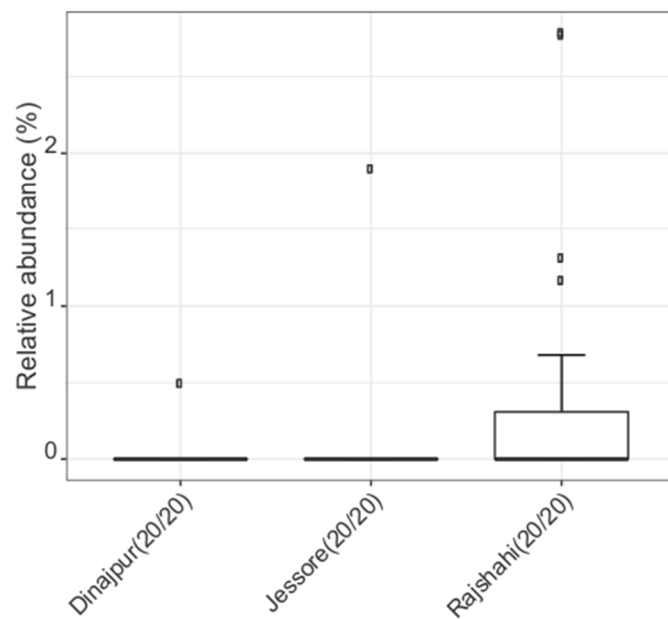
Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu15	0.034	0.102

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-3	0.0195	0.0585

Otu17

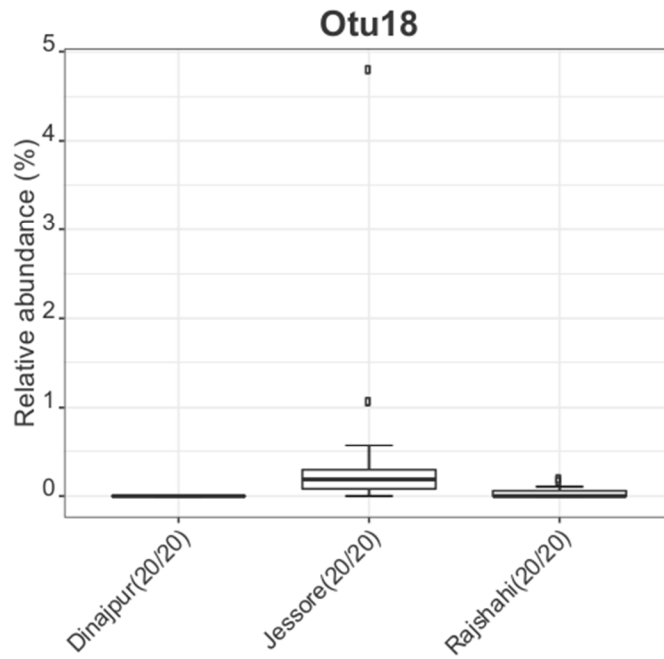


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu17	0.0275	0.0902

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-3	0.0354	0.0714
2-3	0.0476	0.0714

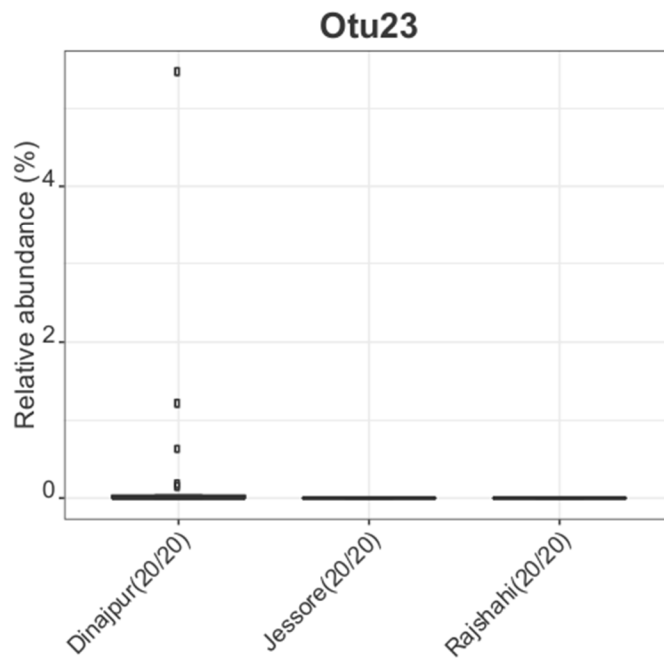


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu18	0	0

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	0.0000	0.0000
1-3	0.0045	0.0045
2-3	0.0001	0.0002



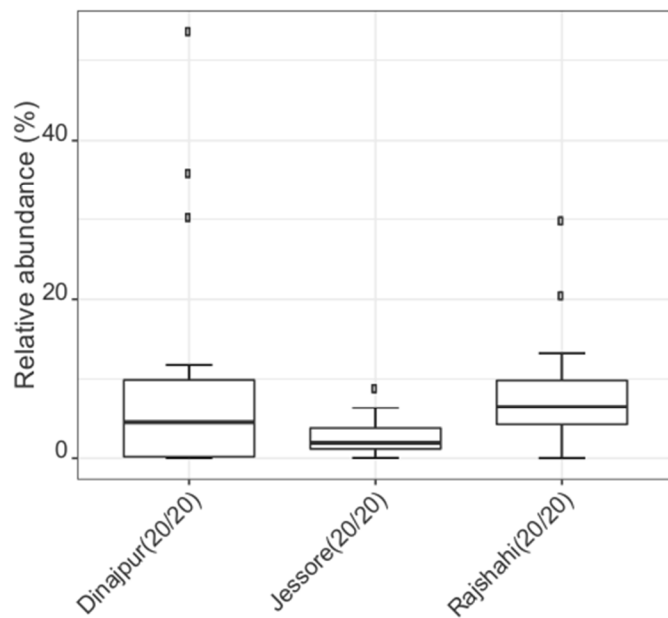
Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu23	0.0047	0.024

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	0.0198	0.0198
1-3	0.0198	0.0198

Otu3



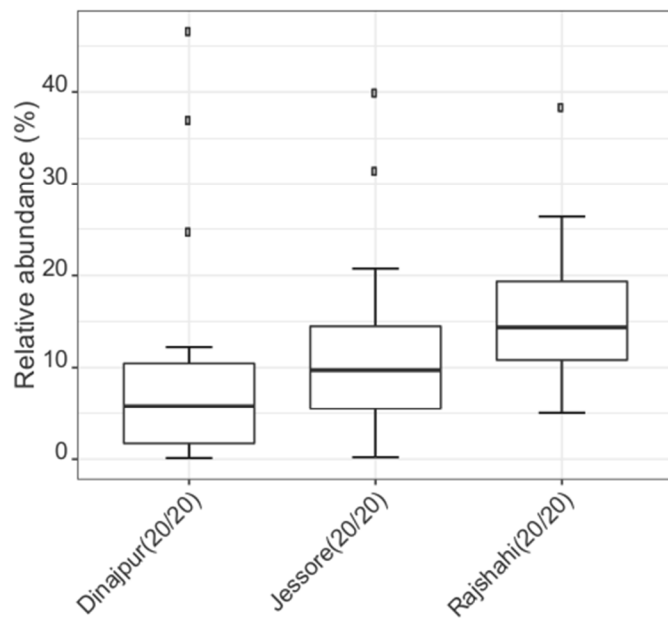
ruskal-Wallis Rank Sum Test - all group

	p-value	Adj. p-value
Otu3	0.0179	0.0702

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
2-3	4e-04	0.0012

Otu4



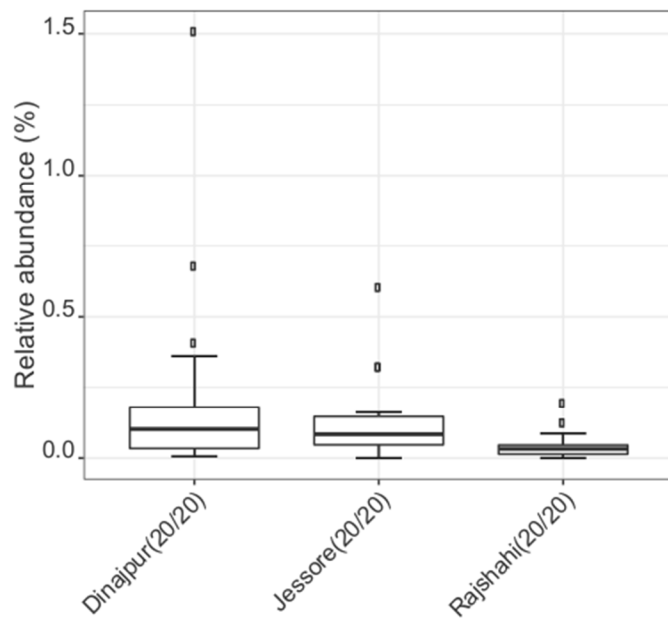
ruskal-Wallis Rank Sum Test - all group

	p-value	Adj. p-value
Otu4	0.0032	0.0204

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-3	0.0009	0.0027
2-3	0.0402	0.0603

Otu45



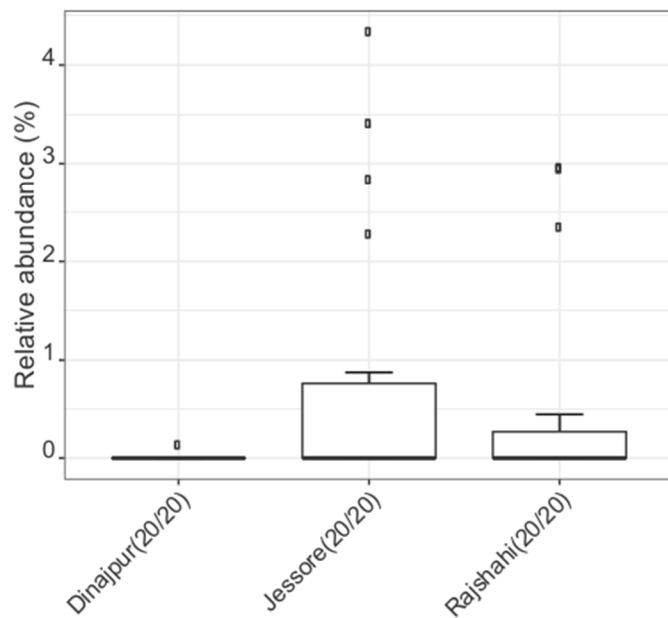
Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu45	0.0082	0.038

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-3	0.0095	0.0142
2-3	0.0058	0.0142

Otu59

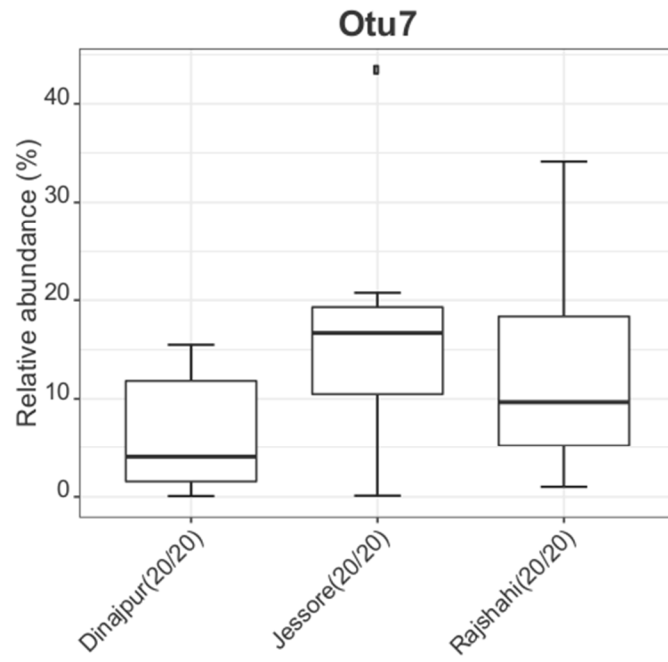


Kruskal-Wallis Rank Sum Test - all groups

	p-value	Adj. p-value
Otu59	0.0128	0.0544

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	0.0028	0.0084
1-3	0.0320	0.0480

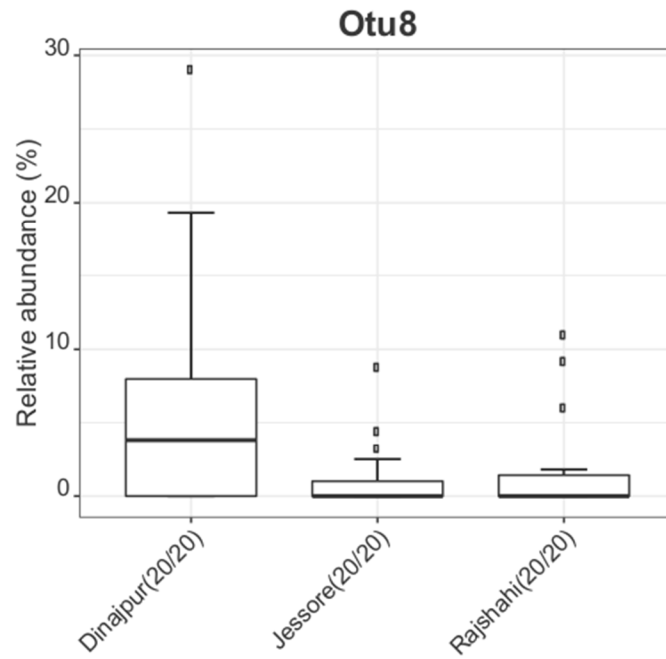


ruskal-Wallis Rank Sum Test - all group

	p-value	Adj. p-value
Otu7	0.002	0.0146

Wilcoxon Rank Sum Test - pairwise

Groups	p-value	Adj. p-value
1-2	0.0004	0.0012
1-3	0.0155	0.0232



ruskal-Wallis Rank Sum Test - all group

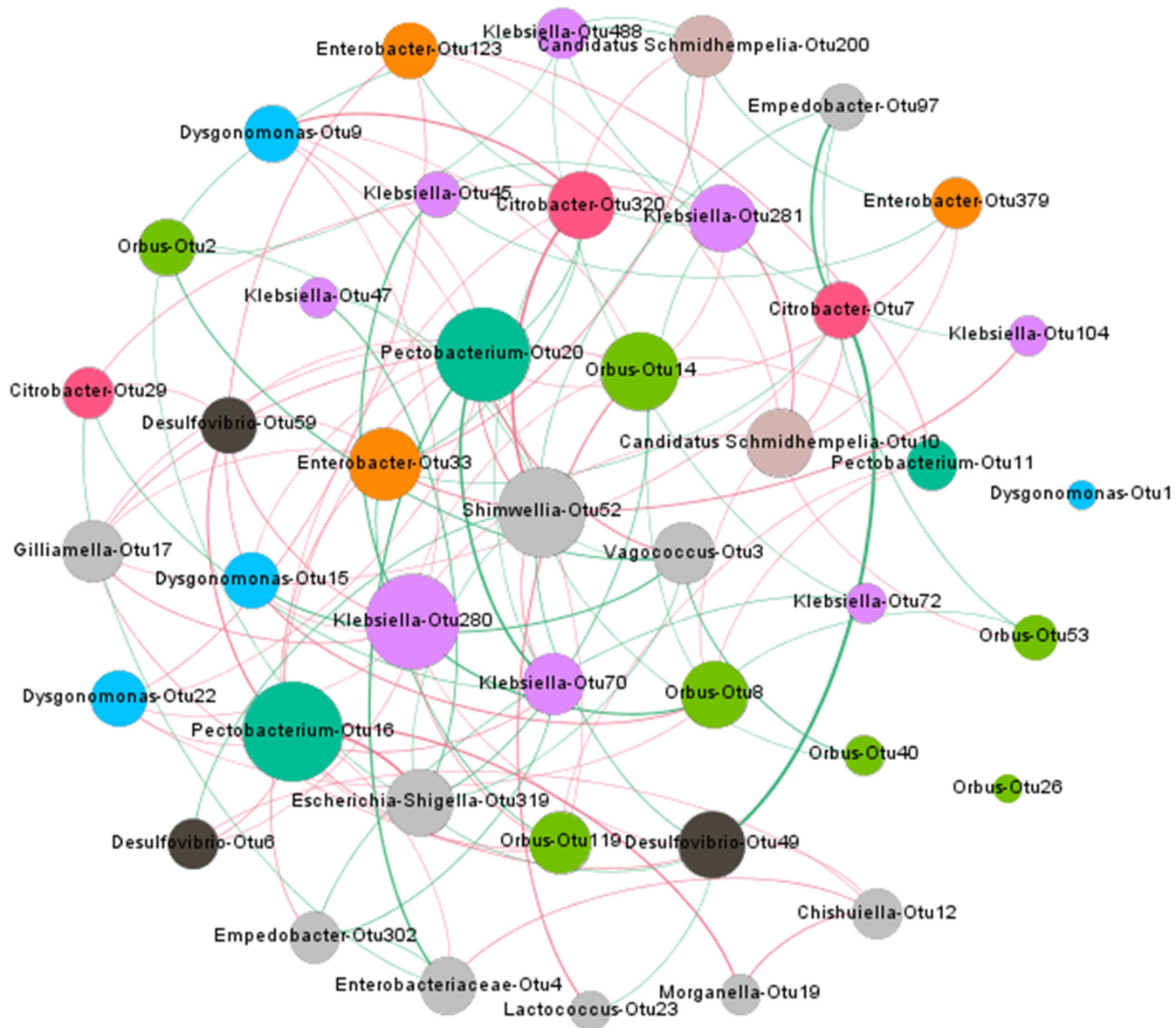
	p-value	Adj. p-value
Otu8	0.0046	0.024

Wilcoxon Rank Sum Test - pairwise

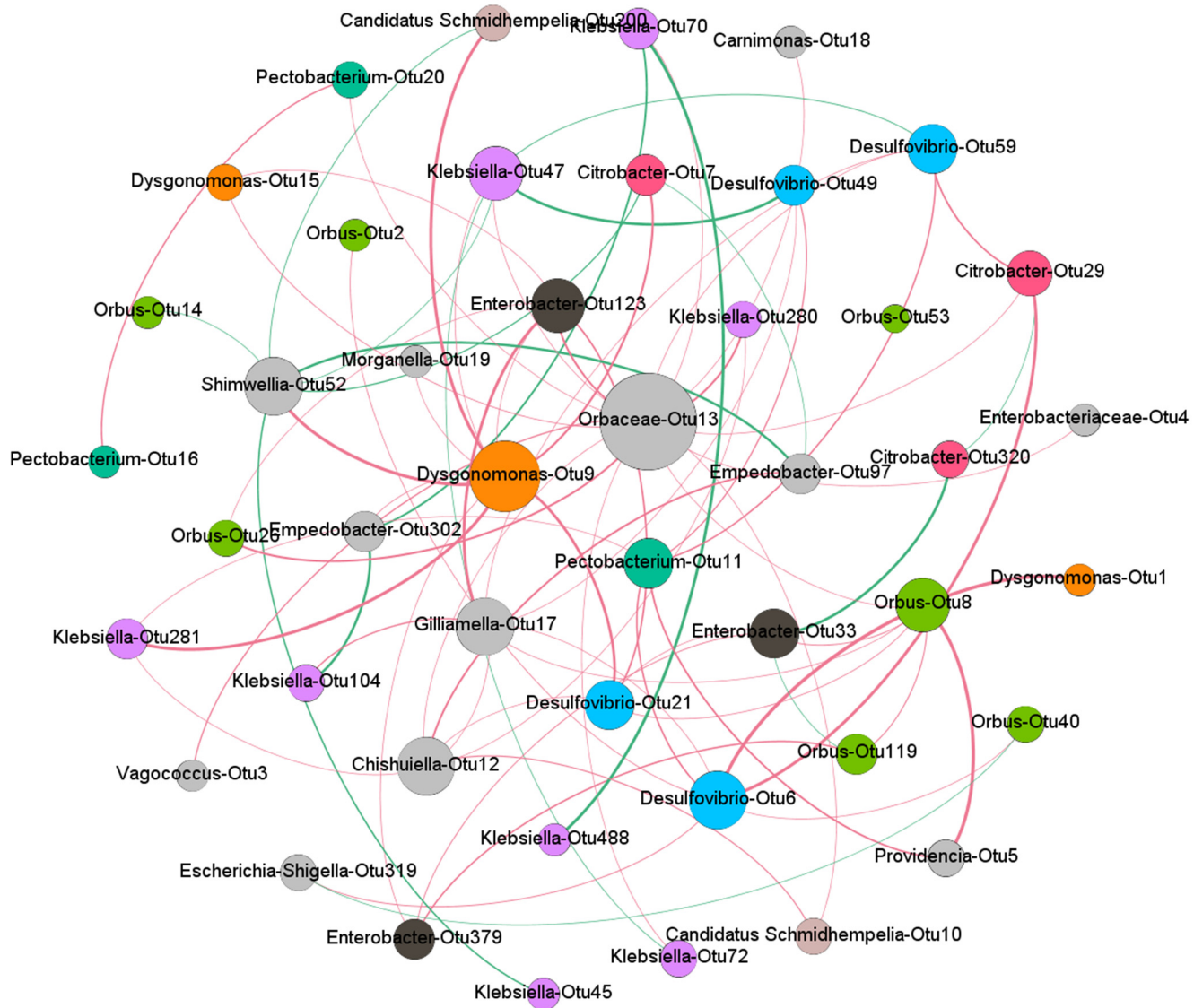
Groups	p-value	Adj. p-value
1-2	0.0044	0.0132
1-3	0.0089	0.0134

Supplementary Figure S2: Alpha diversity indices and pairwise comparisons of OTUs that show statistically significant differences ($p\text{-value} < 0.05$) among the three tested areas.

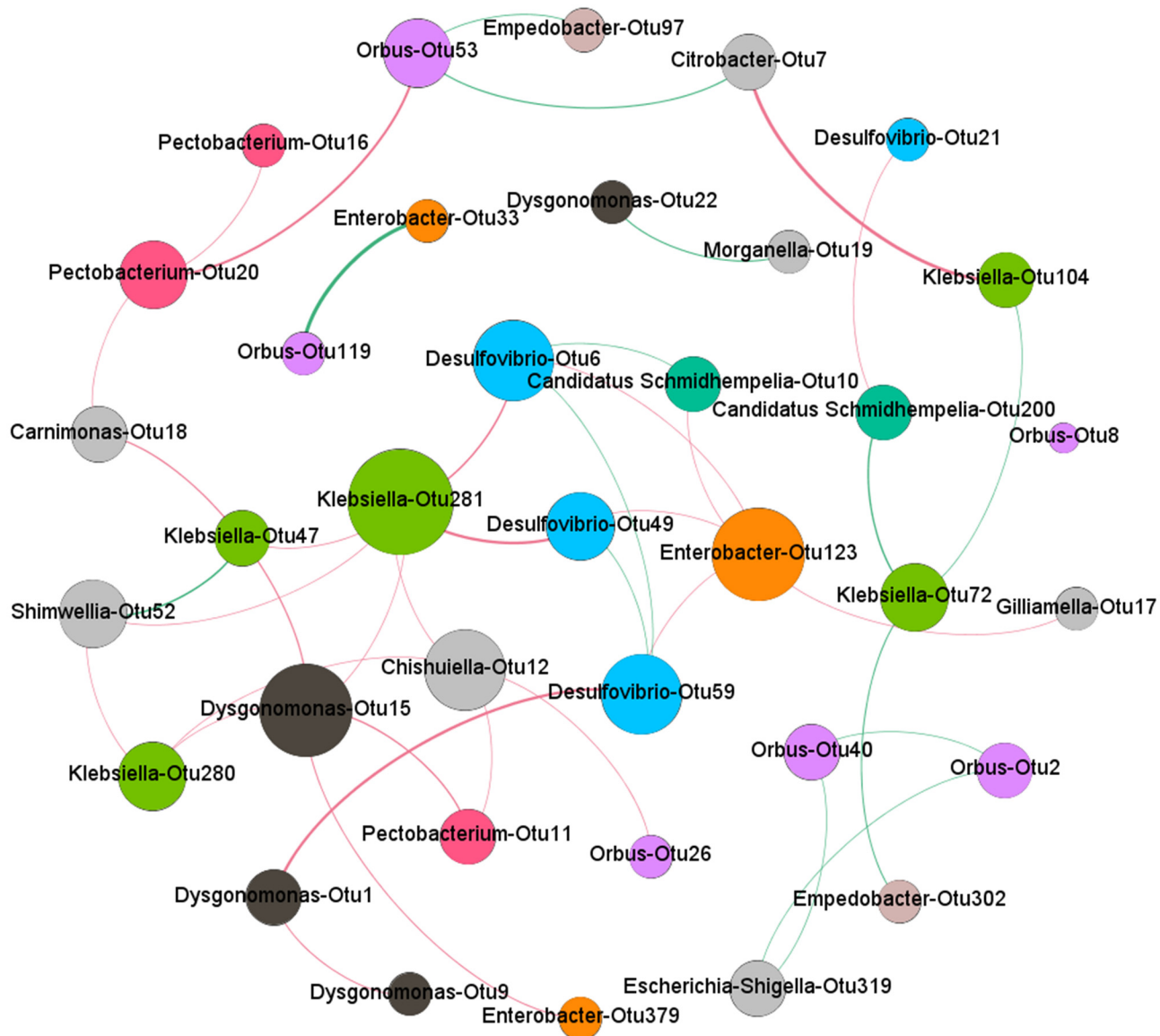
Dinajpur Network (Genus level)



Jessore Network (Genus level)



Rajshahi Network (Genus level)



Supplementary Figure S3: Mutual exclusion and co-occurrence networks among OTUs (genera) in the three tested areas.

Supplementary Table S3: Network statistics for each region

	Nodes	Edges	Average Clustering Coefficient:	Total triangles	Mutual exclusion %	Copresence %	Mutual exclusion (number of edges)	Copresence (number of edges)
Dinajpur	43	113	0.205	42	59.29	40.71	67	46
Jessore	45	77	0.349	16	77.92	22.08	60	17
Rajshahi	36	40	0.291	5	65	35	26	14

Supplementary Table S4: Network statistics for the OTUs in the three tested areas. The column titled “degree” contains the total number of interactions. The column titled “posdegree” contains the number of positive interactions, and “negdegree” negative interactions.

Network Statistics Dinajpur

Label	lineage	posdegree	abundance	degree	negdegree	sample count	clustering	triangles		
Pectobacterium-Otu16	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu16	4	0.040	962	25	21	5	0.153	846	12
Pectobacterium-Otu20	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu20	5	0.096	059	24	19	10	0.196	97	13
Shimwellia-Otu52	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Shimwellia_OTU_Otu52	19	0.027	907	22	3	12	0.181	818	10
Gilliamella-Otu17	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Gilliamella_OTU_Otu17	5	0.004	948	18	13	1	0.333	333	5
Escherichia-Shigella-Otu319	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Escherichia-Shigella_OTU_Otu319	17	0.023	458	18	1	18	0.285	714	6
Orbus-Otu14	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu14	4	0.158	718	16	12	7	0.111	111	4
Klebsiella-Otu280	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu280	5	0.054	844	16	11	8	0.106	061	7
Candidatus Schmidhempelia-Otu10	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Candidatus Schmidhempelia_OTU_Otu10	3	0.242	38	14	11	3	0.190	476	4
Citrobacter-Otu320	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu320	7	0.050	372	13	6	16	0.380	952	8
Desulfovibrio-Otu49	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu49	9	0.005	797	13	4	3	0.095	238	2

Dysgonomonas-Otu9	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu9	3	678	13	10	2	0.4	4
Orbus-Otu8	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu8	5	702	13	8	14	0.238	095
Desulfovibrio-Otu59	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu59	4	294	13	9	1	0.2	2
Orbus-Otu2	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu2	10	101	12	2	20	0.4	4
Orbus-Otu40	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu40	11	653	11	0	20	1	1
Enterobacter-Otu33	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu33	3	15	11	8	11	0.214	286
Dysgonomonas-Otu15	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu15	6	292	10	4	3	0.2	2
Enterobacter-Otu123	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu123	2	358	10	8	15	0.1	1
Vagococcus-Otu3	Bacteria_Firmicutes_Bacilli_Lactobacillales_Enterococcaceae_Vagococcus_OTU_Otu3	8	56	10	2	20	0.4	6
Klebsiella-Otu47	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu47	9	839	9	0	20	1	1
Schmidhempelia-Otu200	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Candidatus_Schmidhempelia_OTU_Otu200	5	26	9	4	14	0.133	333
Klebsiella-Otu281	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu281	6	047	9	3	6	0.095	238
Dysgonomonas-Otu22	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu22	2	77	9	7	3	0.2	2
Enterobacteriaceae-Otu4	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Ambiguous_taxa_OTU_Otu4	6	522	9	3	20	0.2	2
Klebsiella-Otu488	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu488	8	098	8	0	16	0.166	667
Klebsiella-Otu70	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu70	6	208	8	2	20	0.4	6
Orbus-Otu119	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu119	1	88	8	7	9	0.266	667
Citrobacter-Otu29	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu29	5	57	7	2	11	0	0
Desulfovibrio-Otu6	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu6	3	721	7	4	2	0	0

Morganella-Otu19	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Morganella_OTU_Otu19	0	0.004 974	7	7	3	0	0
Citrobacter-Otu7	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu7	3	1.228 639	6	3	20	0.1	1
Enterobacter-Otu379	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu379	3	0.052 771	6	3	5	0	0
Chishuiella-Otu12	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Chishuiella_OTU_Otu12	0	0.166 955	6	6	5	0	0
Pectobacterium-Otu11	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu11	2	0.056 274	6	4	3	0	0
Empedobacter-Otu302	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Empedobacter_OTU_Otu302	4	0.036 775	5	1	19	0.333 333	2
Klebsiella-Otu45	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu45	5	0.042 986	5	0	20	0	0
Dysgonomonas-Otu1	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu1	0	7.339 884	4	4	20	0	0
Klebsiella-Otu72	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu72	4	0.121 892	4	0	9	0	0
Klebsiella-Otu104	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu104	3	0.051 64	4	1	19	0	0
Empedobacter-Otu97	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Empedobacter_OTU_Otu97	4	0.049 557	4	0	19	0	0
Orbus-Otu53	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu53	2	0.066 213	3	1	18	0.333 333	1
Lactococcus-Otu23	Bacteria_Firmicutes_Bacilli_Lactobacillales_Streptococcaceae_Lactococcus_OTU_Otu23	1	0.076 143	2	1	5	0	0
Orbus-Otu26	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu26	1	0.087 969	1	0	4	0	0

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Label	lineage	posde gree	abund ance	deg ree	negde gree	sample count	clust ering	trian gles
Shimwellia-Otu52	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Shimwellia_OTU_Otu52	7	0.027 386	10	3	14	0.190 476	4
Klebsiella-Otu47	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu47	5	0.197 447	8	3	20	0.2	3
Klebsiella-Otu488	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu488	4	0.037 462	10	6	19	0	0

Empedobacter-Otu97	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Empedobacter_OTU_Otu97	4	0.033	827	7	3	19	0.333	333	1
Citrobacter-Otu320	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu320	3	0.022	682	9	6	18	0	0	0
Citrobacter-Otu7	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu7	3	3.230	727	8	5	20	0.666	667	2
Desulfovibrio-Otu49 Candidatus	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu49	3	0.055	999	6	3	9	0	0	0
Schmidhempelia-Otu200	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Candidatus_Schmidhempelia_OTU_Otu200	3	0.033	906	6	3	17	1	1	1
Empedobacter-Otu302	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Empedobacter_OTU_Otu302	3	0.013	494	6	3	19	0	0	0
Klebsiella-Otu45	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu45	3	0.025	667	5	2	19	0	0	0
Enterobacter-Otu33	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu33	2	0.264	489	9	7	11	0.3	3	3
Desulfovibrio-Otu59	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu59	2	0.149	779	9	7	9	0.2	2	2
Orbus-Otu40	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu40	2	0.100	807	9	7	19	1	1	1
Klebsiella-Otu70	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu70	2	0.681	153	8	6	20	0	0	0
Orbus-Otu14	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu14	2	0.259	174	4	2	13	0	0	0
Desulfovibrio-Otu6	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu6	1	0.988	332	12	11	7	0.047	619	1
Orbus-Otu8	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu8	1	0.219	271	11	10	7	0.133	333	2
Orbus-Otu119	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu119	1	0.030	519	9	8	14	0.666	667	2
Enterobacter-Otu123	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu123	1	0.010	486	9	8	6	0.2	3	3
Citrobacter-Otu29	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu29	1	0.476	239	9	8	11	0.166	667	1
Escherichia-Shigella-Otu319	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Escherichia-Shigella_OTU_Otu319	1	0.026	777	8	7	19	1	1	1
Klebsiella-Otu72	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu72	1	0.208	961	6	5	9	1	1	1

Klebsiella-Otu280	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu280	1	0.056	576	5	4	8	1	1
Klebsiella-Otu104	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu104	1	0.028	552	5	4	19	0	0
Klebsiella-Otu281	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu281	1	0.014	631	5	4	5	0	0
Carnimonas-Otu18	Bacteria_Proteobacteria_Gammaproteobacteria_Oceanospirillales_Halomonadaceae_Carnimonas_OTU_Otu18	1	0.091	166	3	2	17	0	0
Orbaceae-Otu13	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_uncultured_OTU_Otu13	0	0.598	334	63	63	1	333	7
Dysgonomonas-Otu9	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu9	0	0.116	194	18	18	4	889	4
Gilliamella-Otu17	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Gilliamella_OTU_Otu17	0	0.018	955	14	14	1	0	0
Pectobacterium-Otu11	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu11	0	0.370	333	12	12	9	0	0
Chishuiella-Otu12	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Chishuiella_OTU_Otu12	0	0.289	127	10	10	8	238	2
Orbus-Otu2	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu2	0	3.153	511	7	7	20	0	0
Desulfovibrio-Otu21	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu21	0	0.022	386	6	6	3	0.2	2
Pectobacterium-Otu16	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu16	0	0.117	172	5	5	9	0	0
Schmidhempelia-Otu10	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Candidatus_Schmidhempelia_OTU_Otu10	0	0.313	039	4	4	6	1	1
Dysgonomonas-Otu1	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu1	0	3.773	732	4	4	20	0	0
Dysgonomonas-Otu15	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu15	0	0.024	452	3	3	5	1	1
Pectobacterium-Otu20	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu20	0	0.076	783	3	3	7	0	0
Orbus-Otu26	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu26	0	0.307	945	3	3	6	1	1
Enterobacter-Otu379	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu379	0	0.156	713	3	3	8	333	1
Enterobacteriaceae-Otu4	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Ambiguous_taxa_OTU_Otu4	0	2.409	793	2	2	20	0	0

Orbus-Otu53	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu53	0	0.034	385	2	2	19	0	0
Vagococcus-Otu3	Bacteria_Firmicutes_Bacilli_Lactobacillales_Enterococcaceae_Vagococcus_OTU_Otu3	0	0.534	421	2	2	20	0	0
Providencia-Otu5	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Providencia_OTU_Otu5	0	0.363	557	2	2	20	0	0
Morganella-Otu19	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Morganella_OTU_Otu19	0	0.010	446	1	1	5	0	0

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Klebsiella-Otu281	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu281	1	0.010	356	15	14	2	0.066
Enterobacter-Otu123	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu123	1	0.014	141	12	11	5	0.3
Klebsiella-Otu280	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu280	2	0.016	626	11	9	3	0
Dysgonomonas-Otu15	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu15	0	0.285	576	10	10	9	0
Schmidhempelia-Otu10	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Candidatus_Schmidhempelia_OTU_Otu10	7	0.215	617	8	1	5	1
Pectobacterium-Otu20	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu20	0	0.050	822	6	6	6	0
Pectobacterium-Otu11	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu11	1	0.203	267	6	5	9	0
Desulfovibrio-Otu6	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu6	4	0.399	193	6	2	7	0.333
Desulfovibrio-Otu59	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu59	3	0.093	074	5	2	6	0.333
Dysgonomonas-Otu1	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu1	0	4.080	75	4	4	20	0
Orbus-Otu26	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu26	0	0.354	554	4	4	7	0
Chishuiella-Otu12	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Chishuiella_OTU_Otu12	0	0.194	903	4	4	9	0
Klebsiella-Otu47	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu47	3	0.182	394	4	1	20	1

Klebsiella-Otu72	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu72	4	0.390	258	4	0	12	0	0
Desulfovibrio-Otu49	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu49	2	0.030	46	4	2	7	333	1
Orbus-Otu2	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu2	3	2.083	745	3	0	20	1	1
Orbus-Otu40	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu40	3	0.073	534	3	0	20	1	1
Orbus-Otu53	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu53	2	0.022	531	3	1	19	0	0
Gilliamella-Otu17	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Gilliamella_OTU_Otu17	2	0.088	822	3	1	6	0	0
Shimwellia-Otu52	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Shimwellia_OTU_Otu52	1	0.019	658	3	2	13	333	1
Dysgonomonas-Otu9	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu9	0	0.643	218	2	2	6	0	0
Klebsiella-Otu104	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Klebsiella_OTU_Otu104	1	0.035	231	2	1	20	0	0
Escherichia-Shigella-Otu319	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Escherichia-Shigella_OTU_Otu319	2	0.015	398	2	0	18	1	1
Carnimonas-Otu18	Bacteria_Proteobacteria_Gammaproteobacteria_Oceanospirillales_Halomonadaceae_Carnimonas_OTU_Otu18	0	0.007	168	2	2	7	0	0
Citrobacter-Otu7 Candidatus	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Citrobacter_OTU_Otu7	1	2.541	151	2	1	20	0	0
Schmidhempelia-Otu200	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Candidatus_Schmidhempelia_OTU_Otu200	1	0.014	932	2	1	9	0	0
Dysgonomonas-Otu22	Bacteria_Bacteroidetes_Bacteroidia_Bacteroidales_Dysgonomonadaceae_Dysgonomonas_OTU_Otu22	2	0.036	759	2	0	4	0	0
Desulfovibrio-Otu21	Bacteria_Proteobacteria_Deltaproteobacteria_Desulfovibrionales_Desulfovibrionaceae_Desulfovibrio_OTU_Otu21	1	0.022	862	2	1	3	0	0
Orbus-Otu8	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu8	1	0.308	696	2	1	6	0	0
Pectobacterium-Otu16	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Pectobacterium_OTU_Otu16	0	0.167	403	1	1	6	0	0
Enterobacter-Otu33	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu33	1	0.380	868	1	0	15	0	0
Orbus-Otu119	Bacteria_Proteobacteria_Gammaproteobacteria_Orbales_Orbaceae_Orbus_OTU_Otu119	1	0.046	867	1	0	16	0	0

Empedobacter-Otu302	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Empedobacter_OTU_Otu302	1	0.016	27	1	0	19	0	0
Empedobacter-Otu97	Bacteria_Bacteroidetes_Bacteroidia_Flavobacteriales_Weeksellaceae_Empedobacter_OTU_Otu97	1	0.023	464	1	0	19	0	0
Morganella-Otu19	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Morganella_OTU_Otu19	1	0.103	113	1	0	5	0	0
Enterobacter-Otu379	Bacteria_Proteobacteria_Gammaproteobacteria_Enterobacteriales_Enterobacteriaceae_Enterobacter_OTU_Otu379	0	0.022	227	1	1	2	0	0