Table S2 Strains and plasmids used in this study

Strains and plasmids	Description	Source
Strain		
Saccharomyces. cerevisiae	Host for DNA assembly and integration	(3)
E. coli strain WM1788	Used for DNA cloning	(4)
E. coli strain Top 10	Used for DNA cloning	Our lab
Cyanothece sp. ATCC 51142	wild-type strain	Our lab
Synechocystis sp. PCC 6803	wild-type strain	Our lab
TSyNif-1 (T2379)	Containing entire *nif*-cluster 35 genes from *Cyanothece*	This study
TSyNif-2 (T2397)	Containing 24 genes of *nif*-cluster from *Cyanothece*	This study
TSyNif-3 (T2452)	T2397 without gene *hesB*	This study
TSyNif-4 (T2453)	T2397 without genes *hesAB*	This study
TSyNif-5 (T2454)	T2397 without gene *nifT*	This study
TSyNif-6 (T2466)	T2397 without gene *niTZ*	This study
TSyNif-7 (T2467)	T2397 without gene *nifX*	This study
TSyNif-8 (T2468)	T2397 without genes *nifW*	This study
TSyNif-9 (T2872)	Containing 24 genes of *nif*-cluster on pCA2.4 plasmid	This study
TSyNif-10 (T2873)	Containing 24 genes of *nif*-cluster on pCB2.4 plasmid	This study
TSyNif-11 (T2874)	Containing 24 genes of *nif*-cluster on pCC5.2 plasmid	This study
TSyNif-12 (T2444)	Genes *hupSL* from *Cyanothece* 51142 under $P_{ssr2227}$ in	This study
TSyNif-13 (T2537)	Gene *hupW* from *Cyanothece* under P_{trc1O} in T2444	This study
Plasmid		
pRL443	Used for conjugation	(5)
pRL663	Used for conjugation	(6)
pRSF1010	Broad-host-range shuttle vector	(7)
pUC118	DNA cloning vector	(8)
pSyNif-1 (pSL2379)	Containing entire *nif*-cluster 35 genes from *Cyanothece*	This study
pSyNif-2 (pSL2397)	Containing 24 genes of *nif*-cluster from *Cyanothece*	This study
pSyNif-3 (pSL2452)	Knocking-out plasmid for gene *hesB*	This study
pSyNif-4 (pSL2453)	Knocking-out plasmid for genes *hesAB*	This study
pSyNif-5 (pSL2454)	Knocking-out plasmid for gene *nifT*	This study
pSyNif-6 (pSL2466)	Knocking-out plasmid for gene *nifTZ*	This study
pSyNif-7 (pSL2467)	Knocking-out plasmid for gene *nifX*	This study
pSyNif-8 (pSL2468)	Knocking-out plasmid for genes *nifW*	This study
pSyNif-9 (pSL2872)	Containing 24 genes of *nif*-cluster on pCA2.4 plasmid	This study
pSyNif-10 (pSL2873)	Containing 24 genes of *nif*-cluster on pCB2.4 plasmid	This study
pSyNif-11 (pSL2874)	Containing 24 genes of *nif*-cluster on pCC5.2 plasmid	This study
pSyNif-12 (pSL2444)	Genes *hupSL* from *Cyanothece* 51142 under $P_{ssr2227}$	This study
pSyNif-13 (pSL2537)	Gene *hupW* from *Cyanothece* 51142 under P_{trc1O}	This study

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