

## SUPPLEMENTARY TABLES

**Table S1.** Nearest neighbors on the basis of the 16S rRNA sequence generated using Sanger Sequencing obtained through BLAST searches, excluding uncultured and environmental sequences (last accessed Jan. 29, 2021).

Species	Isolate	16S sequence (GenBank accession number)	Best hit (GenBank accession number)*	Similarity
<i>Acinetobacter pollinis</i> sp. nov.	FNA3	MN701875	<i>Acinetobacter nectaris</i> SAP 970.1 <sup>T</sup> (JQ771134.1)	98.9%
	FNA11	MN701874	<i>Acinetobacter nectaris</i> SAP 970.1 <sup>T</sup> (JQ771134.1)	99.0%
	SCC474	MN701877	<i>Acinetobacter nectaris</i> SAP 970.1 <sup>T</sup> (JQ771134.1)	99.2%
	SCC477 <sup>T</sup>	MN701878	<i>Acinetobacter nectaris</i> SAP 970.1 <sup>T</sup> (JQ771134.1)	99.0%
<i>Acinetobacter rathckeae</i> sp. nov.	EC115	MN701872	<i>Acinetobacter boissieri</i> SAP 284.1 <sup>T</sup> (NR_118409.1)	98.7%
	EC24 <sup>T</sup>	MN701873	<i>Acinetobacter boissieri</i> SAP 284.1 <sup>T</sup> (NR_118409.1)	99.4%
<i>Acinetobacter baretiae</i> sp. nov.	B10A <sup>T</sup>	MN709041	<i>Acinetobacter boissieri</i> SAP 284.1 <sup>T</sup> (NR_118409.1)	98.9%
	B5B	MN701871	<i>Acinetobacter boissieri</i> SAP 284.1 <sup>T</sup> (NR_118409.1)	98.9%

\* Excluding *Acinetobacter* strains of unknown species identity.

**Table S2.** Nearest neighbors on the basis of *rpoB* gene sequences among species of the genus *Acinetobacter* with validly published names for the isolates characterized in this work, as obtained through BLAST searches (last accessed on Jan. 2, 2020).

Species	Isolate	<i>rpoB</i> sequence (GenBank accession number)	Best hit (GenBank accession number)	Similarity
<i>Acinetobacter pollinis</i> sp. nov.	FNA3	MN315325	<i>Acinetobacter nectaris</i> SAP 763.2 (JQ7711446.1)	93.2%
	FNA11	MN315322	<i>Acinetobacter nectaris</i> SAP 763.2 (JQ7711446.1)	93.2%
	SCC474	MN389213	<i>Acinetobacter nectaris</i> SAP 763.2 (JQ7711446.1)	93.2%
	SCC477 <sup>T</sup>	MN389214	<i>Acinetobacter nectaris</i> SAP 763.2 (JQ7711446.1)	93.2%
<i>Acinetobacter rathckeae</i> sp. nov.	EC115	MN389215	<i>Acinetobacter boissieri</i> SAP 284.1 (JQ771155.1)	92.6%
	EC24 <sup>T</sup>	MN389216	<i>Acinetobacter boissieri</i> SAP 284.1 (JQ771155.1)	92.6%
<i>Acinetobacter baretiae</i> sp. nov.	B10A <sup>T</sup>	MN315286	<i>Acinetobacter boissieri</i> SAP 284.1 <sup>T</sup> (JQ771155.1)	91.5%
	B5B	MN315310	<i>Acinetobacter boissieri</i> SAP 284.1 <sup>T</sup> (JQ771155.1)	91.6%

**Table S3:** Genome characteristics of closely related *Acinetobacter* species included in the phylogenomic analysis. The accession number, completeness (checkM) (listed by PATRIC), size, and percentage GC content (NCBI).

Species	Isolate	Accession number	Complete (%)	Size (Mb)	GC content (%)
<i>A. apis</i>	ANC 5114	GCF_900197575.1	90	2.4	38.3
<i>A. baumannii</i>	ATCC 17978	GCA_000368685.1	100	4	38
<i>A. baumannii</i>	AB30	GCF_000746645.1	100	4.3	39
<i>A. baumannii</i>	SDF	GCF_000069205.1	91.1	3.48	39.13
<i>A. baylyi</i>	DSM 14961 <sup>T</sup>	GCF_000368685.1	100	3.6	40.4
<i>A. baylyi</i>	TG19579	GCF_000302115.1	100	3.7	40.2
<i>A. beijerinckii</i>	CIP110307 <sup>T</sup>	GCF_000369005.1	100	3.6	38.3
<i>A. bereziniae</i>	CIP 70.12 <sup>T</sup>	GCF_000368925.1	96.2	5.03	38.3
<i>A. boissieri</i>	ANC 4422 <sup>T</sup>	GCF_900096955.1	91.4	2.7	38
<i>A. bouvetii</i>	DSM 14964 <sup>T</sup>	GCF_000368865.1	100	3.4	45
<i>A. brisouii</i>	ANC 4119 <sup>T</sup>	GCF_000368645.1	98.6	3.1	69.7
<i>A. brisouii</i>	CIP 110357	GCF_000488275.1	98.6	3.2	41.7
<i>A. brisouii</i>	SM1	GCF_000964015.1	99.3	3	41.8
<i>A. gernerii</i>	CIP 107464	GCF_000368565.1	99.3	4.6	37.9
<i>A. guillouiae</i>	CIP 63.46 <sup>T</sup>	GCF_000368145.1	100	4.9	56
<i>A. guillouiae</i>	MSP4-18	GCF_000414055.1	100	4.8	38.1
<i>A. gyllenbergsii</i>	NIPH 230 <sup>T</sup>	GCF_000488195.1	98.6	4.6	41
<i>A. gyllenbergsii</i>	CIP 110306	GCF_000413855.1	100	4.3	40.9
<i>A. haemolyticus</i>	CIP 64.3 <sup>T</sup>	GCF_000369065.1	100	3.4	39.7
<i>A. haemolyticus</i>	ATCC 19194	GCF_000164055.1	100	3.7	40.4
<i>A. harbinensis</i>	HITLi 7 <sup>T</sup>	GCF_000816495.1	97.2	2.9	41.7
<i>A. indicus</i>	CIP 110367 <sup>T</sup>	GCF_000488255.1	100	3.2	45.4
<i>A. johnsonii</i>	XBB1	GCF_001484935.1	100	4.1	40.1
<i>A. johnsonii</i>	SH046	GCF_000162055.1	100	3.7	41.3
<i>A. junii</i>	CIP 64.5 <sup>T</sup>	GCF_000368765.1	100	3.3	38.8
<i>A. junii</i>	SH205	GCF_000162075.1	100	3.5	37.3
<i>A. larvae</i>	BRTC-1 <sup>T</sup>	GCF_001704115.1	95.9	3.7	41.6
<i>A. lwoffii</i>	NCTC 5866 <sup>T</sup>	GCF_000369105.1	100	3.4	43
<i>A. lwoffii</i>	SH145	GCF_000162095.1	100	3.5	42.6
<i>A. nectaris</i>	CIP 110549 <sup>T</sup>	GCF_000488215.1	88.7	2.7	36.7
<i>A. oleivorans</i>	DR1 <sup>T</sup>	GCF_000196795.1	100	4.2	38.7
<i>A. parvus</i>	DSM 16617 <sup>T</sup>	GCF_000248155.1	99.3	2.9	41.6
<i>A. pitti</i>	PHEA-2 <sup>T</sup>	GCF_000191145.1	100	3.9	38.8
<i>A. radioresistens</i>	SK82	GCF_000162115.1	100	3.3	41.5
<i>A. radioresistens</i>	DSM 6976 <sup>T</sup>	GCF_006757745.1	100	3.4	41.3
<i>A. radioresistens</i>	SH164	GCF_000175675.1	100	3.2	41.6
<i>A. rudis</i>	CIP 110305 <sup>T</sup>	GCF_000413895.1	98.6	4	39.1

<i>A. rудis</i>	DMS 24031	GCF_000829675.1	98.6	4	39
<i>A. schindleri</i>	CIP 107287	GCF_000368625.1	99.3	3.4	42.3
<i>A. schindleri</i>	TG19614	GCF_000301815.1	96.6	3.2	42.4
<i>A. soli</i>	CIP 110264 <sup>T</sup>	GCF_000368705.1	99.3	3.4	54.7
<i>A. soli</i>	NIPH 2899	GCF_000368725.1	99.3	3.5	56
<i>A. tandoii</i>	DSM 14970 <sup>T</sup>	GCF_000400735.1	100	4.1	40.1
<i>A. tjernbergiae</i>	DSM 14971 <sup>T</sup>	GCF_000374425.1	100	3.7	38.5
<i>A. townieri</i>	DSM 14962 <sup>T</sup>	GCF_000368785.1	99.3	3	41.3
<i>A. ursingii</i>	DMS 16037 <sup>T</sup>	GCF_000368825.1	94.5	3.5	39.5
<i>A. venetianus</i>	VE-C3	GCF_000308235.1	93.8	3.54	39.13