Supplementary Table S2 Primers and PCR conditions of target genes for qPCR

Gene	Primer set	Primer sequence (5'-3')	Thermal profile	References
nirK	F1aCu	ATCATGGTSCTGCCGCG	98 °C for 2 min; 30 cycles of 98 °C for 30 s, 58°C for 30 s, and 72 °C for 30 s	[12]
	R3Cu	GCCTCGATCAGRTTGTGGTGGTT		
nirS	Cd3aF	GTSAACGTSAAGGARACSGG	98 °C for 2 min; 30 cycles of 98 °C for 30 s, 55°C for 30 s, and 72 °C for 30 s	[13]
	R3cdR	GASTTCGGRTGSGTCTTGA		
hzsB	*hzsB*396F	ARGGHTGGGGHAGYTGGAAG	3 min at 95 °C, 40 cycles consisting of 30 s at 95 °C, 30 s at 59°C and 30 s at 72 °C	[14]
	*hzsB*742R	GTYCCHACRTCATGVGTCTG		

References

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