

Supplementary files

Figure S1. Increase of microalgae addition for water quality control: (a) pH value; (b) DO content. (Stocking densities in Aquaculture 1, 2 and 3 are 0.0050, 0.0025, and 0.0010 g/fish, respectively)

Figure S2. Evolutionary tree of dominant bacteria in samples collected from aquaculture systems

Table S1. Numerical values for the parameters of aquaculture (6-day culture)

fish/100 mL	COD		TN		TAN		DO content	
	T ^a	A ^b	T	A	T	A	T	A
2	↑85	↑34	↑22.6	↑5.8	↑15.8	↑2.1	↑0.04	↑2.40
4	↑121	↑51	↑30.0	↑6.1	↑20.5	↑4.2	↓1.13	↑1.41
6	↑147	↑91	↑35.3	↑17.9	↑28.6	↑9.9	↓2.69	↑0.41
8	↑221	↑99	↑47.0	↑22.8	↑37.8	↑11.5	↓4.80	↓1.06
10	↑342	↑109	↑68.1	↑26.0	↑45.8	↑13.8	↓5.10	↓2.28

^a "T" refers to the aquaculture added with traditional fish feed (Figure 1)

^b "A" refers to the aquaculture added with algae (Figure 2)

Table S2. Number of sequences and OTU in samples

	Number of sequences	Number of OTU
Sample 1	64125	354
Sample 2	10680	325
Total	74805	679

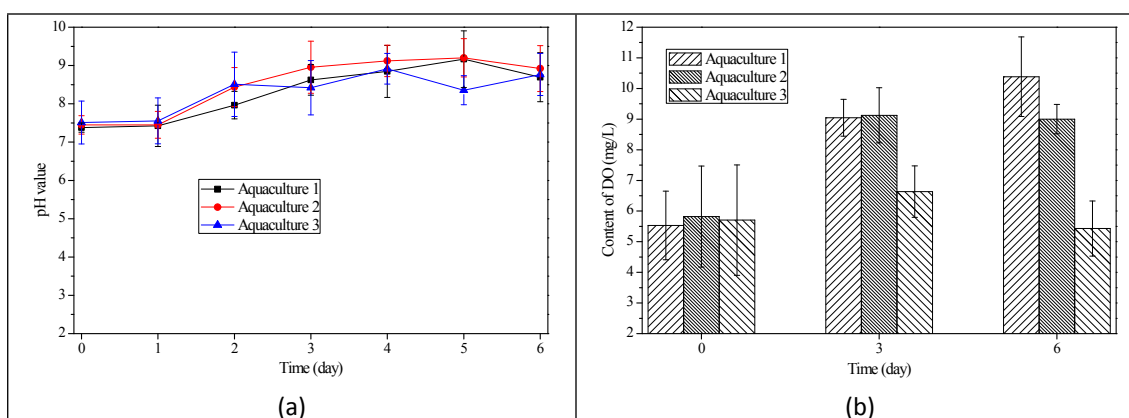


Figure S1

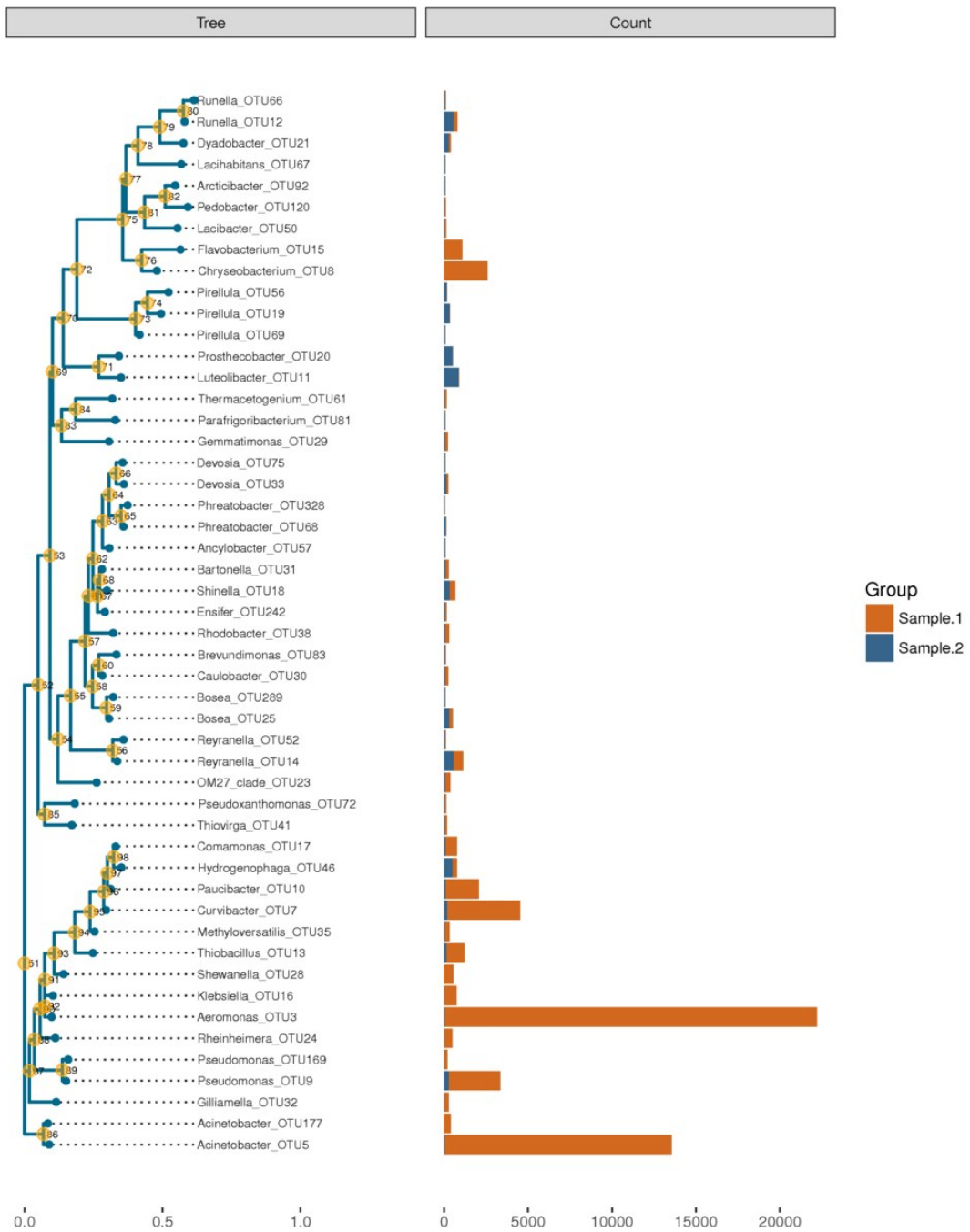


Figure S2