Supplementary Materials:

Table S1. Detection of potential BD Fusarium_4 by *in vitro* inoculation of maize.

Fungal Isolates	Fumonisin Concentration(ppm) [1]	Increase of Fumonisin Concentration (%) over Control
Control	2.01 ± 0.43 b	0
BD Fusarium_1	2.13 ± 0.43 b	5.63
BD Fusarium_2	2.03 ± 0.43 b	0.99
BD Fusarium_3	2.11 ± 0.43 b	4.74
BD Fusarium_4	9.16 ± 0.43 a	78.05
BD Fusarium_5	2.07 ± 0.43 b	2.90
BD Fusarium_6	2.58 ± 0.43 b	17.44
BD Fusarium_7	2.14 ± 0.43 b	5.14
BD Fusarium_8	2.15 ± 0.43 b	1.86
Level of significance *	*	-
LSD	1.29	-
CV%	1.74	-

* Indicates significance at a 5% level of significance. [1] Data are the averages of three biological replications ± SE. Values with similar letters are statistically similar. Control: sterilized maize grains were inoculated with water only.

Table S2. Representative *B. subtilis* isolates identified by homology search of 16S rDNA sequence using BLAST program.

Isolate ID	Close Relatives	Accession Number	Identities	Homology (%)
BDISO76MR	*Bacillus subtilis* strain MMM1	OP179630	1241/1241	100
	Bacillus subtilis strain PB1	KU904502.1	1089/1110	98.11
	Bacillus sp. strain RB31	MF138130.1	1088/1110	98.02
	Bacillus sp. strainLMYB-2	MZ505270.1	1116/1151	96.96
	Bacillus sp. CR10	KR780414.1	1117/1152	96.96

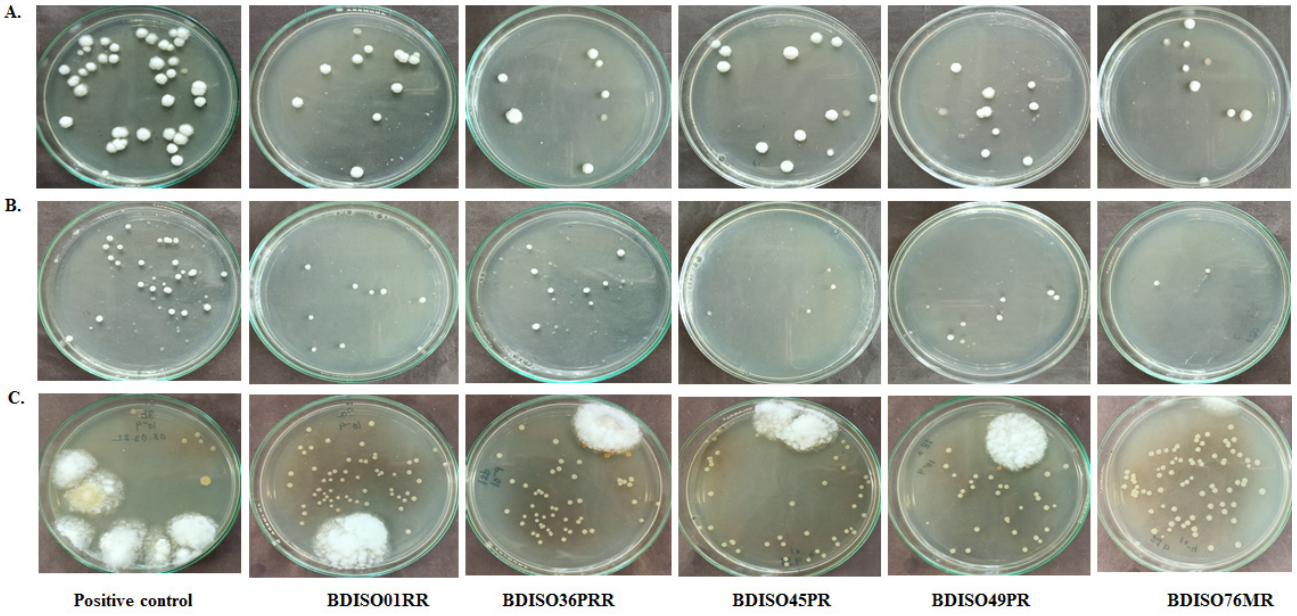


Figure S1. Inhibition of the population of *F. proliferatum*on inoculated maize grain by different *Bacillus* species at (**A**) 10 DAI, (**B**) 20 DAI, and (**C**) 35 DAI (BDISO01RR: *B. amyloliquefaciens*, BDISO36PR: *B. subtilis*, BDISO45PR: *B. subtilis*, BDISO49PR: *B. subtilis* and BDISO76MR: *B. subtilis*).

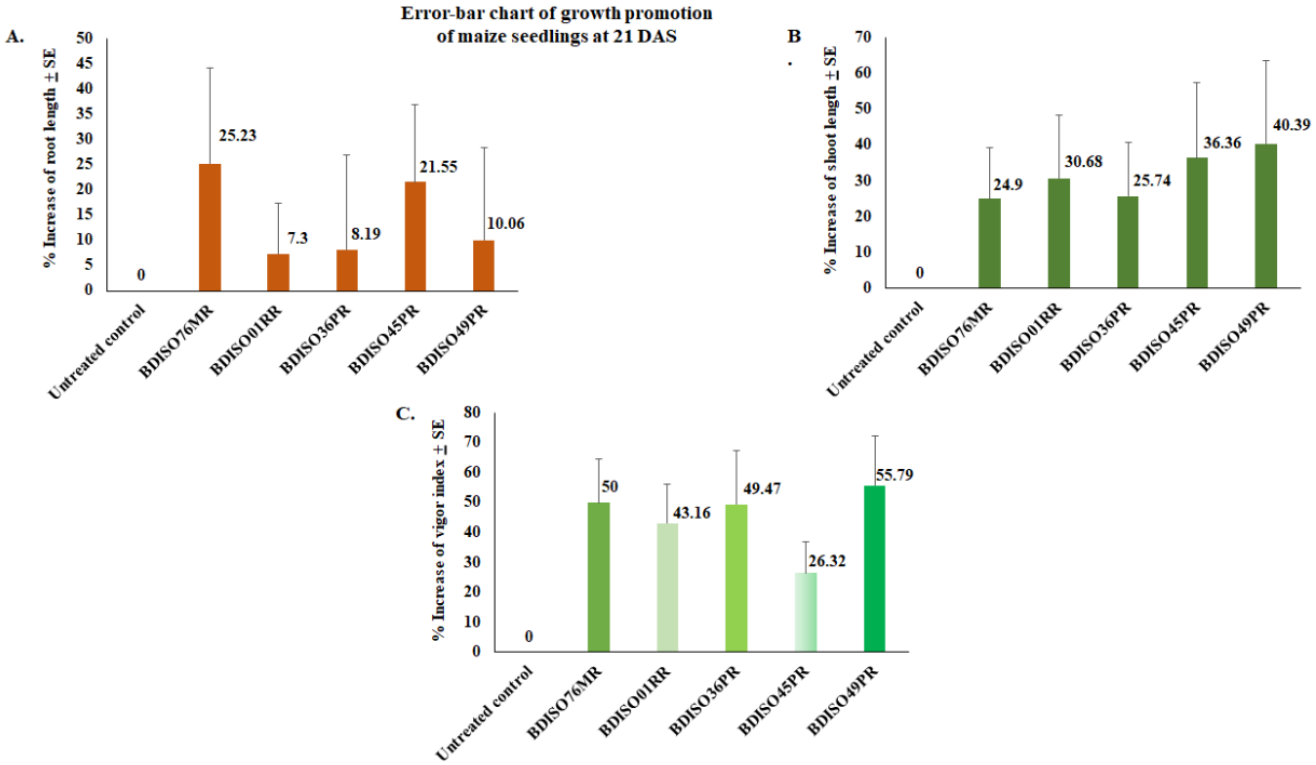


Figure S2. Percent increase of (**A**) root length, (**B**) shoot length, and (**C**) vigor index of maize seedlings over control at 21 DAS. (BDISO76MR: *B. subtilis*, BDISO01RR: *B. amyloliquefaciens*, BDISO36PR: *B. subtilis*, BDISO45PR: *B. subtilis* and BDISO49PR: *B.*

subtilis). Untreated control: seed treatment with only distilled water. SE: standard error.