**Table S1.** Bacterial strains and plasmids used in this study.

|  |  |  |
| --- | --- | --- |
| **Strains or plasmids** | **Characteristicsa** | **References** |
| **Bacterial strains** |  |  |
| ***Bradyrhizobium elkanii*** |  |  |
| USDA61 | Wild-type strain, Polr | USDAb |
| BEnodC | USDA61 derivative harboring insertion in *nodC* gene, Polr, Kmr, Tcr | [1] |
| BEttsInod | USDA61 derivative harboring insertion in *ttsI* and *nodC* genes, Polr, Kmr, Smr, Tcr | [1] |
| BErhcJ | USDA61 derivative harboring insertion in *rhcJ* encoding a membrane protein of the type III secretion apparatus, defective in type III protein secretion, Polr, Kmr, Tcr | [2] |
| BE53 | USDA61 derivative carrying a Tn*5* insertion in the *innB* gene, Polr, Kmr | [3] |
| BEinnB | USDA61 derivative with the *innB* gene deleted via double-crossover, Polr | This study |
| BE2-5 | USDA61 derivative with the *bel2-5* gene deleted via double-crossover, Polr | This study |
| BEnopL | USDA61 derivative with the *nopL* gene deleted via double-crossover, Polr | This study |
| BEnopP1 | USDA61 derivative harboring insertion of the plasmid pSUPSCAKm::*nopP1* in the *nopP1* gene via single-crossover, Polr, Kmr | This study |
| BEnopP2 | USDA61 derivative with the *nopP2* gene deleted via double-crossover, Polr | This study |
| BEinnBnopP2 | USDA61 derivative with both *innB* and *nopP2* deleted via double-crossover, Polr | This study |
| BEinnB5208 | USDA61 derivative with both *innB* and *bel2-5* deleted via double-crossover, Polr | This study |
| USDA61G | USDA61 derivative containing a pCAM120 plasmid insertion, Polr, Smr/Spr | [4] |
| BEnodCG | BEnodC derivative containing a pCAM120 plasmid insertion, Tcr, Polr, Kmr, Smr/Spr | This study |
| BEnopLG | BEnopL derivative containing a pCAM120 plasmid insertion, Polr, Smr/Spr | This study |
| ***Escherichia coli*** |  |  |
| HB101 | *recA*, *hsdR*, *hsdM*, *pro*, Smr | Invitrogen |
| DH5α | *sup*E44 ∆*lac*U169 (φ80 *lac*Z∆M15) *hsdR*17 *recA*1 *endA1* *gyrA*96 *thi*-1 *rel*A1 | BRL, Bethesda, MD, U.S.A. |
| S17-1 | *thi pro hsd*R- *hsd*M+ *recA* RP4::2-Tc::Mu-Km::Tn*7*(Tpr/Smr) | [5] |
| **Plasmids** |  |  |
| pRK2013 | Helper plasmid, ColE1 replicon carrying RK2 transfer genes; Kmr, tra | [6] |
| pCAM120 | mTn*5*SS*gusA20* (P*aph*-*gusA*-*trpA* ter translational fusion) in pUT/mini-Tn*5*; Smr/Spr, Apr | [7] |
| pSUPSCAKm | Derivative of pSUPPOL2SCA [8] with a kanamycin resistance gene in the  pSUPSCAKm  *Dra*I site, *oriT* of RP4, Tcr, Kmr | [3] |
| pSUPSCAKm::*nopP1* | pSUPSCAKm carrying a 0.5-kb DNA fragment containing the internal sequence of USDA61 *nopP1*, Kmr | This study |
| pK18mobsacB | Mobilizable vector for gene disruption and replacement, Mob+ *sacB*, Kmr | [9] |
| pInnBUD | pK18mobsacB containing insertions of upstream and downstream DNA fragments of the USDA61 *innB*, Kmr | This study |
| pBel2-5UD | pK18mobsacB containing insertions of upstream and downstream DNA fragments of the USDA61 *bel2-5*, Kmr | This study |
| pNopLUD | pK18mobsacB containing insertions of upstream and downstream DNA fragments of the USDA61 *nopL*, Kmr | This study |
| pNopP2UD | pK18mobsacB containing insertions of upstream and downstream DNA fragments of the USDA61 *nopP2*, Kmr | This study |

aPolr, polymyxin resistant; Kmr, kanamycin resistant; Smr, streptomycin resistant; Spr, spectinomycin resistant; Tcr, tetracycline resistant; Tpr, trimethoprim resistant; Apr, ampicillin resistant.

bUnited States Department of Agriculture (USDA), Beltsville, MD.

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