

Suppl. Table S1 PCR amplification and sequencing primers used in this study and their cycling conditions

Locus ^a	Primers ^b			PCR cycle conditions					
	Sequences (5'-3')	References (primers sequences and PCR conditions)	Approximate product size (bp)	Cycles	Step 1	Step 2	Step 3	Step 4	Step 5
16S rRNA	16SF: AGAGTTTGATCCTGGCTCAG	Suau et al. 1999 and	1200	30	94°C/	94°C/	55°C/	72°C/	72°C/
	16SR: TACCTTGTTACGACTTACCCCA	Vaneechoutte et al. 1993			2 min	1 min	1 min	1 min	1 min
<i>acnA</i>	ACNA462F: CGAGCGCTAICAGTTCAT	This study	715	30	95°C/	94°C/	43°C/	72°C/	72°C/
	ACNA1334R: GGGTTCGACGTGTTIGTG				2 min	30 s	30 s	1 min	5 min
<i>atpD</i>	atpDF: GATCGTACAGTGCATCGG	Baldwin et al. 2005	1150	30	94°C/	94°C/	59°C/	72°C/	72°C/
	atpDR: ATCGTGCCGACCATGTAG				2 min	1 min	2 min	2 min	5 min
<i>gyrB</i>	gyrB1F: GACAACGGCCGCGGSATTCC	Tayeb et al. 2008	600	35	94°C/	94°C/	65-68°C/	72°C/	72°C/
	gyrB2R: CACGCCGTTGTTCAGGAASG				5 min	1 min	1 min	2 min	5 min
<i>pab</i>	PAB27F: ITCGTTACCTACAACCT	This study	400	30	95°C/	94°C/	46-47°C/	72°C/	72°C/
	PAB550R: AGTTTTCIAGCAGCGIGT				2 min	30 s	30 s	1 min	5 min

^a Housekeeping loci included *acnA*, aconitate hydratase A; *atpD*, ATP synthase subunit beta; *gyrB*, DNA gyrase subunit β and *pab*, anthranilate synthase (para-amino-benzoate).

^b Same primers were used for both PCR and Sequencing.

Suppl. Table S2 Accession numbers for the DNA sequences used in this study

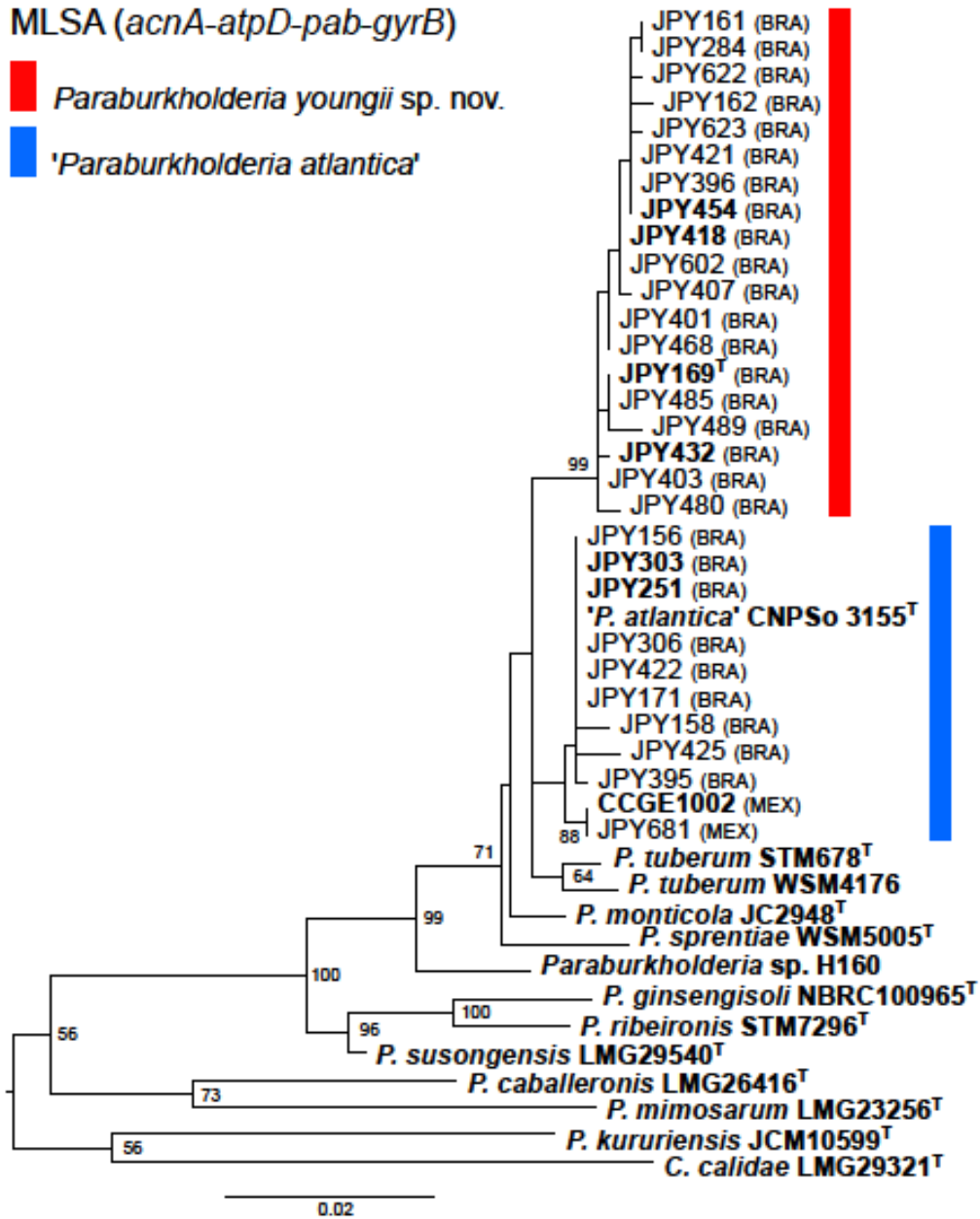
Isolate	*16S rRNA	<i>gyrB</i>	<i>acnA</i>	<i>pab</i>	<i>atpD</i>
Cluster A (<i>Paraburkholderia youngii</i> sp. nov.)					
JPY161	FN543653	LR607064	LR607010	LR607126	LR607157
JPY162	FN543654	LR607065	LR607011	LR607127	LR607158
*JPY169 ^T	FN543659	LR607066	LR607012	LR607128	LR607159
JPY284	FN543684	LR607069	LR607015	LR607131	LR607162
JPY396	FN543726	LR607073	LR607019	LR607135	LR607166
JPY401	FN543727	LR607074	LR607020	LR607136	LR607167
JPY403	FN543728	LR607075	LR607021	LR607137	LR607168
JPY407	FN543731	LR607076	LR607022	LR607138	LR607169
*JPY418	GCA_013367595.1 [©]	GCA_013367595.1 [©]	GCA_013367595.1 [©]	GCA_013367595.1 [©]	GCA_013367595.1 [©]
JPY421	FN543741	LR607079	LR607025	LR607141	LR607172
*JPY432	GCA_013371975.1 [©]	GCA_013371975.1 [©]	GCA_013371975.1 [©]	GCA_013371975.1 [©]	GCA_013371975.1 [©]
*JPY454	GCA_013372005.1 [©]	GCA_013372005.1 [©]	GCA_013372005.1 [©]	GCA_013372005.1 [©]	GCA_013372005.1 [©]
JPY468	FN543758	LR607084	LR607030	LR607146	LR607177
JPY480	FN543763	LR607085	LR607031	LR607147	LR607178
JPY485	FN543766	LR607086	LR607032	LR607148	LR607179
JPY489	FN543768	LR607087	LR607033	LR607149	LR607180
JPY602	FN543779	LR607088	LR607034	LR607150	LR607181
JPY622	FN543782	LR607089	LR607035	LR607151	LR607182
JPY623	FN543783	LR607090	LR607036	LR607152	LR607183
Cluster B (<i>'Paraburkholderia atlantica'</i>)					
*CCGE1002	GCA_000092885.1 [©]	GCA_000092885.1 [©]	GCA_000092885.1 [©]	GCA_000092885.1 [©]	GCA_000092885.1 [©]
JPY156	FN543648	LR607062	LR607008	LR607124	LR607155
JPY158	FN543650	LR607063	LR607009	LR607125	LR607156
JPY171	FN543661	LR607067	LR607013	LR607129	LR607160
*JPY251	GCA_000372985.1 [©]	GCA_000372985.1 [©]	GCA_000372985.1 [©]	GCA_000372985.1 [©]	GCA_000372985.1 [©]
*JPY303	GCA_013367625.1 [©]	GCA_013367625.1 [©]	GCA_013367625.1 [©]	GCA_013367625.1 [©]	GCA_013367625.1 [©]
JPY306	FN543694	LR607071	LR607017	LR607133	LR607164
JPY395	FN543725	LR607072	LR607018	LR607134	LR607165
JPY422	FN543742	LR607080	LR607026	LR607142	LR607173
JPY425	FN543743	LR607081	LR607027	LR607143	LR607174
JPY681	KP760662	LR607091	LR607037	LR607153	LR607184
*CNPSo 3155 ^T	GCA_009362785.1 [©]	GCA_009362785.1 [©]	GCA_009362785.1 [©]	GCA_009362785.1 [©]	GCA_009362785.1 [©]
Reference strains					
* <i>P. tuberum</i> STM678 ^T	Gp0007985 ^{©, α}	Gp0007985 ^{©, α}	Gp0007985 ^{©, α}	Gp0007985 ^{©, α}	Gp0007985 ^{©, α}
* <i>P. tuberum</i> WSM4176	GCA_000372945.1 [©]	GCA_000372945.1 [©]	GCA_000372945.1 [©]	GCA_000372945.1 [©]	GCA_000372945.1 [©]
* <i>Paraburkholderia</i> sp. H160	GCA_000173575.1 [©]	GCA_000173575.1 [©]	GCA_000173575.1 [©]	GCA_000173575.1 [©]	GCA_000173575.1 [©]
* <i>P. kururiensis</i> JCM 10599 ^T	GCA_000616025.1 [©]	GCA_000616025.1 [©]	GCA_000616025.1 [©]	GCA_000616025.1 [©]	GCA_000616025.1 [©]
* <i>P. caballeronis</i> LMG 26416 ^T	GCA_900109675.1 [©]	GCA_900109675.1 [©]	GCA_900109675.1 [©]	GCA_900109675.1 [©]	GCA_900109675.1 [©]
* <i>P. mimosarum</i> LMG 23256 ^T	GCA_000472825.1 [©]	GCA_000472825.1 [©]	GCA_000472825.1 [©]	GCA_000472825.1 [©]	GCA_000472825.1 [©]
* <i>P. ribeironis</i> STM7296 ^T	GCA_900019265.2 [©]	GCA_900019265.2 [©]	GCA_900019265.2 [©]	GCA_900019265.2 [©]	GCA_900019265.2 [©]

<i>*P. ginsengisoli</i> NBRC 100965 ^T	GCA_000739735.1 [⊖]	GCA_000739735.1 [⊖]	GCA_000739735.1 [⊖]	GCA_000739735.1 [⊖]	GCA_000739735.1 [⊖]
<i>*P. susongensis</i> LMG 29540 ^T	GCA_900177725.1 [⊖]	GCA_900177725.1 [⊖]	GCA_900177725.1 [⊖]	GCA_900177725.1 [⊖]	GCA_900177725.1 [⊖]
<i>*P. sprentiae</i> WSM5005 ^T	GCA_001865575.1 [⊖]	GCA_001865575.1 [⊖]	GCA_001865575.1 [⊖]	GCA_001865575.1 [⊖]	GCA_001865575.1 [⊖]
<i>*P. monticola</i> JC2948 ^T	GCA_001580545.1 [⊖]	GCA_001580545.1 [⊖]	GCA_001580545.1 [⊖]	GCA_001580545.1 [⊖]	GCA_001580545.1 [⊖]
<i>* Caballeronia</i> <i>calidae</i> LMG 29321 ^T	GCF_900044055.2 [⊖]	GCF_900044055.2 [⊖]	GCF_900044055.2 [⊖]	GCF_900044055.2 [⊖]	GCF_900044055.2 [⊖]

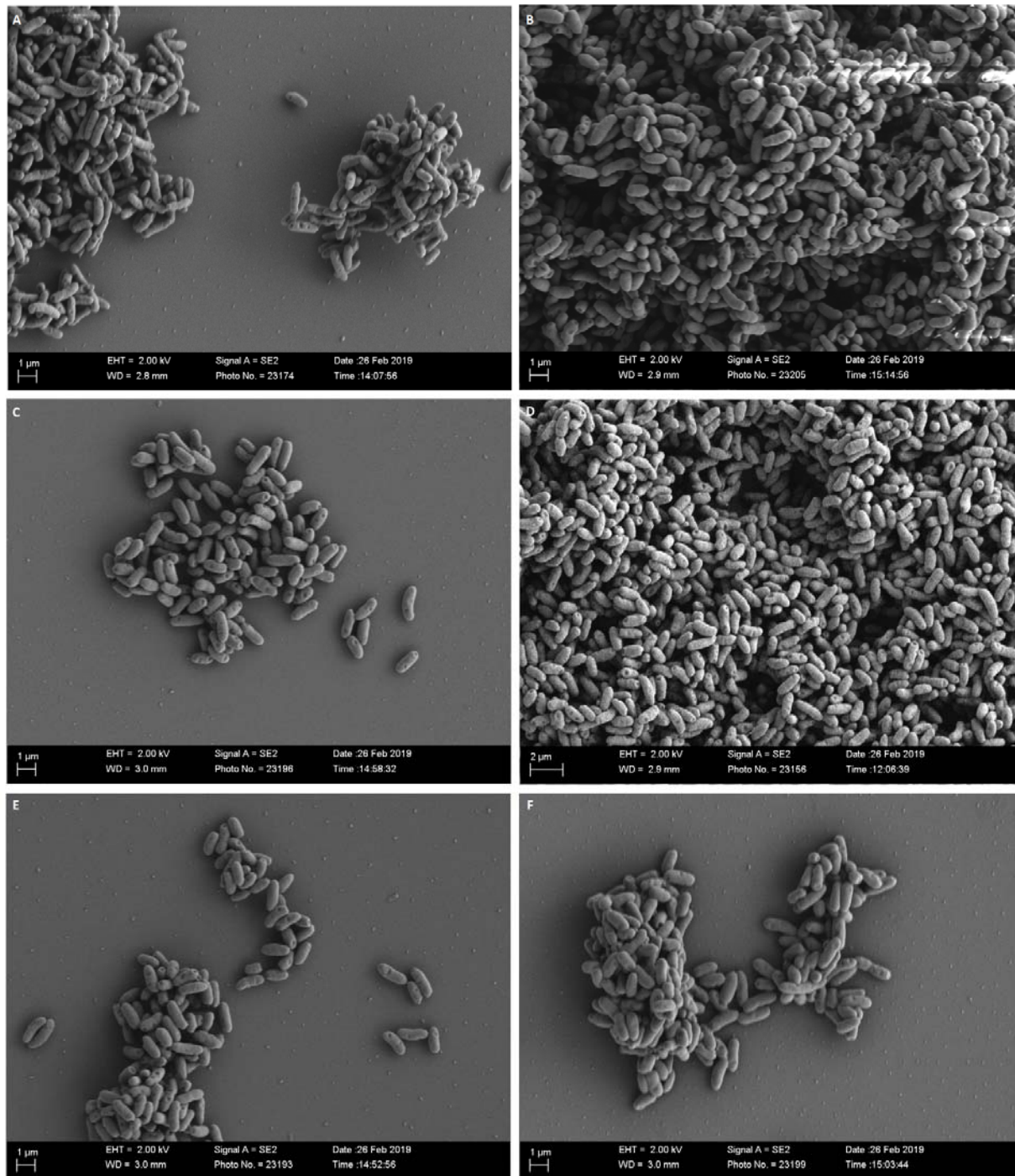
* Strains with whole genome sequences which were either downloaded from GenBank or obtained directly from our collaborators for this study.

[⊖] Genome sequences from which the relevant genes were extracted.

^α Gold Project ID.



Suppl. Fig. S1 An MLSA phylogeny based upon the concatenated *acnA-atpD-pab-gyrB* amino acid sequence dataset. Statistical support higher than 55% is indicated at the respective nodes. The scale bar indicates the number of nucleotide changes per site. Strains in bold have whole genome sequences available. The geographical origin of the strains is indicated as: BRA (Brazil) and MEX (Mexico).



Suppl. Fig. S2 Scanning electron microscopy for selected strains representing *Paraburkholderia youngii* sp. nov. [A, JPY169^T; B, JPY432; C, JPY454] and '*Paraburkholderia atlantica*' [D, CCGE1002; E, JPY251; F, JPY303]. The cells were magnified at $\times 10000$ with the Zeiss Crossbeam 540 FEG Scanning Electron Microscope, using the infrastructure of the Laboratory for Microscopy and Microanalysis Unit of the University of Pretoria.