

Table S1. Information of Primers Used.

No.	Name of primer	Primer 5'-3'	Annotation and Functions
1	pGWC- <i>NopP</i> 1.8-F-	CTTCAGATATGTTTCGCGAGG	Clone the fragment containing <i>NopP</i> and putative promoter into pGWC
2	pGWC- <i>NopP</i> 1.8-R-	AACACCGAATGGGTATCGCTC	Clone the fragment containing <i>NopP</i> and putative promoter into pGWC
3	<i>NopP</i> Ω <i>Bam</i> H I F	TCGCCATGTACGGTCGGATCCATAGCTCCGATT	Site-directed mutagenesis, mutated <i>NopP</i> 1.8 had a <i>Bam</i> H1 restriction site
4	<i>NopP</i> Ω <i>Bam</i> H I R	AGCGGTTGCCAGCCTAGGTATCGAGCAGGCTAA	Site-directed mutagenesis
5	Kan- <i>Bam</i> H1-F	tcaagtAGTAAACTGGATGGCTTTCTTG	Clone Kanamycin fragment into pGWC- <i>NopP</i> 1.8
6	Kan- <i>Bam</i> H1-R	tcaagtCTTCAGCATCTTTTACTTTCAC	Clone Kanamycin fragment into pGWC- <i>NopP</i> 1.8
7	pJQ200SK- <i>NopP</i> Ω-F	GCTCTAGACTTCAGATATGTTTCGCGAGG	Construction of Suicide vector pJQ200SK- <i>NopP</i> Ω to generate HH103Ω <i>NopP</i>
8	pJQ200SK- <i>NopP</i> Ω -R	AACTGCAGAACACCGAATGGGTATCGCTC	Construction of Suicide vector pJQ200SK- <i>NopP</i> Ω to generate HH103Ω <i>NopP</i>
9	<i>Gm</i> UNK1	Fwd-TGGTGCTGCCGCTATTTACTG Rev- GGTGGAAGGAAGTCTAACAAT	qRT-PCR for validation of <i>Gm</i> UNK1 gene transcription level in Charleston
10	<i>Glyma</i> .12G028300	Fwd- CTTCGGATAGCCTCAGTTG Rev- AACAACCCGTGAAAGGATT	qRT-PCR for validation of <i>Gm</i> 19g138300 gene transcription level in Charleston
11	<i>Glyma</i> .12G030000	Fwd- ATTGGTTATGATACGATTC Rev- AAAAAGAAAATACAAGACAAAGC	qRT-PCR for validation of <i>Gm</i> 19g140100 gene transcription level in Charleston
12	<i>Glyma</i> .12G031200	Fwd- ATTAGTATTATCATCTTGGGAGC Rev- CAACACAGGCACACAGCAC	qRT-PCR for validation of <i>Gm</i> 19g131900 gene transcription level in Charleston
13	<i>Glyma</i> .12G036900	Fwd- TTGAAGATGTGGTTGAATTG Rev- TTGGGAATGAAAAGGAAAAT	qRT-PCR for validation of <i>Gm</i> 06G181200 gene transcription level in Charleston
14	<i>Glyma</i> .12G052400	Fwd- CTTTTTCGCCCCCTACTT Rev- GCACCACAACGAAGAGAATG	qRT-PCR for validation of <i>Gm</i> 06G171700 gene transcription level in Charleston
15	<i>Glyma</i> .12G055500	Fwd- ATGTTAAGATGTGCCTGAAT Rev- CGTTACAGTCAGAAATCCATAG	qRT-PCR for validation of <i>Gm</i> 19g117200 gene transcription level in Charleston
16	<i>Glyma</i> .12G073000	Fwd- ATATTTTTTTTAACCCCTGACGG Rev- ATGTTTGTTTTATTTAGTCCCTC	qRT-PCR for validation of <i>Gm</i> 19g129200 gene transcription level in Charleston

Table S2. Information of Strains and Vectors.

Strain	Relevant Characteristics	Reference
<i>Escherichia coli</i>		
DH5 α	supE44 lacY169 (80lacZM15) hsdR17 recA1 endA1 gyrA96 thi-1 relA1	Mason et al. 1989
BL21(DE3)	F- ompT hsdSB (rB- mB-) gal dcm (DE3)	Studier et al. 1990
<i>Rhizobium strains</i>		
HH103	Broad host range bacterium isolated from nodules of Glycine max , Rif ^r	Dowdle et al. 1985
HH103 Ω NopP	HH103 insertion mutated containing an Kanamycin resistance gene insertion at position downstream 8bp of start codon of <i>NopP</i> nucleotide sequence, Rif ^r , Kan ^r	This work
Plasmids		
pGWC	Entry clone vector, Cm ^r	Chen et al. 2006
pJQ200SK	Suicide vector used for directed mutagenesis (Gm ^r)	Quandt and Hynes 1993
pJQ200SK-NopP Ω	A 2.8kb Xba1-Pst1 fragment containing <i>NopP</i> with a Kanamycin resistance gene inserted into downstream 8bp of start codon of <i>NopP</i> the Xba1-PstI site of pJQ200SK (Gm ^r)	This work
pRK2013	Tra ⁺ helper plasmid for mobilisation (Kan ^r)	Figurski and Helinski, 1979

Note: Rifampicin(Rif^r); Kanamycin (Kan^r); Chloramphenicol (Cm^r); Gentamicin (Gm^r).