



Corrigendum: *Alkalihalobacterium elongatum* gen. nov. sp. nov.: An Antibiotic-Producing Bacterium Isolated From Lonar Lake and Reclassification of the Genus *Alkalihalobacillus* Into Seven Novel Genera

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A Corrigendum on

Alkalihalobacterium elongatum gen. nov. sp. nov.: An Antibiotic-Producing Bacterium Isolated From Lonar Lake and Reclassification of the Genus *Alkalihalobacillus* Into Seven Novel Genera by Joshi, A., Thite, S., Karodi, P., Joseph, N., and Lodha, T. (2021). *Front. Microbiol.* 12:722369. doi: 10.3389/fmicb.2021.722369

In the original article, there was a mistake in the description of the new combinations in the newly proposed genus (**Table 5**). Culture collection number for *Alkalihalobacterium bogoriense* was given as MG 22234 in the original manuscript. It is changed to LMG 22234. The strain number for the type strain *Alkalihalobacillus okhensis* was incorrect. The corrected **Table 5** appears below.

In the original article, there was an error in the naming of a family species, *Bacilla* was written where it should be *Bacillaceae*. A correction has been made to **Materials and Methods, Genome Sequences Used in This Study and Pathway Analysis**, paragraph one:

“Type strains of 41 species of the genus *Alkalihalobacillus* (28 type strains), *Desertibacillus*, and *Anaerobacillus* and type species of the different genera of the family *Bacillaceae*, whose genomes were available in the public database, were considered in this study. Fifty genomes of non-type strains of genus *Alkalihalobacillus* were also included in this study. *Streptococcus gordonii* ATCC 10558^T and *Streptococcus agalactiae* ATCC 13813^T genomes were used to root (outgroup) the phylogenetic tree. The genome of strain MEB199^T and *Desertibacillus haloalkaliphilus* KJ1-10-99^T were sequenced under this study, and all the other genomes were downloaded from the PATRIC database (Supplementary Table 1). The functional annotations of each genome was carried out using EggNOG-mapper v2 (Cantalapiedra et al., 2021). The pathway was mapped using the KEGG Orthology (KO) Database³ for all the selected genomes. Heatmap to visualize the distribution of pathways across all the members of the genus *Alkalihalobacillus* was constructed using heatmapmer.⁴”

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way.

³<https://www.genome.jp/kegg/ko.html>

⁴<http://www.heatmapmer.ca/>

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TABLE 5 | Description of the new combinations in the newly proposed genus.

New Name combination and etymology	Basonym	Description	Type strain
Description of the new combinations in the genus <i>Alkalihalobacterium</i>			
<i>Alkalihalobacterium alkalinitrilicum</i> comb. nov. (Type species of this genus) (al.ka.li.ni.tri'li.cum. N.L. n. <i>alkali</i> (from Arabic <i>al</i> the; <i>qaliy</i> soda ash) alkali; N.L. masc. adj. <i>nitrilicus</i> pertaining to nitriles; N.L. neut. adj. <i>alkalinitrilicum</i> alkaliphile utilizing nitriles)	<i>Bacillus alkalinitrilicus</i> (Sorokin et al., 2008) Patel and Gupta, 2020	The description of this taxon is as given by Sorokin et al. (2008)	ANL-iso4 ^T (=DSM 22532 = NCCB 100120 = UNIQEM U240)
<i>Alkalihalobacterium bogoriense</i> comb. nov. (bo.gori.en'se. N.L. neut. adj. <i>bogoriense</i> pertaining to Lake Bogoria, a soda lake in Kenya)	<i>Alkalihalobacillus bogoriensis</i> (Vargas et al., 2005) Patel and Gupta, 2020	The description of this taxon is as given by Vargas et al. (2005)	LBB3 ^T (=ATCC BAA-922 = LMG 22234)
Description of the new combinations in the genus <i>Halalkalibacterium</i>			
<i>Halalkalibacterium halodurans</i> comb. nov. (Type species of this genus) (ha.lo.du'rans. Gr. n. <i>hals halos</i> salt; L. pres. part. <i>durans</i> enduring; N.L. part. adj. <i>halodurans</i> salt-enduring)	<i>Alkalihalobacillus halodurans</i> (ex Boyer et al., 1973) (Nielsen et al., 1995) Patel and Gupta, 2020	The description of this taxon is as given by Nielsen et al. (1995)	PN-80 ^T (=ATCC 27557 = CIP 105296 = DSM 497 = LMG 7121 = NRRL B-3881)
<i>Halalkalibacterium ligniniphilum</i> comb. nov. (lig.ni.ni'phi.lum. N.L. neut. n. <i>ligninum</i> lignin; N.L. masc. adj. <i>philus</i> (from Gr. masc. adj. <i>philos</i>) friend, loving; N.L. neut. adj. <i>ligniniphilum</i> lignin-loving, isolated as a lignin degrader with lignin as a single carbon source)	<i>Alkalihalobacillus ligniniphilus</i> (Zhu et al., 2014) Patel and Gupta, 2020	The description of this taxon is as given by Zhu et al. (2014)	L1 ^T (= DSM 26145 = JCM 18543)
Description of the new combinations in the genus <i>Halalkalibacter</i>			
<i>Halalkalibacter krulwichiae</i> comb. nov. (Type species of this genus) (krul.wich'i.ae. N.L. fem. gen. n. <i>krulwichiae</i> of Krulwich; named after American microbiologist Terry A. Krulwich who made fundamental contributions to the study of alkaliphilic bacteria)	<i>Alkalihalobacillus krulwichiae</i> (Yumoto et al., 2003) Patel and Gupta, 2020	The description of this taxon is as given by Yumoto et al. (2003)	AM31D ^T (=DSM 18225 = IAM 15000 = JCM 11691 = NBRC 102362 = NCIMB 13904)
<i>Halalkalibacter oceani</i> comb. nov. (o.ce.a'ni. L. gen. masc. n. <i>oceani</i> , of an ocean, referring to its optimal growth under marine conditions)	<i>Alkalihalobacillus oceani</i> (Song et al., 2016) Gupta et al., 2020	The description of this taxon is as given by Song et al. (2016)	SW109 ^T (=CGMCC 1.12347 = DSM 100579)
<i>Halalkalibacter hemicellulosilyticus</i> comb. nov. (he.mi.cel.lu.lo.si.ly'ti.cus. N.L. neut. n. <i>haemicellulosum</i> , hemicellulose; Gr. masc. adj. <i>lytikos</i> , able to loosen, able to dissolve; N.L. masc. adj. <i>hemicellulosilyticus</i> , hemicellulose-dissolving)	<i>Alkalihalobacillus hemicellulosilyticus</i> corrig. (Nogi et al., 2005) Patel and Gupta, 2020	The description of this taxon is as given by Nogi et al. (2005)	C-11 ^T (=DSM 16731 = JCM 9152)
<i>Halalkalibacter nanhaiisediminis</i> comb. nov. (nan.hai.i.se.di'mi.nis. N.L. neut. n. <i>nanhaium</i> Nan Hai, the Chinese name for the South China Sea; L. neut. n. <i>sedimen -inis</i> a sediment; N.L. gen. n. <i>nanhaiisediminis</i> of a sediment from the South China Sea)	<i>Alkalihalobacillus nanhaiisediminis</i> (Zhang et al., 2011) Patel and Gupta, 2020	The description of this taxon is as given by Zhang et al. (2011)	NH3 ^T (=CGMCC 1.10116 = DSM 27953 = JCM 16507)
<i>Halalkalibacter wakoensis</i> comb. nov. (wa.ko.en'sis. N.L. masc. adj. <i>wakoensis</i> of Wako, a city in Japan)	<i>Alkalihalobacillus wakoensis</i> (Nogi et al., 2005) Patel and Gupta, 2020	The description of this taxon is as given by Nogi et al. (2005)	N-1 ^T (=DSM 2521 = JCM 9140)
<i>Halalkalibacter okhensis</i> comb. nov. (ok.hen'sis. N.L. masc. adj. <i>okhensis</i> pertaining to Port Okha, a port of the Dwarka region in India, where the type strain was isolated)	<i>Alkalihalobacillus okhensis</i> (Nowlan et al., 2006) Patel and Gupta, 2020	The description of this taxon is as given by Nowlan et al. (2006)	Kh10-101 ^T (=ATCC BAA-1137 = DSM 23308 = JCM 13040)
<i>Halalkalibacter akibai</i> comb. nov. (a.ki.ba'i. N.L. gen. n. <i>akibai</i> of Akiba, named after the Japanese microbiologist Teruhiko Akiba, who made fundamental contributions to the study of alkaliphilic bacteria)	<i>Alkalihalobacillus akibai</i> (Nogi et al., 2005) Patel and Gupta, 2020	The description of this taxon is as given by Nogi et al. (2005)	1139 ^T (=ATCC 43226 = DSM 21942 = JCM 9157)
<i>Halalkalibacter kiskunsagensis</i> comb. nov. (kis.kun.sag.en'sis. N.L. masc. adj. <i>kiskunsagensis</i> , referring to the name of Kiskunság National Park in Hungary, the location of the sampling site)	<i>Alkalihalobacillus kiskunsagensis</i> (Borsodi et al., 2017) Gupta et al., 2020	The description of this taxon is as given by Borsodi et al. (2017)	B16-24 ^T (=DSM 29791 = NCAIM B.02610)

(Continued)

TABLE 5 | Continued

New Name combination and etymology	Basonym	Description	Type strain
<i>Halalkalibacter urbisdiaboli</i> comb. nov. (ur.bis.di.a'bo.li. L. fem. n. <i>urbs</i> , city; L. masc. n. <i>diabolus</i> , devil; N.L. gen. n. <i>urbisdiaboli</i> , of Devil City)	<i>Alkalihalobacillus urbisdiaboli</i> (Liu et al., 2019) Gupta et al., 2020	The description of this taxon is as given by Liu et al. (2019)	FJAT-45385 ^T (=CCTCC AB 2016263 = DSM 104651)
<i>Halalkalibacter alkalisediminis</i> comb. nov. (al.ka.li.se.di' mi.nis. N.L. n. <i>alkali</i> (from Arabic <i>al the</i> ; <i>qaliy</i> soda ash) alkali; L. gen. n. <i>sediminis</i> of sediment; N.L. gen. n. <i>alkalisediminis</i> of alkaline sediment)	<i>Alkalihalobacillus alkalisediminis</i> (Borsodi et al., 2011) Patel and Gupta, 2020	The description of this taxon is as given by Borsodi et al. (2011)	K1-25 ^T (=DSM 21670 = NCAIM B.02301)
Description of the new combinations in the genus <i>Shouchella</i>			
<i>Shouchella clausii</i> comb. nov. (Type species of this genus) (clau' si.i. N.L. gen. n. <i>clausii</i> of Claus, named after Dieter Claus, the German bacteriologist who made fundamental contributions to the taxonomy of <i>Bacillus</i>)	<i>Alkalihalobacillus clausii</i> (Nielsen et al., 1995) Patel and Gupta, 2020	The description of this taxon is as given by Nielsen et al. (1995)	PN-23 ^T (=ATCC 700160 = CCUG 47262 = CIP 104718 = DSM 8716 = LMG 17945 = NCIB 10309 = NCIMB 10309)
<i>Shouchella xiaoxiensis</i> comb. nov. (xi.a.o.xi.en' sis. N.L. fem. adj. <i>xiaoxiensis</i> pertaining to Xiaoxi National Natural Reserve, China, the source of the sample from which the type strain was isolated)	<i>Alkalihalobacillus xiaoxiensis</i> (Chen et al., 2011b) Patel and Gupta, 2020	The description of this taxon is as given by Chen et al. (2011b)	DSM 21943 ^T (=JSM 081004 = CCTCC AA 208057)
<i>Shouchella alkalliacus</i> comb. nov. (al.ka.li.la'cus. N.L. n. <i>alkali</i> (from Arabic <i>al the</i> ; <i>qaliy</i> soda ash) alkali; L. gen. masc. n. <i>lacus</i> , a lake; N.L. gen. masc. n. <i>alkalliacus</i> , of an alkaline lake)	<i>Alkalihalobacillus alkalliacus</i> (Singh et al., 2018) Gupta et al., 2020	The description of this taxon is as given by Singh et al. (2018)	AK73 ^T (=JCM 32184 = KCTC 33880 = MTCC 12637)
<i>Shouchella rhizosphaerae</i> comb. nov. (rhi.zo.sphae'rae. N.L. gen. n. <i>rhizosphaerae</i> of the rhizosphere)	<i>Alkalihalobacillus rhizosphaerae</i> (Madhaiyan et al., 2011) Patel and Gupta, 2020	The description of this taxon is as given by Madhaiyan et al. (2011)	SC-N012 ^T (=DSM 21911 = NCCB 100267)
<i>Shouchella patagoniensis</i> comb. nov. (pa.ta.go.ni.en' sis. N.L. fem. adj. <i>patagoniensis</i> pertaining to Patagonia, in Argentina, where the type strain was isolated)	<i>Alkalihalobacillus patagoniensis</i> (Olivera et al., 2005) Patel and Gupta, 2020	The description of this taxon is as given by Olivera et al. (2005)	PAT 5 ^T (=ATCC BAA-965 = DSM 16117)
<i>Shouchella miscanthi</i> comb. nov. (misc.an'thi. N.L. gen. masc. n. <i>miscanthi</i> , of <i>Miscanthus sacchariflorus</i> , where the type strain was isolated)	<i>Alkalihalobacillus miscanthi</i> (Shin et al., 2020) Gupta et al., 2020	The description of this taxon is as given by Shin et al. (2020)	AK13 ^T (= DSM 109981 = KACC 21401)
<i>Shouchella plakortidis</i> comb. nov. (pla.kor' ti.dis. N.L. gen. n. <i>plakortidis</i> of <i>Plakortis</i> , a genus of sponges)	<i>Alkalihalobacillus plakortidis</i> (Borchert et al., 2007) Patel and Gupta, 2020	The description of this taxon is as given by Borchert et al. (2007)	P203 ^T (=DSM 19153 = NCIMB 14288)
<i>Shouchella oshimensis</i> comb. nov. (o.shi.men' sis. N.L. fem. adj. <i>oshimensis</i> from Oshima, the region where the micro-organism was isolated)	<i>Alkalihalobacillus oshimensis</i> (Yumoto et al., 2005) Patel and Gupta, 2020	The description of this taxon is as given by Yumoto et al. (2005)	K11 ^T (=DSM 18940 = JCM 12663 = NCIMB 14023)
<i>Shouchella lehensis</i> comb. nov. (le.hen' sis. N.L. fem. adj. <i>lehensis</i> pertaining to Leh, in India, where the type strain was isolated)	<i>Alkalihalobacillus lehensis</i> (Ghosh et al., 2007) Patel and Gupta, 2020	The description of this taxon is as given by Ghosh et al. (2007)	MTCC 7633 ^T (=MLB2 = JCM 13820 = LMG 24751 = DSM 19099)
<i>Shouchella shacheensis</i> comb. nov. (sha.che.en' sis. N.L. fem. adj. <i>shacheensis</i> pertaining to Shache County, Xinjiang Province, China, the source of the sample from which the type strain was isolated)	<i>Alkalihalobacillus shacheensis</i> (Lei et al., 2014) Patel and Gupta, 2020	The description of this taxon is as given by Lei et al. (2014)	HNA-14 ^T (=DSM 26902 = KCTC 33145)
<i>Shouchella lonarensis</i> comb. nov. (lo.nar.en' sis. N.L. fem. adj. <i>lonarensis</i> of or belonging to Lonar lake, India, from where the type strain was isolated).	<i>Alkalihalobacillus lonarensis</i> (Reddy et al., 2015) Patel and Gupta, 2020	The description of this taxon is as given by Reddy et al. (2015)	LMG 27974 ^T (=CGMCC 1.12817 = KCTC 33413 = 25 nlg)
<i>Shouchella hunanensis</i> comb. nov. (hu.nan.en' sis. N.L. fem. adj. <i>hunanensis</i> , pertaining to Hunan Province, PR China, the source of the sample from which the type strain was isolated)	<i>Alkalihalobacillus hunanensis</i> (Patel and Gupta, 2020)	The description of this taxon is as given by Patel and Gupta (2020)	JSM 081003 ^T (=DSM 23008 = KCTC 13711)

(Continued)

TABLE 5 | Continued

New Name combination and etymology	Basonym	Description	Type strain
<i>Shouchella gibsoni</i> comb. nov. (gib.so'ni.i. N.L. gen. masc. n. <i>gibsonii</i> , of Gibson, named after the British bacteriologist Thomas Gibson)	<i>Alkalihalobacillus gibsonii</i> (Nielsen et al., 1995) Gupta et al., 2020	The description of this taxon is as given by Nielsen et al. (1995)	PN-109 ^T (=ATCC 700164 = CIP 104720 = DSM 8722 = LMG 17949)
Description of the new combinations in the genus <i>Pseudokalibacillus</i>			
<i>Pseudokalibacillus decolorationis</i> comb. nov. (Type species of this genus) (de.co.lo.ra.ti.o'nis. L. gen. n. <i>decolorationis</i> of discoloration)	<i>Alkalihalobacillus decolorationis</i> (Heyrman et al., 2003) Patel and Gupta, 2020	The description of this taxon is as given by Heyrman et al. (2003)	LMG 19507 ^T (=DSM 14890)
<i>Pseudokalibacillus macyae</i> comb. nov. (ma'cy.ae. N.L. fem. n. <i>macyae</i> of Macy, named after the late Professor Joan M. Macy, Chair of Microbiology, La Trobe University, in tribute to her research in the area of environmental microbiology)	<i>Alkalihalobacillus macyae</i> (Santini et al., 2004) Patel and Gupta (2020)	The description of this taxon is as given by Santini et al. (2004)	JMM-4 ^T (=DSM 16346 = JCM 12340)
<i>Pseudokalibacillus caeni</i> comb. nov. (cae'ni. L. gen. neut. n. <i>caeni</i> , of mud, referring to the source of isolation)	<i>Alkalihalobacillus caeni</i> (Mo et al., 2020) Gupta et al., 2020	The description of this taxon is as given by Mo et al. (2020)	HB172195 ^T (=CGMCC 1.16730 = JCM 33411)
<i>Pseudokalibacillus hemicentroti</i> comb. nov. (he.mi.cen.tro'ti. N.L. gen. n. <i>haemicentroti</i> of <i>Haemicentrotus (Haemicentrotus pulcherrimus)</i> , a sea urchin), the source of isolation of the organism)	<i>Alkalihalobacillus haemicentroti</i> (Chen et al., 2011a) Patel and Gupta, 2020	The description of this taxon is as given by Chen et al. (2011a)	JSM 076093 ^T (=DSM 23007 = KCTC 13710)
<i>Pseudokalibacillus hwajinpoensis</i> comb. nov. (hwa.jin.po.en'sis. N.L. masc. adj. <i>hwajinpoensis</i> of Hwajinpo, a beach of the East Sea in Korea, where the type strain was isolated)	<i>Alkalihalobacillus hwajinpoensis</i> (Yoon et al., 2004) Patel and Gupta, 2020	The description of this taxon is as given by Yoon et al. (2004)	SW-72 ^T (=DSM 16206 = JCM 11807 = KCCM 41641 = LMG 24749)
<i>Pseudokalibacillus algicola</i> comb. nov. (al.gi'co.la. L. fem. n. <i>alga</i> alga; L. suff. <i>-cola</i> (from L. masc. n. <i>incola</i> inhabitant, dweller; N.L. masc. n. <i>algicola</i> algae-dweller)	<i>Alkalihalobacillus algicola</i> (Ivanova et al., 2004) Patel and Gupta, 2020	The description of this taxon is as given by Ivanova et al. (2004)	KMM 3737 ^T (=CIP 107850)
<i>Pseudokalibacillus berkeleyi</i> comb. nov. (ber'ke.ley.i. N.L. <i>berkeleyi</i> is named after Roger C. W. Berkeley (1937–2010), who is the famous English microbiologist who greatly contributed to the <i>Bacillus</i> taxonomy)	<i>Alkalihalobacillus berkeleyi</i> (Nedashkovskaya et al., 2012) Patel and Gupta, 2020	The description of this taxon is as given by Nedashkovskaya et al. (2012)	KMM 6244 ^T (=KCTC 12718 = LMG 26357)
Description of the new combinations in the genus <i>Alkalicoccobacillus</i>			
<i>Alkalicoccobacillus murimartini</i> comb. nov. (Type species of this genus) (mu.ri.mar.ti'ni. L. masc. n. <i>murus</i> wall; N.L. gen. n. <i>martini</i> of Martin (masc. name of a saint); N.L. gen. n. <i>murimartini</i> from the wall of the (St.) Martin church in Greene-Kreiensen, Germany)	<i>Alkalihalobacillus murimartini</i> (Borchert et al., 2007) Patel and Gupta, 2020	The description of this taxon is as given by Borchert et al. (2007)	NCIMB 14102 ^T (=LMG 21005)
Description of the new combinations in the genus <i>Alkalihalophilus</i>			
<i>Alkalihalophilus pseudofirmus</i> comb. nov. (Type species of this genus) (pseu.do.fir'mus. Gr. adj. <i>pseudés</i> false; L. masc. adj. <i>firmus</i> strong, firm, and also specific epithet; N.L. masc. adj. <i>pseudofirmus</i> the false <i>firmus</i> , referring to physiological similarities to <i>Bacillus firmus</i>)	<i>Alkalihalobacillus pseudofirmus</i> (Nielsen et al., 1995) Patel and Gupta (2020)	The description of this taxon is as given by Nielsen et al. (1995)	PN-3 ^T (=DSM 8715 = ATCC 700159)
<i>Alkalihalophilus lindianensis</i> comb. nov. (lin.di.an.en'sis. N.L. masc. adj. <i>lindianensis</i> pertaining to Lindian, a county in Heilongjiang Province, China, the source of the sample from which the type strain was isolated)	<i>Alkalihalobacillus lindianensis</i> (Dou et al., 2016) Patel and Gupta, 2020	The description of this taxon is as given by Dou et al. (2016)	12-3 ^T (=CGMCC 1.12717 = DSM 26864)
<i>Alkalihalophilus marmarensis</i> comb. nov. (mar.ma.ren'sis. N.L. masc. adj. <i>marmarensis</i> pertaining to the region of Marmara, where the type strain was isolated)	<i>Alkalihalobacillus marmarensis</i> (Denizci et al., 2010) Patel and Gupta, 2020	The description of this taxon is as given by Denizci et al. (2010)	GMBE 72 ^T (=DSM 21297 = JCM 15719)