

**Assessing the Effectiveness of 3, 4-dimethylpyrazole  
phosphate (DMPP) Inhibitor in Mitigating N<sub>2</sub>O Emissions from Contrasting  
Cd-Contaminated Soils**

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## Supporting Material

**Table S1.** Primers and conditions used in the manuscript.

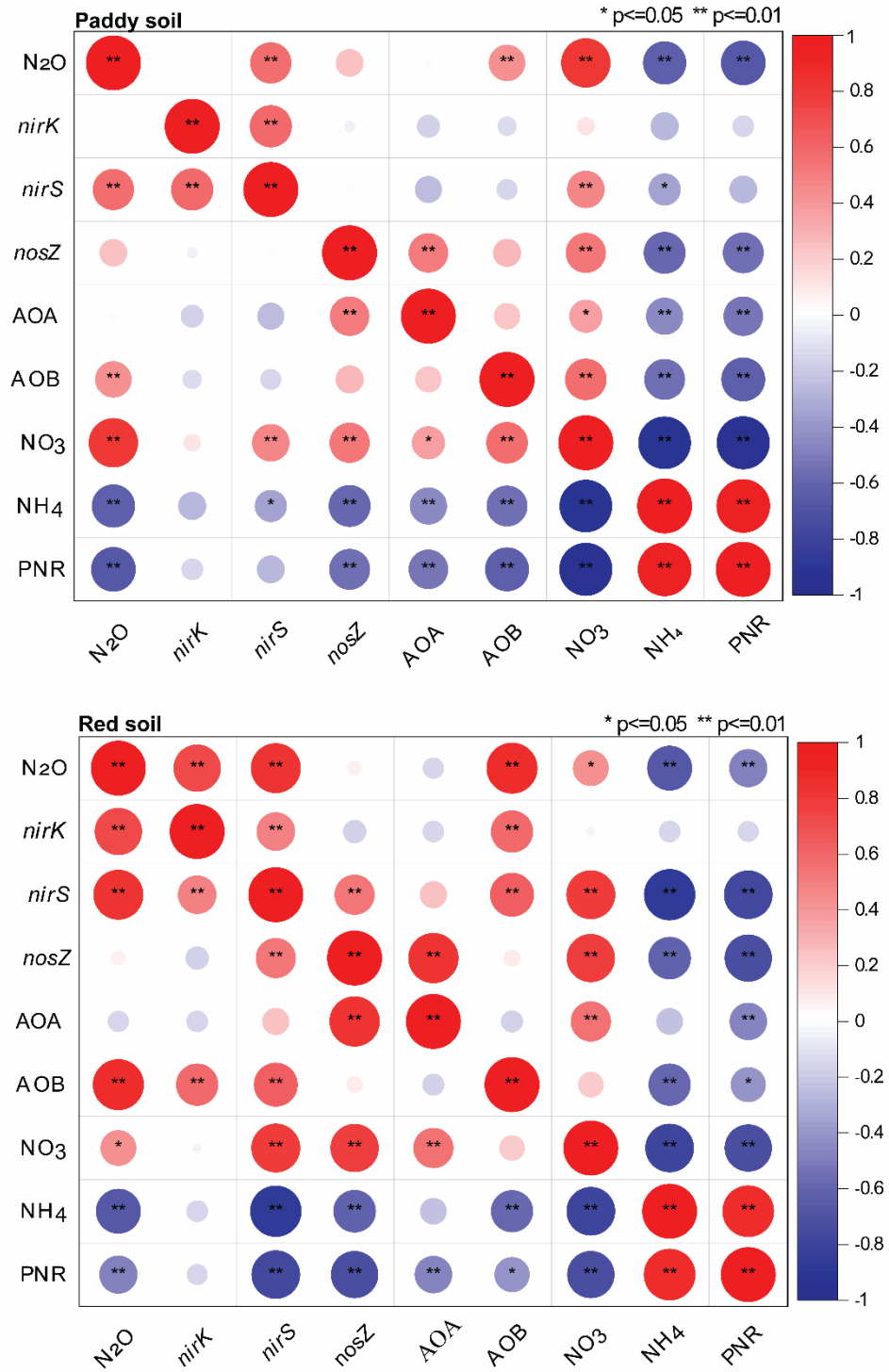
**Table. S2 (a-e).** Simple linear regression analysis of selected genes with selected parameters in paddy soil.

**Table. S3 (a-e).** Simple linear regression analysis of selected genes with selected parameters in red soil.

**Figure S1.** Pearson correlation between N<sub>2</sub>O emission and different parameters across Two soils (Paddy and Red) receiving four treatments during the experimental incubation.

Table. S1. Primers used for PCR and qPCR in the manuscript

Target	primers	Sequence (5'-3')	Fragment Size (bp)	Annealing Temp (°C)	Reference
AOA- <i>amoA</i>	Arch-amoAF Arch-amoAR	STAATGGTCTGGCTTAG ACG GCGGCCATCCATCTGTA TGT	635	53	Zhang et al. (2012) Tourna et al. (2008) Cui et al. (2016)
AOB- <i>amoA</i>	amoA-1F amoA-2R	GGGGTTTCTACTGGTGG T CCCCTCGGCAAAGCCTT CTTC	491	56	(Rotthauwe et al., 1997)
<i>nirS</i>	cd3aF R3cd	GTSAACG TSAAGGARAC SGG GASTTCGGRTGSGTCTTG A	425	59	(Michotey et al., 2000) [Throback et al., 2004]
<i>nirK</i>	F1aCu R3Cu	ATCATGGTSCTGCCGCG GCCTCGATCAGRTTGTG GTT	473	59	[Hallin & Lindgren 1999]
<i>nosZ</i>	nosZ2F nosZ2R	CGCRACGGCAASAAGGT SMSSGT CAKRTGCAKSGCRTGGC AGAA	267	59	[Henry et al., 2006]



**Fig. S1.** Pearson correlation between N<sub>2</sub>O emission and different parameters across Two soils (Paddy and Red) receiving four treatments during the experimental incubation.

Table. S2a. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Paddy soil	<i>NirK</i>	CK	N <sub>2</sub> O	$y = -3E-06x + 59.0$	R <sup>2</sup> = 0.98	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-06x - 7.2$	R <sup>2</sup> = 0.89	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -3E-07x + 5.7$	R <sup>2</sup> = 0.78	<i>P</i> < 0.05
			PNR	$y = -4E-07x + 6.9$	R <sup>2</sup> = 0.70	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = -1E-07x + 18.2$	R <sup>2</sup> = 0.03	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-07x + 12.3$	R <sup>2</sup> = 0.49	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-08x + 2.1$	R <sup>2</sup> = 0.35	<i>P</i> < 0.05
			PNR	$y = -5E-08x + 3.45$	R <sup>2</sup> = 0.44	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 6E-07x + 2.82$	R <sup>2</sup> = 0.87	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 4E-06x - 16.3$	R <sup>2</sup> = 0.53	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -4E-07x + 4.9$	R <sup>2</sup> = 0.42	<i>P</i> < 0.05
			PNR	$y = -5E-07x + 5.5$	R <sup>2</sup> = 0.36	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 9E-06x - 38.12$	R <sup>2</sup> = 0.96	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-06x + 7.2$	R <sup>2</sup> = 0.038	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = 2E-07x + 1.2$	R <sup>2</sup> = 0.017	<i>P</i> < 0.05
			PNR	$y = 6E-07x - 1.12$	R <sup>2</sup> = 0.157	<i>P</i> < 0.05

Table. S2b. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Paddy soil	<i>NirS</i>	CK	N <sub>2</sub> O	$y = 1E-06x - 25.4$	R <sup>2</sup> = 0.90	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-07x + 3.4$	R <sup>2</sup> = 0.35	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -4E-08x + 3.3$	R <sup>2</sup> = 0.08	<i>P</i> < 0.05
			PNR	$y = -3E-08x + 3.8$	R <sup>2</sup> = 0.04	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 8E-07x - 10.9$	R <sup>2</sup> = 0.96	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 5E-07x + 4.03$	R <sup>2</sup> = 0.42	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -4E-08x + 3.2$	R <sup>2</sup> = 0.44	<i>P</i> < 0.05
			PNR	$y = -1E-07x + 7.28$	R <sup>2</sup> = 0.27	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 2E-06x - 51.5$	R <sup>2</sup> = 0.99	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 1E-06x - 11.03$	R <sup>2</sup> = 0.33	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -9E-08x + 4.16$	R <sup>2</sup> = 0.26	<i>P</i> < 0.05
			PNR	$y = -1E-07x + 4.36$	R <sup>2</sup> = 0.13	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 1E-06x - 17.3$	R <sup>2</sup> = 0.88	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 9E-07x - 6.74$	R <sup>2</sup> = 0.42	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -7E-08x + 4.4$	R <sup>2</sup> = 0.13	<i>P</i> < 0.05
			PNR	$y = -2E-08x + 2.9$	R <sup>2</sup> = 0.016	<i>P</i> < 0.05

Table. S2c. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Paddy soil	NosZ	CK	N <sub>2</sub> O	$y = 3E-08x - 9.28$	R <sup>2</sup> = 0.30	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-08x - 10.4$	R <sup>2</sup> = 0.91	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -5E-09x + 6.8$	R <sup>2</sup> = 0.94	<i>P</i> < 0.05
			PNR	$y = -6E-09x + 9.13$	R <sup>2</sup> = 0.89	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 7E-09x + 8.45$	R <sup>2</sup> = 0.12	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-08x - 4.20$	R <sup>2</sup> = 0.93	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-09x + 3.4$	R <sup>2</sup> = 0.94	<i>P</i> < 0.05
			PNR	$y = -3E-09x + 5.5$	R <sup>2</sup> = 0.98	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 3E-09x + 9.75$	R <sup>2</sup> = 0.079	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 8E-09x + 3.12$	R <sup>2</sup> = 0.94	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -9E-10x + 3.2$	R <sup>2</sup> = 0.98	<i>P</i> < 0.05
			PNR	$y = -1E-09x + 3.62$	R <sup>2</sup> = 0.96	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = -3E-10x + 12.5$	R <sup>2</sup> = 0.0013	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = -3E-10x + 12.5$	R <sup>2</sup> = 0.0013	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-10x + 2.79$	R <sup>2</sup> = 0.02	<i>P</i> < 0.05
			PNR	$y = -9E-11x + 2.5$	R <sup>2</sup> = 0.0036	<i>P</i> < 0.05

Table. S2d. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Paddy soil	AOA	CK	N <sub>2</sub> O	$y = 4E-06x - 18.8$	R <sup>2</sup> = 0.97	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 1E-06x + 1.46$	R <sup>2</sup> = 0.43	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-07x + 3.9$	R <sup>2</sup> = 0.35	<i>P</i> < 0.05
			PNR	$y = -2E-07x + 4.6$	R <sup>2</sup> = 0.23	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 2E-06x - 8.11$	R <sup>2</sup> = 0.54	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-06x - 12.3$	R <sup>2</sup> = 0.83	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-07x + 3.9$	R <sup>2</sup> = 0.79	<i>P</i> < 0.05
			PNR	$y = -4E-07x + 6.2$	R <sup>2</sup> = 0.72	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = -6E-08x + 19.4$	R <sup>2</sup> = 0.26	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 6E-08x + 12.2$	R <sup>2</sup> = 0.32	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -7E-09x + 2.2$	R <sup>2</sup> = 0.42	<i>P</i> < 0.05
			PNR	$y = -1E-08x + 2.41$	R <sup>2</sup> = 0.48	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = -1E-07x + 17.16$	R <sup>2</sup> = 0.38	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 1E-07x + 14.06$	R <sup>2</sup> = 0.32	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -1E-08x + 2.06$	R <sup>2</sup> = 0.34	<i>P</i> < 0.05
			PNR	$y = -2E-08x + 3.13$	R <sup>2</sup> = 0.54	<i>P</i> < 0.05

Table. S2e. Simple linear regression analysis of selected genes with selected parameters



Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Paddy soil	AOB	CK	N <sub>2</sub> O	$y = 1E-08x + 18.5$	R <sup>2</sup> = 0.06	$P < 0.05$
			NO <sub>3</sub> -N	$y = 1E-08x + 6.1$	R <sup>2</sup> = 0.72	$P < 0.05$
			NH <sub>4</sub> -N	$y = -3E-09x + 3.51$	R <sup>2</sup> = 0.82	$P < 0.05$
			PNR	$y = -4E-09x + 4.4$	R <sup>2</sup> = 0.89	$P < 0.05$
		Cd	N <sub>2</sub> O	$y = -4E-09x + 19.4$	R <sup>2</sup> = 0.087	$P < 0.05$
			NO <sub>3</sub> -N	$y = 1E-08x + 13.57$	R <sup>2</sup> = 0.39	$P < 0.05$
			NH <sub>4</sub> -N	$y = -7E-10x + 2.23$	R <sup>2</sup> = 0.44	$P < 0.05$
			PNR	$y = -2E-09x + 3.16$	R <sup>2</sup> = 0.56	$P < 0.05$
		DMPP	N <sub>2</sub> O	$y = -2E-08x + 20.4$	R <sup>2</sup> = 0.28	$P < 0.05$
			NO <sub>3</sub> -N	$y = 2E-08x + 10.2$	R <sup>2</sup> = 0.35	$P < 0.05$
			NH <sub>4</sub> -N	$y = -3E-09x + 2.48$	R <sup>2</sup> = 0.47	$P < 0.05$
			PNR	$y = -4E-09x + 2.75$	R <sup>2</sup> = 0.53	$P < 0.05$
		DMPP + Cd	N <sub>2</sub> O	$y = -2E-08x + 24.08$	R <sup>2</sup> = 0.35	$P < 0.05$
			NO <sub>3</sub> -N	$y = 3E-08x + 11.2$	R <sup>2</sup> = 0.38	$P < 0.05$
			NH <sub>4</sub> -N	$y = -2E-09x + 2.2$	R <sup>2</sup> = 0.4	$P < 0.05$
			PNR	$y = -4E-09x + 3.59$	R <sup>2</sup> = 0.60	$P < 0.05$

Table. S3a. Simple linear regression analysis of selected genes with selected parameters

Soil	Genes	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Red soil	<i>NirK</i>	CK	N <sub>2</sub> O	$y = 1E-06x + 5.1$	R <sup>2</sup> = 0.90	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 5E-07x + 4.29$	R <sup>2</sup> = 0.17	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-07x + 7.2$	R <sup>2</sup> = 0.31	<i>P</i> < 0.05
			PNR	$y = -9E-08x + 2.06$	R <sup>2</sup> = 0.15	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 3E-06x + 3.6$	R <sup>2</sup> = 0.70	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 1E-06x + 8.7$	R <sup>2</sup> = 0.06	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -3E-07x + 6.7$	R <sup>2</sup> = 0.112	<i>P</i> < 0.05
			PNR	$y = -9E-08x + 1.76$	R <sup>2</sup> = 0.03	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 4E-07x + 7.84$	R <sup>2</sup> = 0.64	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-07x + 12.5$	R <sup>2</sup> = 0.016	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = 5E-08x + 5.9$	R <sup>2</sup> = 0.02	<i>P</i> < 0.05
			PNR	$y = -1E-08x + 0.9$	R <sup>2</sup> = 0.004	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 1E-06x + 6.3507$	R <sup>2</sup> = 0.65	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 8E-07x + 12.158$	R <sup>2</sup> = 0.05	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -1E-07x + 5.6705$	R <sup>2</sup> = 0.07	<i>P</i> < 0.05
			PNR	$y = -2E-08x + 0.98$	R <sup>2</sup> = 0.01	<i>P</i> < 0.05

Table. S3b. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Red soil	<i>NirS</i>	CK	N <sub>2</sub> O	$y = 6E-07x + 3.2129$	R <sup>2</sup> = 0.69	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 4E-07x + 0.6272$	R <sup>2</sup> = 0.36	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-07x + 9.0919$	R <sup>2</sup> = 0.86	<i>P</i> < 0.05
			PNR	$y = -1E-07x + 3.4725$	R <sup>2</sup> = 0.88	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 5E-07x + 3.586$	R <sup>2</sup> = 0.90	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 6E-07x + 1.18$	R <sup>2</sup> = 0.52	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -1E-07x + 8.49$	R <sup>2</sup> = 0.81	<i>P</i> < 0.05
			PNR	$y = -8E-08x + 3.04$	R <sup>2</sup> = 0.68	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 2E-07x + 6.69$	R <sup>2</sup> = 0.77	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 9E-07x - 0.84$	R <sup>2</sup> = 0.88	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -1E-07x + 8.02$	R <sup>2</sup> = 0.63	<i>P</i> < 0.05
			PNR	$y = -6E-08x + 1.8$	R <sup>2</sup> = 0.77	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 4E-07x + 4.0625$	R <sup>2</sup> = 0.93	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 8E-07x + 0.63$	R <sup>2</sup> = 0.78	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -9E-08x + 6.84$	R <sup>2</sup> = 0.78	<i>P</i> < 0.05
			PNR	$y = -5E-08x + 1.739$	R <sup>2</sup> = 0.63	<i>P</i> < 0.05

Table. S3c. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Red soil	NosZ	CK	N <sub>2</sub> O	$y = 3E-11x + 13.663$	R <sup>2</sup> = 0.005	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 1E-10x + 4.7042$	R <sup>2</sup> = 0.114	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -7E-11x + 7.5401$	R <sup>2</sup> = 0.36	<i>P</i> < 0.05
			PNR	$y = -6E-11x + 2.8035$	R <sup>2</sup> = 0.61	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 1E-10x + 10.78$	R <sup>2</sup> = 0.13	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 4E-10x + 2.93$	R <sup>2</sup> = 0.44	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -9E-11x + 8.0$	R <sup>2</sup> = 0.67	<i>P</i> < 0.05
			PNR	$y = -6E-11x + 3.04$	R <sup>2</sup> = 0.78	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 3E-11x + 8.49$	R <sup>2</sup> = 0.27	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-10x + 2.2$	R <sup>2</sup> = 0.96	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -4E-11x + 7.9$	R <sup>2</sup> = 0.97	<i>P</i> < 0.05
			PNR	$y = -2E-11x + 1.7$	R <sup>2</sup> = 0.91	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 4E-11x + 9.31$	R <sup>2</sup> = 0.104	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-10x + 4.4$	R <sup>2</sup> = 0.75	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -3E-11x + 6.36$	R <sup>2</sup> = 0.66	<i>P</i> < 0.05
			PNR	$y = -2E-11x + 1.60$	R <sup>2</sup> = 0.79	<i>P</i> < 0.05

Table. S3d. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Red soil	AOA	CK	N <sub>2</sub> O	$y = 5E-07x + 7.8$	R <sup>2</sup> = 0.90	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-07x + 5.28$	R <sup>2</sup> = 0.21	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -1E-07x + 7.08$	R <sup>2</sup> = 0.48	<i>P</i> < 0.05
			PNR	$y = -6E-08x + 2.13$	R <sup>2</sup> = 0.46	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 3E-07x + 6.9$	R <sup>2</sup> = 0.68	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 5E-07x + 2.3$	R <sup>2</sup> = 0.66	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -1E-07x + 7.9$	R <sup>2</sup> = 0.86	<i>P</i> < 0.05
			PNR	$y = -6E-08x + 2.8$	R <sup>2</sup> = 0.79	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 4E-08x + 7.68$	R <sup>2</sup> = 0.75	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-07x + 3.6$	R <sup>2</sup> = 0.85	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-08x + 7.4$	R <sup>2</sup> = 0.65	<i>P</i> < 0.05
			PNR	$y = -1E-08x + 1.5$	R <sup>2</sup> = 0.74	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 9E-08x + 7.9$	R <sup>2</sup> = 0.33	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-07x + 3.4$	R <sup>2</sup> = 0.93	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -4E-08x + 6.49$	R <sup>2</sup> = 0.85	<i>P</i> < 0.05
			PNR	$y = -2E-08x + 1.6$	R <sup>2</sup> = 0.92	<i>P</i> < 0.05

Table. S3e. Simple linear regression analysis of selected genes with selected parameters

Soil	Gene	Treatments	Selected parameters	Equation	R <sup>2</sup>	P value
Red soil	AOB	CK	N <sub>2</sub> O	$y = 2E-07x + 6.74$	R <sup>2</sup> = 0.59	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-07x + 1.71$	R <sup>2</sup> = 0.56	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -8E-08x + 8.3$	R <sup>2</sup> = 0.92	<i>P</i> < 0.05
			PNR	$y = -5E-08x + 2.95$	R <sup>2</sup> = 0.88	<i>P</i> < 0.05
		Cd	N <sub>2</sub> O	$y = 3E-07x + 6.2$	R <sup>2</sup> = 0.80	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-07x + 3.1$	R <sup>2</sup> = 0.56	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -8E-08x + 7.9$	R <sup>2</sup> = 0.88	<i>P</i> < 0.05
			PNR	$y = -4E-08x + 2.7$	R <sup>2</sup> = 0.73	<i>P</i> < 0.05
		DMPP	N <sub>2</sub> O	$y = 1E-07x + 8.2$	R <sup>2</sup> = 0.93	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 3E-07x + 10.13$	R <sup>2</sup> = 0.32	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -2E-08x + 6.4$	R <sup>2</sup> = 0.06	<i>P</i> < 0.05
			PNR	$y = -2E-08x + 1.09$	R <sup>2</sup> = 0.25	<i>P</i> < 0.05
		DMPP + Cd	N <sub>2</sub> O	$y = 2E-07x + 7.83$	R <sup>2</sup> = 0.89	<i>P</i> < 0.05
			NO <sub>3</sub> -N	$y = 2E-07x + 11.2$	R <sup>2</sup> = 0.34	<i>P</i> < 0.05
			NH <sub>4</sub> -N	$y = -3E-08x + 5.7$	R <sup>2</sup> = 0.36	<i>P</i> < 0.05
			PNR	$y = -1E-08x + 1.08$	R <sup>2</sup> = 0.26	<i>P</i> < 0.05

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