

Table S1 Primers used to distinguish bacterial strains in Fig. 2

Bacterial strain	Genome location	Targeted gene	Sequence 5'-3'
<i>Rhizobium</i> sp. NGR234	Chromosomal	16SrDNA ¹	TGTGCTAATACCGTATGAGC CAGCCGAACTGAAGGATACG
	pSym	<i>NodD1</i>	GCCAGAAATGTTTCATGTCGCACA AATGGGTTGCGGAAGTTCCGT
<i>S. meliloti</i> 1021	Chromosomal	16SrDNA ¹	TGTGCTAATACCGTATGAGC CAGCCGAACTGAAGGATACG
	pSym	<i>NodQ</i>	GACAGGATCCTCCACGCTCA CGCCAGGTCGTTCCGGTTGG
	pExo	<i>NodQ2</i>	GACAGGATCCTCCACGCTCA GCTCATAGGGCGAGGATACA
<i>M. loti</i> MAFF303099	Chromosomal	16SrDNA	CCCATCTCTACGGAACAAC ACTCACCTCTTCCGGACTCG
	pMLa	<i>RepC</i>	GACGGCCGAGCCAAGGACGA CACATGGCAAGCCTCCTCA
<i>A. tumefaciens</i> EHA105	Chromosomal	16SrDNA	GAATAGCTCTGGGAACTGGAAT CGGGGCTTCTTCTCCGACT
	pAT	<i>attS</i> (pAT)	GTGCTTCGGATCGACGAAAC GGAGAATGGGAGTGACCTGA
	pTi	<i>VirJ</i> ²	TGACCTTGGCCAGGGAATTG

TCCTGTCATTGGCGTCAGTT

*MoaA*²

CTCCAAGAGGGTCGTTGAC

ATGGATCCTGCCGTGGTCTCGTGTTCTGG

¹ These primers amplify the 16S rDNA genes from both *S. meliloti* and *Rhizobium* sp. NGR234

² Location on the pTiBo542 plasmid map at 8 o'clock and 4 o'clock for *VirJ* and *MoaA* respectively

Table S1 Plant media used in rice transformation

Component (final concentration)	Media			
	2N6	2N6AS	2N6TCH	RGH6
N6 major and minor salts and vitamins (1x)	Yes	Yes	Yes	Yes
Sucrose (30 g l ⁻¹)	Yes	Yes	Yes	Yes
Casamino acids (1 g l ⁻¹)	Yes	Yes	Yes	
2,4-D (2 mg l ⁻¹)	Yes	Yes	Yes	
L-proline (0.5 g l ⁻¹)	Yes			Yes
L-glutamine (0.5 g l ⁻¹)	Yes			Yes
Glucose (10g/ l ⁻¹)		Yes		
Acetosyringone (100 µM)*		Yes		
Casein enzymatic hydrolysate (0.3 g l ⁻¹)				Yes
6-Benzylaminopurine 3 mg l ⁻¹				Yes
Naphthalene acetic acid 0.5 mg l ⁻¹				Yes
Cefotaxime (250 mg l ⁻¹)*			Yes	
Timentin (200 mg l ⁻¹)*			Yes	
Hygromycin-B (50 mg l ⁻¹)*			Yes	Yes
pH	5.8	5.2	5.2	5.8
Phytigel (g l ⁻¹)	2.5	3.5	3.5	6.0

* indicates components added after medium was autoclaved

Rice Transformation protocol

Rice (*Oryza sativa* L. cv. Millin) was transformed using seed derived callus based on the protocol of Hiei *et al.*²⁹ with modifications. Surface-sterilised seed were germinated and cultured on 2N6 media (Supplementary Table S2). After 3-4 weeks culture, callus was harvested and cultured on 2N6 media for 7-10 days more. Calli were then incubated for 20 minutes in bacteria re-suspended ($OD_{600}=1.0$) in AAM media, drained, dried on sterile filter paper and then co-cultured with bacteria for 3 days (*A. tumefaciens*) or 7 days (*S. meliloti*) on 2N6AS media. After co-culture, rice calli were either assayed for GUS activity or rinsed thoroughly in sterile water containing 250 mg l^{-1} cefotaxime and 200 mg l^{-1} timentin and transferred to selective media (2N6TCH) for 4 weeks, at which time proliferating calli were selected and transferred to regeneration media (RGH6). Shoots arising from calli on regeneration media were transferred to rooting media (1/2 MSH media: $\frac{1}{2}$ strength MS major, MS minor salts, N6 vitamins; 10 g l^{-1} sucrose, 2.5 g l^{-1} Phytigel, pH 5.8, 50 mg l^{-1} hygromycin-B). Once roots had formed, plants were transferred to soil for further growth and analysis.