

Supplementary Table S1: ANI values for *Bacillus cereus sensu lato* species determination.

	<i>Bacillus toyonensis</i>	<i>Bacillus weihenstephensis</i>	<i>Bacillus mycoides</i>	<i>Bacillus thuringiensis</i>	sample 6	<i>Bacillus cereus</i> s. – cereulide	<i>Bacillus mobilis</i>	<i>Bacillus wiedmanii</i>	sample 14	<i>Bacillus anthracis</i> Sterne	<i>Bacillus anthracis</i> Ames	<i>Bacillus paranthracis</i>	<i>Bacillus cereus</i> s.s + cereulide	<i>Bacillus pseudomycolides</i>	<i>Bacillus cytotoxicus</i>
<i>Bacillus toyonensis</i>	100.00	90.63	90.83	91.76	91.73	91.78	91.06	91.43	91.13	91.15	91.12	90.96	91.03	83.53	82.55
<i>Bacillus weihenstephensis</i>	90.63	100.00	93.69	89.41	89.45	89.47	90.19	90.52	89.58	89.49	89.51	89.45	89.38	83.84	82.46
<i>Bacillus mycoides</i>	90.83	93.69	100.00	89.91	89.89	89.93	90.83	91.07	90.09	90.05	90.03	89.92	89.96	83.67	82.54
<i>Bacillus thuringiensis</i>	91.76	89.41	89.91	100.00	96.80	96.76	91.15	91.41	91.53	91.42	91.51	91.53	91.47	83.32	82.46
sample 6	91.73	89.45	89.89	96.80	100.00	98.84	91.20	91.49	91.83	91.78	91.73	91.92	91.94	83.30	82.49
<i>Bacillus cereus sensu stricto</i> - non cereulide-producing	91.78	89.47	89.93	96.76	98.84	100.00	91.17	91.47	91.80	91.82	91.80	91.96	92.00	83.34	82.69
<i>Bacillus mobilis</i>	91.06	90.19	90.83	91.15	91.20	91.17	100.00	94.63	93.18	92.87	92.92	92.96	93.14	83.31	82.37
<i>Bacillus wiedmanii</i>	91.43	90.52	91.07	91.41	91.49	91.47	94.63	100.00	93.12	93.11	93.08	93.10	93.09	83.43	82.48
sample 14	91.13	89.58	90.09	91.53	91.83	91.80	93.18	93.12	100.00	98.41	98.62	95.44	95.14	83.48	82.66
<i>Bacillus anthracis</i> str Sterne	91.15	89.49	90.05	91.42	91.78	91.82	92.87	93.11	98.41	100.00	99.99	95.27	95.07	83.43	82.89
<i>Bacillus anthracis</i> str Ames	91.12	89.51	90.03	91.51	91.73	91.80	92.92	93.08	98.62	99.99	100.00	95.32	95.17	83.39	82.84
<i>Bacillus paranthracis</i>	90.96	89.45	89.92	91.53	91.92	91.96	92.96	93.10	95.44	95.27	95.32	100.00	97.52	83.29	82.50
<i>Bacillus cereus sensu stricto</i> -	91.03	89.38	89.96	91.47	91.94	92.00	93.14	93.09	95.14	95.07	95.17	97.52	100.00	83.36	82.67

cereulide producing <i>Bacillus</i> <i>pseudomycoides</i>	83.53	83.84	83.67	83.32	83.30	83.34	83.31	83.43	83.48	83.43	83.39	83.29	83.36	100.00	83.26
<i>Bacillus</i> <i>cytotoxicus</i>	82.55	82.46	82.54	82.46	82.49	82.69	82.37	82.48	82.66	82.89	82.84	82.50	82.67	83.26	100.00

**Supplementary Table S2: Determination of the species, toxin genes and plasmid of the two *Bacillus cereus* s. l. isolates.**

Isolate	Species identification	Enterotoxin producing genes	<i>ces</i> cluster (cereulide)	<i>Bacillus anthracis</i> core pathogenic factors ( <i>pagA</i> , <i>lef</i> , <i>cya</i> genes)	pXO1	pXO2
sample 6	<i>Bacillus cereus</i> s.s.	<i>nhe</i> , <i>hbl</i> , <i>cytK2</i>	-	-	-	-
sample 14	<i>Bacillus anthracis</i>	<i>nhe</i> , <i>hbl</i> , <i>cytK2</i>	-	-	-	-

**Supplementary Table S3: Metadata on the reference genomes used for species determination.**

Species	Strain	RefSeq Accession
<i>Bacillus anthracis</i>	Ames	GCF_000007845.1
<i>Bacillus anthracis</i>	Sterne	GCF_000832635.1
<i>Bacillus cereus sensu stricto</i>	ATCC 14579; non-cereulide producing	GCF_000007825.1
<i>Bacillus cereus sensu stricto</i>	F4810/72 (AH187); cereulide-producing	GCF_000021225.1
<i>Bacillus cytotoxicus</i>	NVH 391-98	GCF_000017425.1
<i>Bacillus mobilis</i>	0711P9-1	GCF_001884045.1
<i>Bacillus mycoides</i>	DSM 2048	GCF_000003925.1
<i>Bacillus paranthracis</i>	MN5	GCF_001883995.1
<i>Bacillus pseudomyoides</i>	DSM 12442	GCF_000161455.1
<i>Bacillus thuringiensis</i>	Serovar Berliner (ATCC 10792)	GCF_000161615.1
<i>Bacillus toyonensis</i>	BCT-7112	GCF_000496285.1
<i>Bacillus weihenstephanensis</i>	WSBC 10204	GCF_000775975.1
<i>Bacillus wiedmannii</i>	FSL W8-0169	GCF_001583695.1

Supplementary Table S4: real-time PCR and phenotypical analysis of stain in sample 14

	real-time PCR <i>pagA</i>	real-time PCR <i>capC</i>	growth on PLET medium	gamma phage	hemolyse	Penicilin resistance
<i>B. anthracis</i> (Sterne)	amplification	amplification	positive	lysis	negative	no
<i>sample 14</i>	no amplification	no amplification	negative	no lysis	beta- hemolysis	yes