

Supplementary Figures and Tables

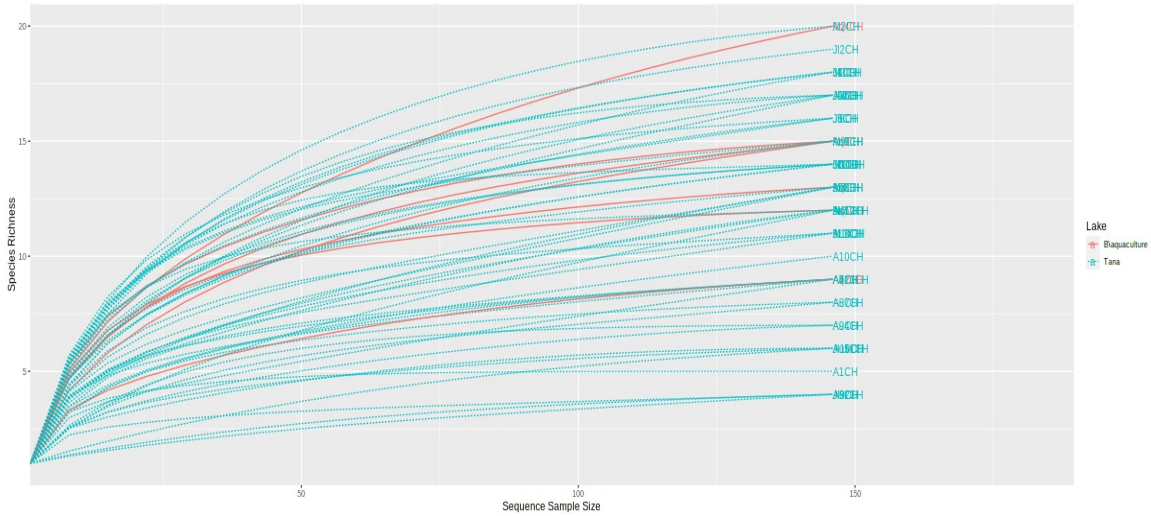


Figure S1. Rarefaction curve.

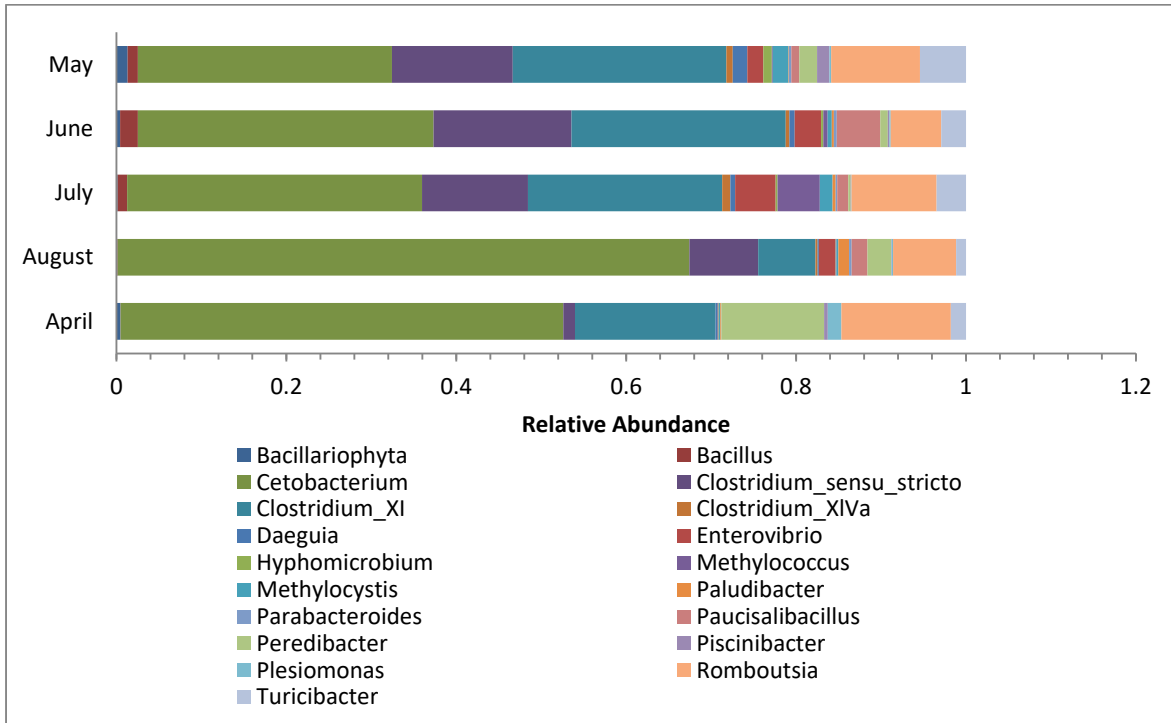


Figure S2. Taxonomic composition of bacterial community of Lake Tana samples at Genus level using stacked plot.

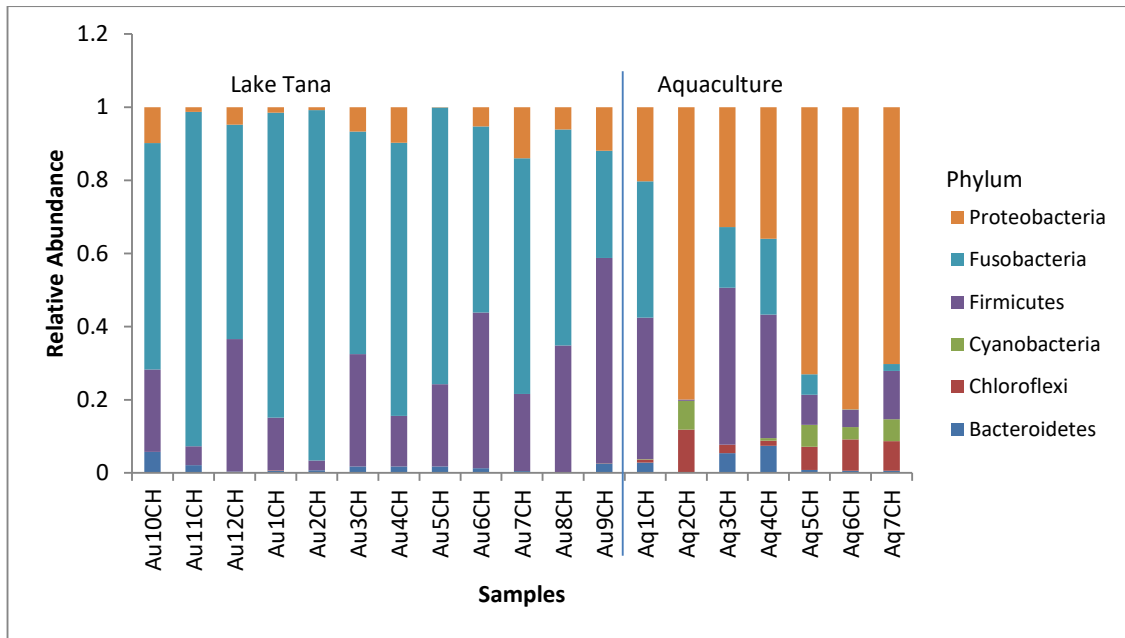
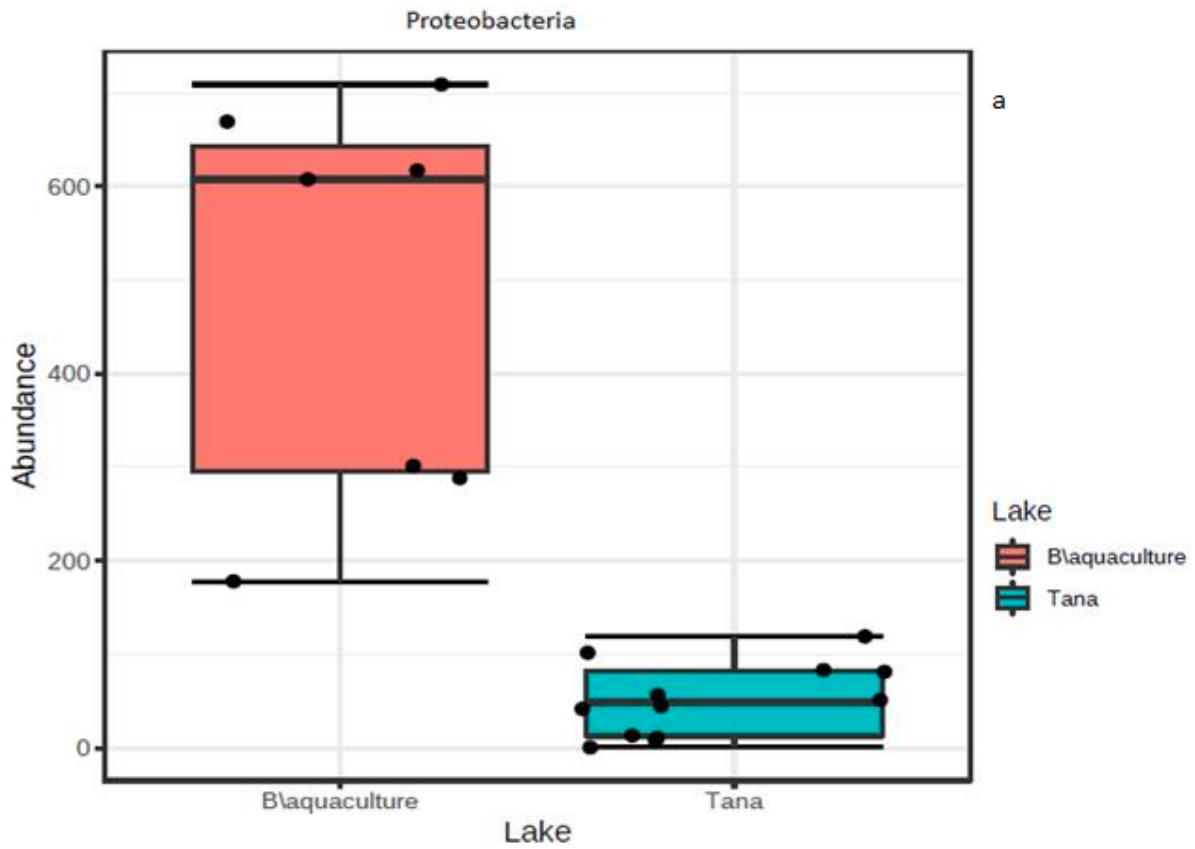


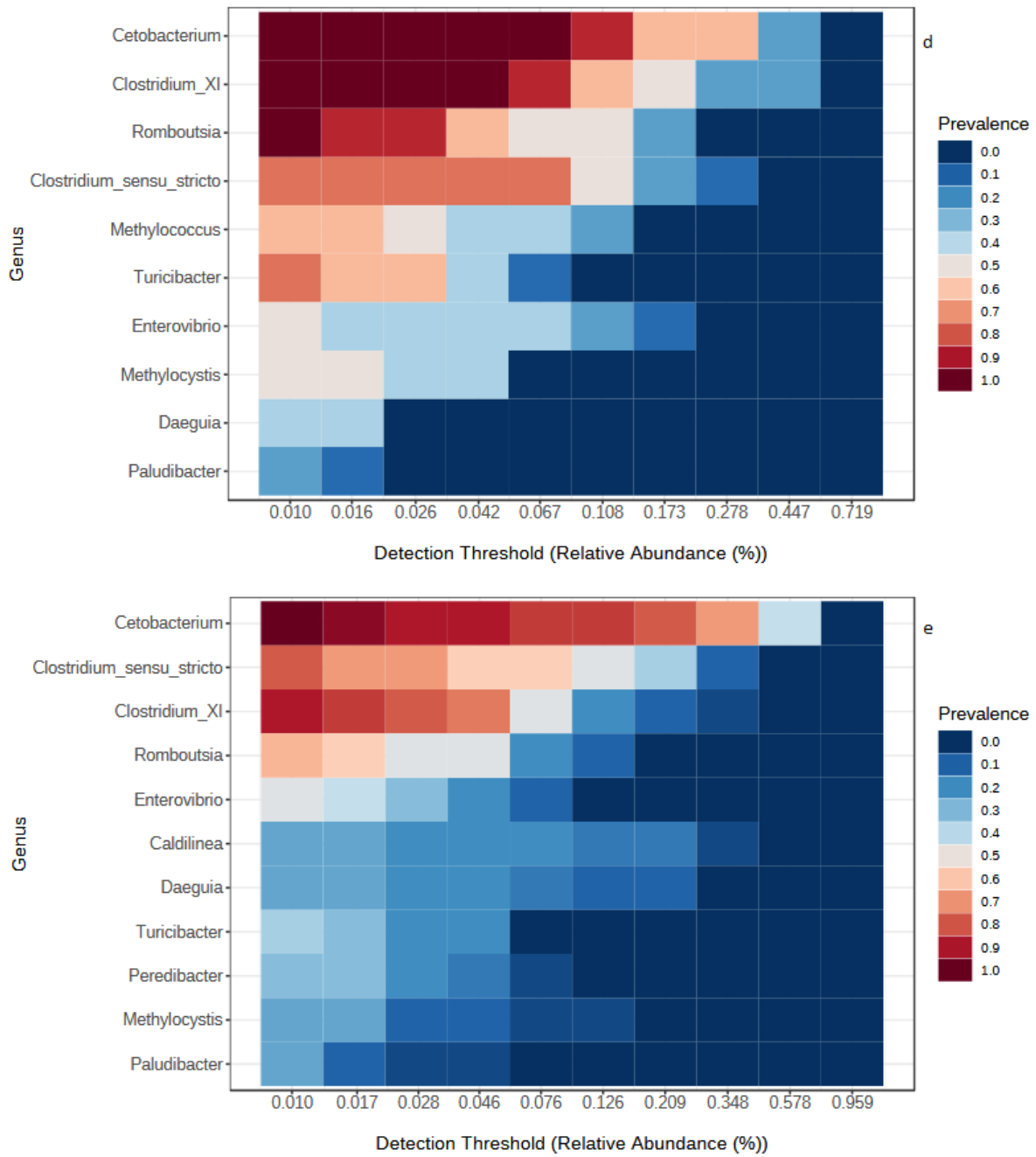
Figure S3. Taxonomic composition of the bacterial community at the phylum level using a stacked plot of aquaculture samples and Lake Tana samples collected in August.



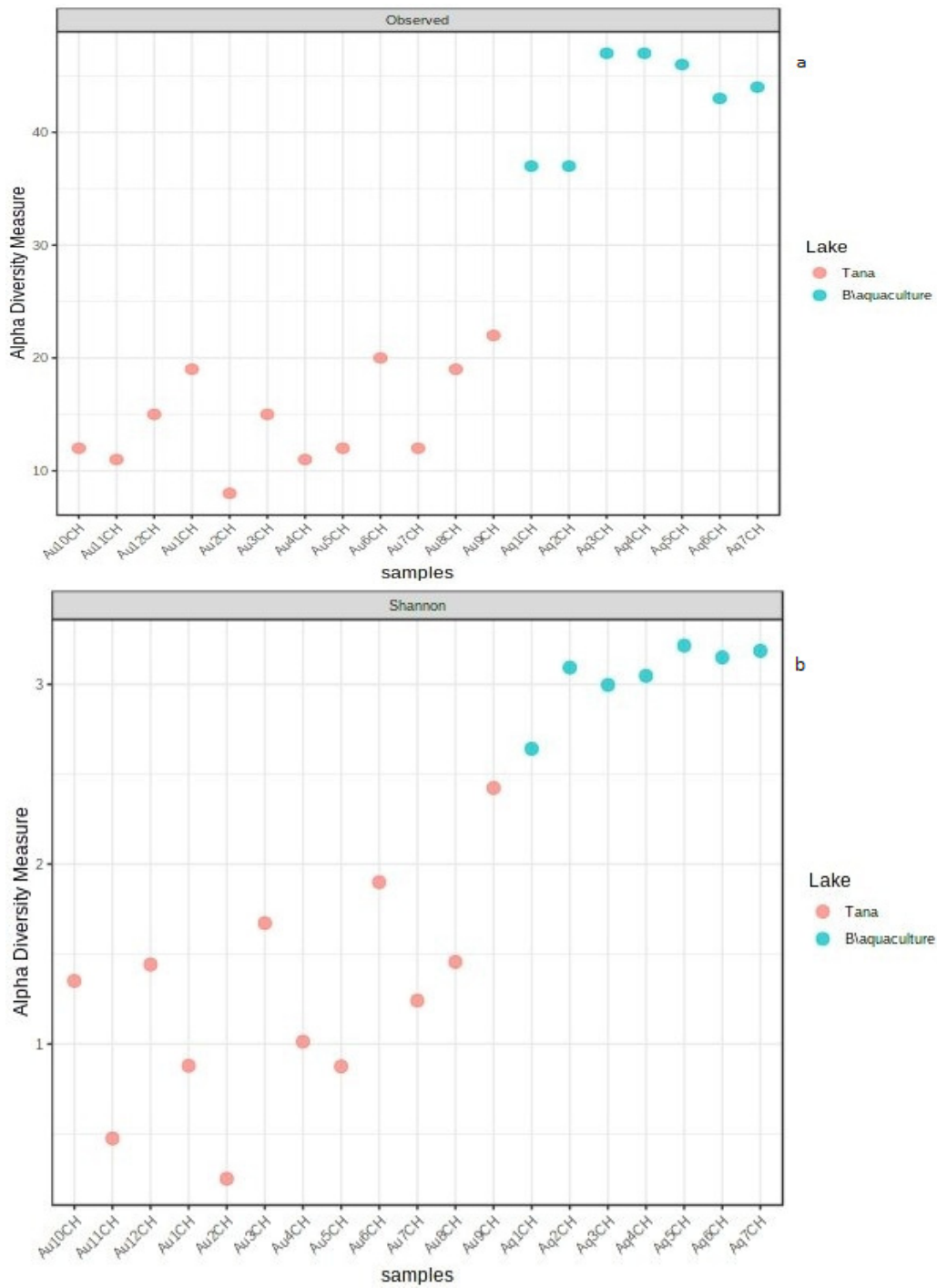


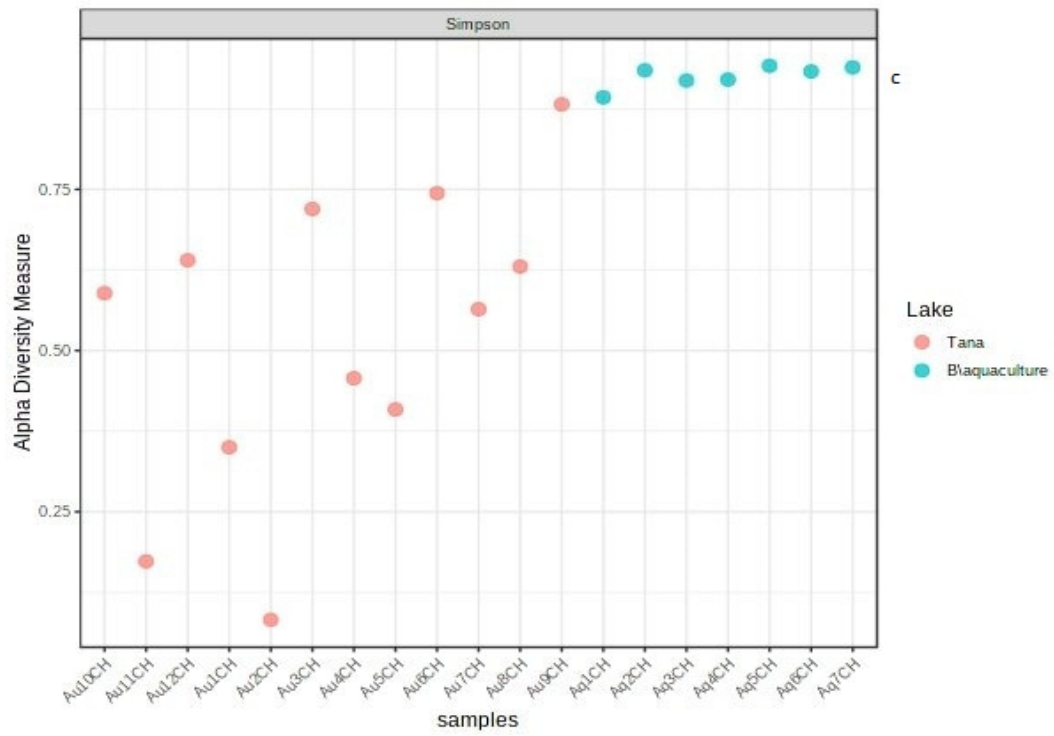






**Figure S5.** Core microbiota analysis of Lake Tana samples at Genus level for each sampling months. (a) April (b) May (c) June (d) July (e) August.





**Figure S6.** Alpha diversity measured at the OTU level across all the samples for comparison of Lake Tana and the Bahir Dar aquaculture facility centre. Each sample is coloured based on the sources of the samples. (a) Observed, (b) Shannon index, and (c) Simpson index.



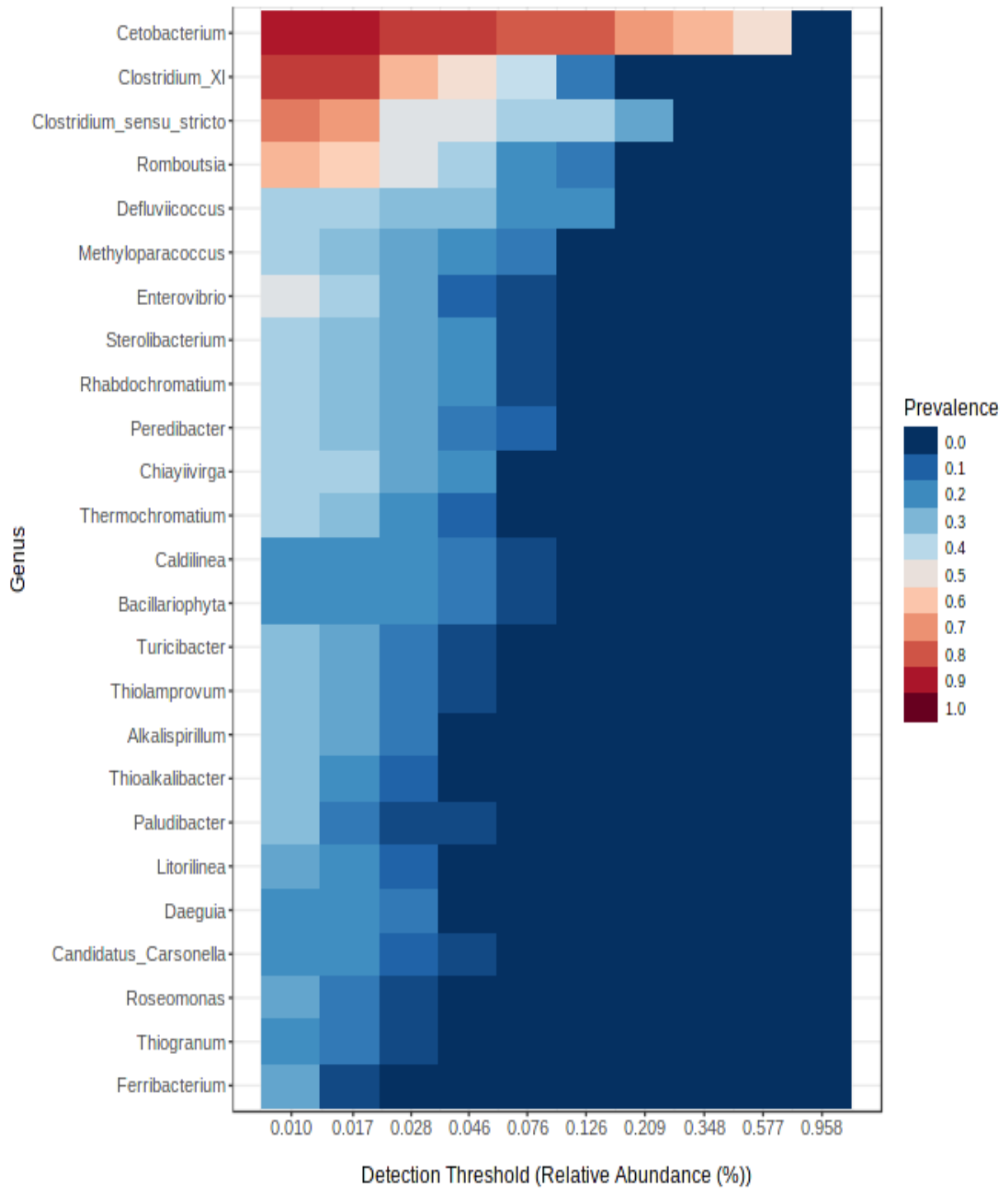


Figure S7. Core microbiota analysis of Lake Tana and aquaculture facility center at Genus level.

**Table S1.** Important features identified by Univariate nonparametric analysis (Mann-Whitney test) at Genus level from Lake Tana samples.

<i>Genera</i>	<i>P-Values</i>
<i>Bacillus</i>	0.00036
<i>Paucisalibacillus</i>	0.001016
<i>Cetobacterium</i>	0.001407
<i>Paludibacter</i>	0.001586
<i>Clostridium_XI</i>	0.002542
<i>Clostridium_sensu_stricto</i>	0.0072
<i>Peredibacter</i>	0.008173
<i>Enterovibrio</i>	0.01257
<i>Turicibacter</i>	0.013208
<i>Clostridium_XIVa</i>	0.019556
<i>Bacillariophyta</i>	0.034771
<i>Daeguia</i>	0.041247

**Table S2.** Important features identified by Univariate nonparametric analysis (Mann-Whitney test) at Genus level from comparison of Lake Tana and Bahir Dar aquaculture facility center.

<i>Genera</i>	<i>P-Values</i>
<i>Desulfatitalea</i>	4.97E-05
<i>Ferribacterium</i>	5.02E-05
<i>Alkalispirillum</i>	5.07E-05
<i>Chiayiivirga</i>	5.07E-05
<i>Defluviicoccus</i>	5.07E-05
<i>Sterolibacterium</i>	5.07E-05
<i>Thioalkalibacter</i>	5.07E-05
<i>Thiolamprovum</i>	5.07E-05
<i>Litorilinea</i>	9.37E-05
<i>Methyloparacoccus</i>	9.45E-05
<i>Rhabdochromatium</i>	9.45E-05
<i>Thermochromatium</i>	9.45E-05
<i>Caldilinea</i>	0.000148
<i>Candidatus_Carsonella</i>	0.000274
<i>Thermodesulforhabdus</i>	0.000276
<i>Paludibacter</i>	0.000312
<i>Romboutsia</i>	0.0004
<i>Cetobacterium</i>	0.000616
<i>Roseomonas</i>	0.000632
<i>Thiogranum</i>	0.000632
<i>Bacillariophyta</i>	0.0009
<i>Peredibacter</i>	0.002053
<i>Rhizobium</i>	0.003377
<i>Acetobacteroides</i>	0.003506
<i>Wandonia</i>	0.005362
<i>Daeguia</i>	0.006198
<i>Rhodoligotrophos</i>	0.006601
<i>Methylocystis</i>	0.011922
<i>Parabacteroides</i>	0.018822
<i>Methylococcus</i>	0.030701