Plant growth-promoting rhizobacteria (PGPR) are able to colonize plant rhizosphere and improve plant growth through several direct and indirect mechanisms (1), which makes them good candidates for use as biofertilizers. Members of the genus *Bacillus* are often reported as PGPR because of multiple traits that promote plant growth, for instance, the ability to fix nitrogen (2), produce hormones like indole acetic acid (IAA), solubilize phosphate, and suppress pathogen growth (3). The rhizobacterium *Bacillus* sp. strain RZ2MS9 was isolated in Brazil from the rhizosphere of guarana, a typical tropical plant, and was identified as *Bacillus thuringiensis* by multilocus sequence type (MLST) analysis. On *in vitro* tests, this strain was able to produce 67.40 μg IAA/ml, solubilize phosphate, produce siderophore, and fix nitrogen. The strain promoted the growth of maize (*Zea mays*) and soybean (*Glycine max*) in an experiment conducted in greenhouse conditions, suggesting that it can be used in a broad range of hosts, which is a greatly desired feature in biofertilizer development (B. D. Batista, submitted for publication). The draft genome sequence of the strain presented here will be useful to explore its genomic features as a multitrait PGPR.

Genomic DNA was extracted from bacterial overnight cultures using the DNeasy blood and tissue kit (Qiagen, USA) and sequenced on an Illumina MiSeq, generating approximately 14 million reads with a mean size of 250 bp. The assembly using SPAdes (version 3.8.1) (4) resulted in 5,297,692 bp of the *Bacillus* genome, with a mean coverage of 620X. The draft is composed of 33 contigs, with an N₅₀ of 1,097,374 bp and G+C content of 35.05%. Gene prediction was performed by PROKKA (version 1.11) (5), resulting in 102 tRNAs, 5,316 open reading frames, with an average size of 826 and 377 proteins predicted as secreted.

The genome of RZ2MS9 includes several genes related to plant growth-promotion mechanisms, such as those for the production of organic acids involved in inorganic phosphorus solubilization: glucose dehydrogenase, citrate synthase, and lactate dehydrogenase (6), 33 genes related to nitrogen fixation, 19 genes related to IAA production, including the *ipdc*, a gene that encodes the key enzyme indole-3-pyruvate decarboxylase of the IAA pathway (7). The annotated genome also has several genes for components of the iron and siderophore uptake systems, such as the uptake regulation protein (*fur*) (8). Genes responsible for flagellar motility, chemotaxis, and biofilm synthesis, which allow RZ2MS9 to move toward plant exudates and facilitate adhesion, were also encoded as well as genes related to growth-stimulating volatile compounds and sporulation.

**Accession number**. This whole-genome shotgun project has been deposited at DDBJ/ENA/GenBank under the accession *MJBF01000000*. The version described in this paper is version MJBF01000000.

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**REFERENCES**


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### Draft Genome Sequence of Multitrait Plant Growth-Promoting Bacillus sp. Strain RZ2MS9

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**Bacillus** sp. strain RZ2MS9 is a multitrait soybean and maize growth-promoting bacterium isolated in Brazil from guarana’s rhizosphere. Here, we present the draft genome sequence of RZ2MS9 and its genes involved in many features related to plant growth promotion.