

Supplementary Table 1. Identification of *Bacillus* strains used in the present study using Bergey's manual

Characteristic	<i>B. coagulans</i>	<i>B. globisporus</i>	<i>B. pumilus</i>	<i>B. subtilis</i>	<i>B. circulans</i>	<i>B. cereus</i>
Yellow-red-pink color colonies	–	–	–	–h	–	–h
Dark brown/black colonies	–	–	–	–h	–	–
Mobility	+		+	+	+	+
Cell diameter $\geq 1.0 \mu\text{m}$	–	–	+	–	–	+
Spore formation	+	+	+	+	+	+
Catalase	+	+	+	+	+	+
Aerobic growth	+	+	+	+	+	+
Anerobic growth	+	–	–	–	+	+
Acid from L-arabinose	d	d/w	+	+	+	–
Acid from D-glucose	+	d/w	+	+	+	+
Acid from D-mannitol	–	d/w	+	+	+	–
Hydrolysis of starch	+	+	–	+	w	+
Hydrolysis of casein	–	–	–	+	w	+
Hydrolysis of gelatin	d	d		+	d	+
Growth of pH						
6	+		d	+	+	+
7	+	+	+	+	+	+
8	+		+	+	+	–
9	+		+		+	
Growth of NaCl						
2%	+	+	+	+		+
5%	–	d	+	+		+
7%	–	–	+	+		d
Growth at different temperature (°C)						
5		+	d	d		
10		+	d	d		d
20		+	+	+		+
30	+	+	+	+	+	+
40	+	–	+	+	+	+
50	d	–	d	d	+	
55	d	–	–	d	d	
65	–	–	–	–	–	
Degradation of tyrosine		–	–	–		+
Deamination of phenylalanine		–	–	–		–
Utilization of citrate	–	–	+	+	–	+
Nitrate reduction	–	+	–	+	d	d
Lipase	–	–	–	–	–	+
Proteases	–	–	+	+	–	+
Phosphatases	–	–	–	+	–	+
Nucleases	–	–	+	+	–	+
Carbohydrate degrading	+	+	+	+	+	+
Voges-Proskauer reaction	d	–	+	+	–	+

+, >85% positive; d, variable (16-84% positive); –, 0-15% positive; w, weak reaction; d/w, variable and weak when positive. No entry indicates that no data are available.