

# Supplementary Materials

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## Additional Supporting Information

**Table S1** The primer sets and amplification conditions used in this study.

**Figure S1** Potential rates of (a) denitrification and (b) N<sub>2</sub>O production between three ponds under varying concentrations of NO<sub>3</sub><sup>-</sup> addition.

**Figure S2** Potential rates of denitrification between three ponds under varying concentrations of glucose addition.

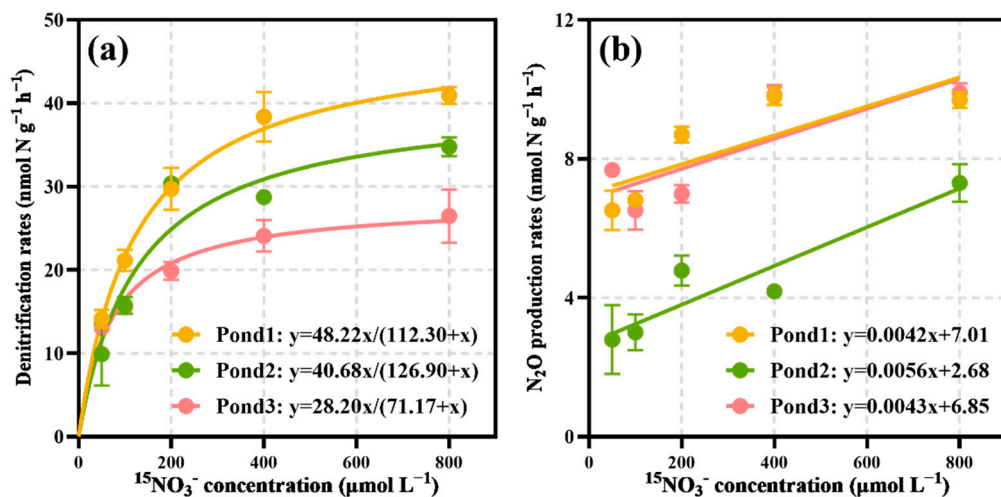


Figure S1. Potential rates of (a) denitrification and (b) N<sub>2</sub>O production between three ponds under varying concentrations of NO<sub>3</sub><sup>-</sup> addition.

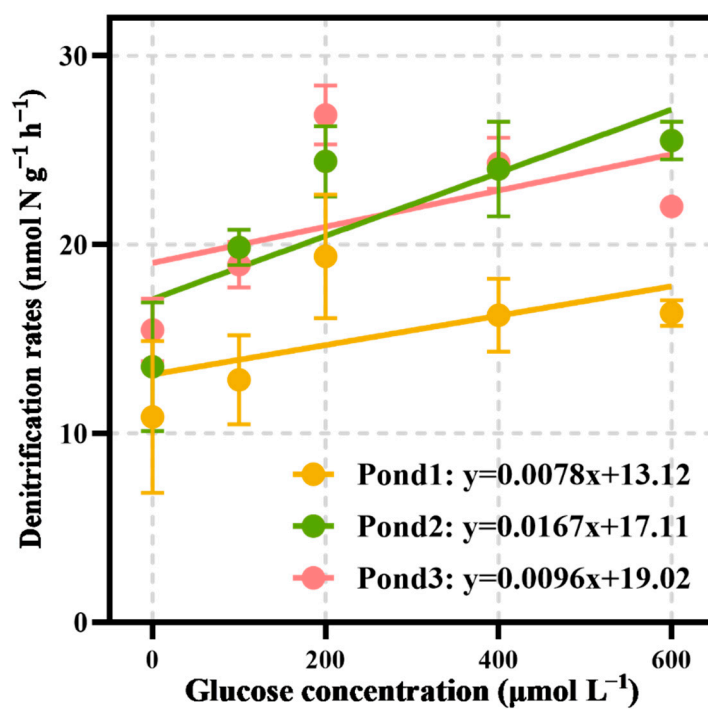


Figure S2. Potential rates of denitrification between three ponds under varying concentrations of glucose addition.

**Table S1.** The primer sets and amplification conditions used in this study.

Target Gene	Primer	Primer Sequence (5'-3')	Size (bp)	qPCR Program	References
Anammox 16S rRNA	438F	GTCRGGAGTTADGAAATG	246	95°C for 3 min, 40 × (95°C for 15 s, 56°C for 30 s, 72°C for 30 s)	[1]
	684R	ACCAGAAAGTTCCACTCTC			
<i>nirS</i>	cd3aF	GTSAACGTAAGGARACSGG	426	95°C for 10 min, 40 × (95°C for 15 s, 56°C for 45 s, 72°C for 45 s)	[2]
	R3cd	GASTTCGGRTGSGTCTTGA			
<i>nirK</i>	Flacu	ATCATGGTSCTGCCGCG	473	95°C for 2 min, 36 × (95°C for 30 s, 56°C for 45 s, 72°C for 45 s)	[3]
	R3cu	TTGGTGTRGACTAGCTCCG			
<i>nosZ</i> I	<i>nosZ</i> 2F	CGCRACGGCAASAAGGTSMSST	267	95°C for 5 min, 40 × (95°C for 30 s, 68°C for 1 min, 72°C for 1 min)	[4]
	<i>nosZ</i> 2R	CAKRTGCAKSGCRTGGCAGAA			
<i>nosZ</i> II	<i>nosZ</i> F	CTIGGICCIYTKCAYAC	746	95°C for 2 min, 40 × (95°C for 15 s, 60°C for 1 min, 72°C for 1 min)	[5]
	<i>nosZ</i> R	GCIGARCARAAITCBGTRC			

## References

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