

Table S1. Accession numbers for partial *nifH*, *anfH*, and *rrs* sequences of nitrogen-fixing bacterial isolates associated with sugarcane cultivar ROC22 grown in Guangxi

Isolate name	Genus affiliation	Accession no. for partial <i>nifH</i> sequences	Accession no. for partial <i>anfH</i> sequences	Accession no. for partial <i>rrs</i> sequences
CZ150S	<i>Klebsiella</i>	HQ204222		HQ204277
CZ152S	<i>Burkholderia</i>	HQ204223		HQ204278
CZ186S	<i>Klebsiella</i>	HQ204224		HQ204279
GG164S	<i>Klebsiella</i>	HQ204225		HQ204280
HX148S	<i>Enterobacter</i>	HQ204226		HQ204281
HX149S	<i>Klebsiella</i>	HQ204227		HQ204282
LA16S	<i>Klebsiella</i>	HQ204228		HQ204283
LC55S	<i>Klebsiella</i>	HQ204229		HQ204284
NN145S	<i>Enterobacter</i>	HQ204230		HQ204285
NN169S	<i>Klebsiella</i>	HQ204231		HQ204286
PG132S	<i>Enterobacter</i>	HQ204232		HQ204287
QZ25S	<i>Enterobacter</i>	HQ204233		HQ204288
QZ33S	<i>Klebsiella</i>	HQ204234		HQ204289
TD153S	<i>Klebsiella</i>	HQ204235		HQ204290
YL34S	<i>Enterobacter</i>	HQ204236	HQ204265	HQ204291
YX115S	<i>Klebsiella</i>	HQ204237		HQ204292
YX116S	<i>Klebsiella</i>	HQ204238		HQ204293
YX117S	<i>Klebsiella</i>	HQ204239		HQ204294
YX118S	<i>Klebsiella</i>	HQ204240		HQ204295
DX120E	<i>Klebsiella</i>	HQ204241		HQ204296
DX194E	<i>Klebsiella</i>	HQ204242		HQ204297
GG41E	<i>Klebsiella</i>	HQ204243	HQ204266	HQ204298
GG42E	<i>Klebsiella</i>	HQ204244	HQ204267	HQ204299
GG49E	<i>Enterobacter</i>	HQ204245		HQ204300
GG50E	<i>Klebsiella</i>	HQ204246	HQ204268	HQ204301
GG53E	<i>Klebsiella</i>	HQ204247	HQ204269	HQ204302
GG160E	<i>Klebsiella</i>	HQ204248		HQ204303
GG165E	<i>Enterobacter</i>	HQ204249	HQ204270	HQ204304
LC89E	<i>Klebsiella</i>	HQ204250		HQ204305
LZ83E	<i>Klebsiella</i>	HQ204251	HQ204271	HQ204306
LZ84E	<i>Enterobacter</i>	HQ204252	HQ204272	HQ204307
LZ87E	<i>Klebsiella</i>	HQ204253		HQ204308
LA3E	<i>Klebsiella</i>	HQ204254		HQ204309
LA4E	<i>Enterobacter</i>	HQ204255	HQ204273	HQ204310
LA11E	<i>Klebsiella</i>	HQ204256	HQ204274	HQ204311
LA14E	<i>Enterobacter</i>	HQ204257		HQ204312
NN143E	<i>Enterobacter</i>	HQ204258		HQ204313
NN144E	<i>Enterobacter</i>	HQ204259		HQ204314
NN208E	<i>Enterobacter</i>	HQ204260		HQ204315
PG122E	<i>Klebsiella</i>	HQ204261		HQ204316
QZ80E	<i>Enterobacter</i>	HQ204262	HQ204275	HQ204317
SS107E	<i>Klebsiella</i>	HQ204263		HQ204318
SS82E	<i>Klebsiella</i>	HQ204264	HQ204276	HQ204319

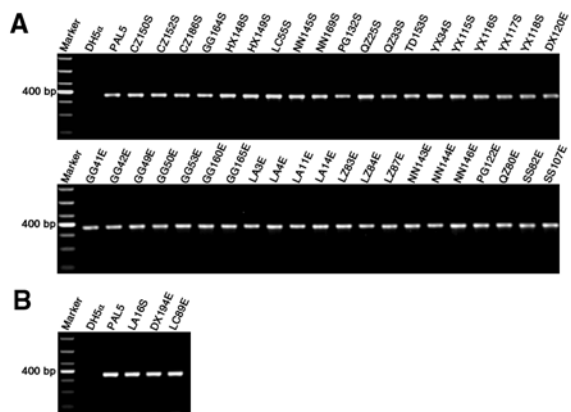


Fig. S1. 2% agarose gel electrophoresis for products of *nifH* PCR based on Z-primers from colonies of 40 ARA-positive isolates (A) and from colonies of isolate LA16S, DX194E, and LC89E (B). *E. coli* DH5 α and *G. diazotrophicus* PAL5 were respectively used as negative and positive control.