Complete genome sequence data of tropical thermophilic bacterium parageobacillus caldoxylosilyticus ER4B

ABSTRACT

Parageobacillus caldoxylosilyticus , or previously identified as Geobacillus caldoxylosilyticus , is a thermophilic Gram-positive bacterium which can easily withstand growth temperatures ranging from 40 °C to 70 °C. Here, we present the first complete genome sequence of Parageobacillus caldoxylosilyticus ER4B which was isolated from an empty oil palm fruit bunch compost in Malaysia. Whole genome sequencing was per- formed using the PacBio RSII platform. The genome size of strain ER4B was around 3.9Mbp, with GC content of 44.31%. The genome consists of two contigs, in which the larger contig (3,909,276bp) represents the chromosome, while the smaller one (54,250bp) represents the plasmid. A total of 4,164 genes were successfully predicted, including 3,972 protein coding sequences, 26 rRNAs, 91 tRNAs, 74 miscRNA, and 1 tmRNA. The genome sequence data of strain ER4B reported here may contribute to the current molecular information of the species. It may also facilitate the discovery of molecular traits related to thermal stress, thus, expanding our understanding in the acclimation or adaptation towards extreme temperature in bacteria.