Optimizing Nitrogen Removal Through Coupled Simultaneous Nitrification-Denitrification and Sulfur Autotrophic Denitrification: Microbial Community Dynamics and Functional Pathways in Mariculture Tailwater Treatment

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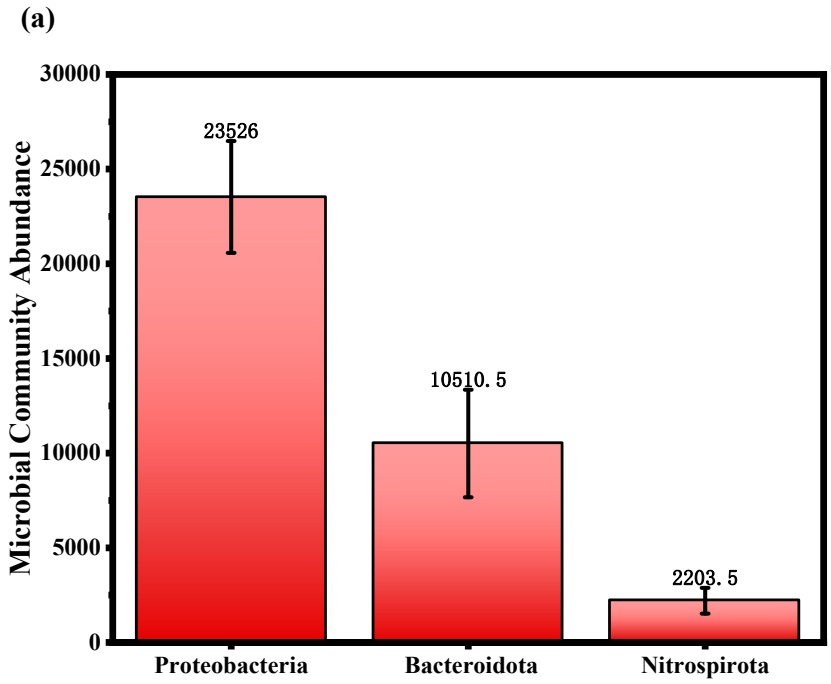
Table S1. Microbial diversity and abundance.

Figure S1. Mean and standard deviation of the abundance of dominant phyla in the community;(a): the aerobiotic sponge stage under different carbon to nitrogenratios; (b): the anaerobic sulfur stage under different carbon to nitrogen ratios.

Figure S2. Mean and standard deviation of the abundance of dominant genera in the community;(a): the aerobiotic sponge stage under different carbon to nitrogenratios; (b): the anaerobic sulfur stage under different carbon to nitrogen ratios.

Table S1. Microbial diversity and abundance.

Sample	C/N	Ace	Chao	Coverage	Shannon	Simpson	Sobs
C25_1	C/N=0.4	479.9714	447.9048	0.997028	3.159045	0.090942	351
C25_2		697.0899	681.5326	0.995743	3.538352	0.079563	545
C25_3		497.1464	453.9429	0.996867	2.346109	0.271694	357
C25_4		177.8102	167.5652	0.998983	1.666394	0.412619	137
C50_1	C/N=0.8	514.4888	489.5441	0.996733	3.181671	0.088563	381
C50_2		608.6171	576.2474	0.996385	3.548178	0.061145	483
C50_3		445.6365	425.0192	0.997242	3.117446	0.077332	324
C50_4		184.3252	183.8333	0.998875	1.283552	0.556209	136
C75_1	C/N=1.2	244.1613	194.0769	0.998795	1.9897	0.318305	156
C75_2		346.9035	337.5278	0.997778	2.834632	0.113176	243
C75_3		123.5663	118.8125	0.999384	1.8154	0.286347	103
C75_4		160.7388	170.2143	0.99917	1.825318	0.331485	137



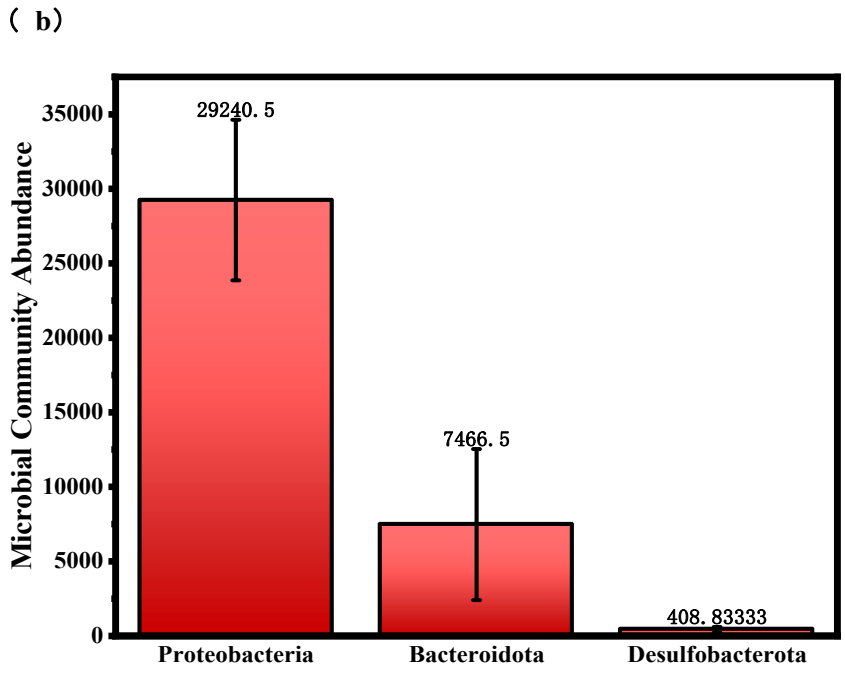


Figure S1: Mean and standard deviation of the abundance of dominant phyla in the community;(a): the aerobiotic sponge stage under different carbon to nitrogenratios; (b): the anaerobic sulfur stage under different carbon to nitrogen ratios.

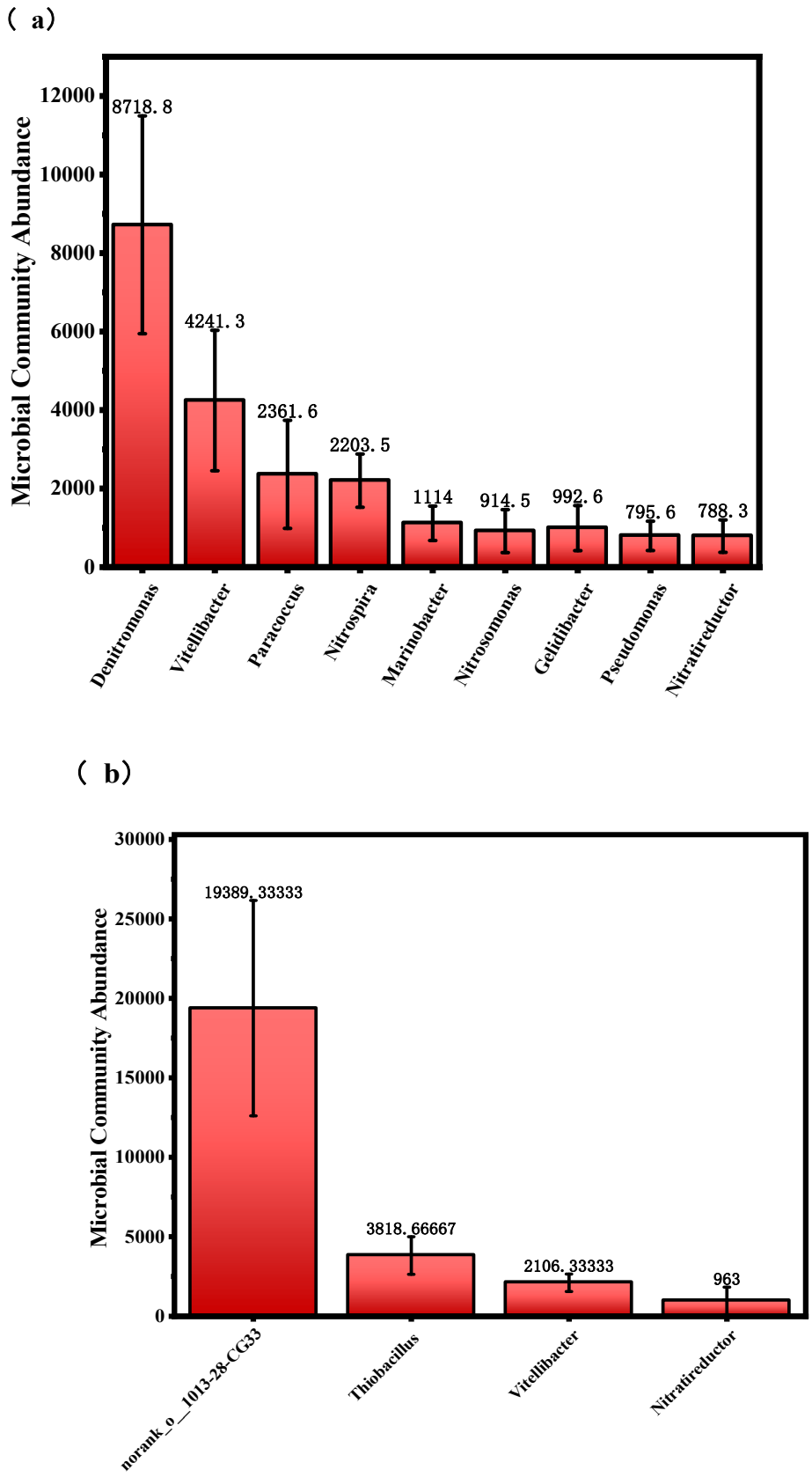


Figure S2: Mean and standard deviation of the abundance of dominant genera in the

community;(a): the aerobiotic sponge stage under different carbon to nitrogenratios; (b): the anaerobic sulfur stage under different carbon to nitrogen ratios.