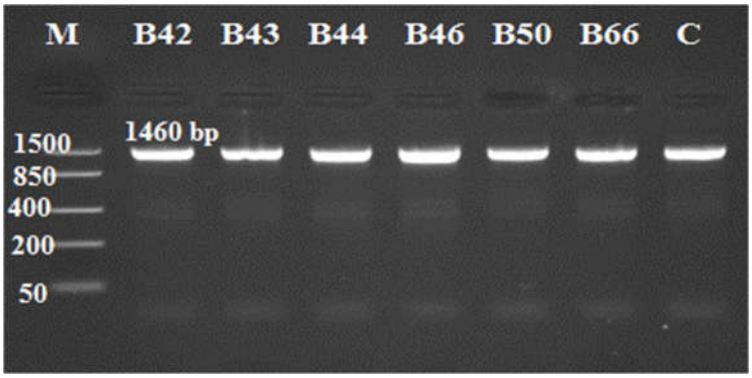
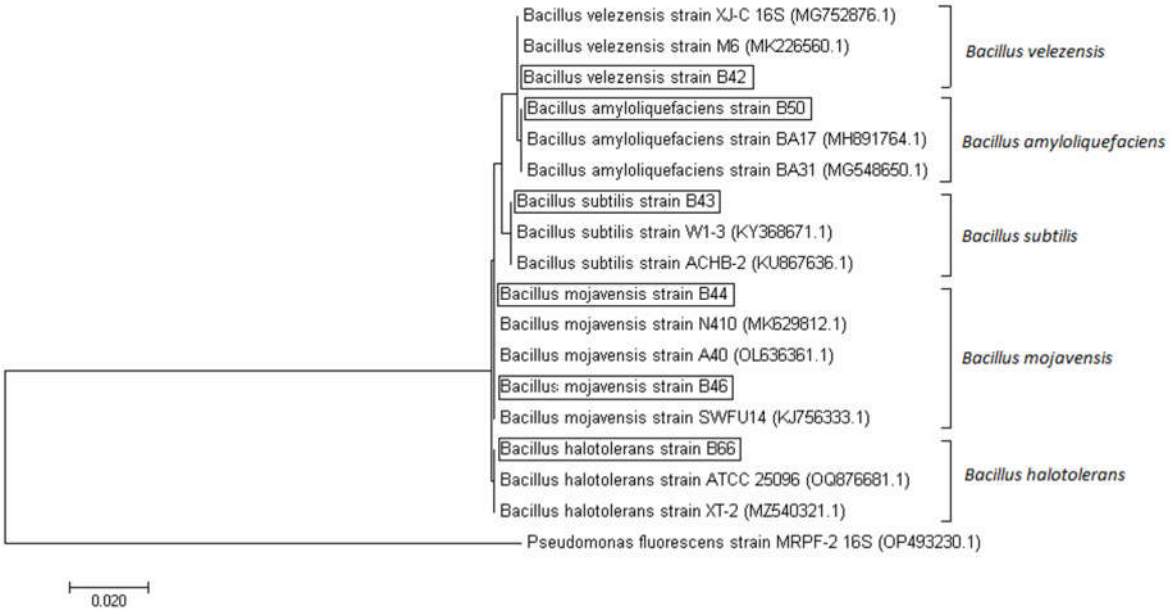
**Supplementary Material**




***Supplementary Materials Figure S1.*** Polymerase chain reaction (PCR) screening for 16S rDNAgene (~1460 bp) in selected *Bacillus* spp. isolates (B42, B43, B44, B46, B50, B66). (M) PCR marker (Step Ladder, 50–1500 bp), (C) positive control (*B. subtilis* B32).

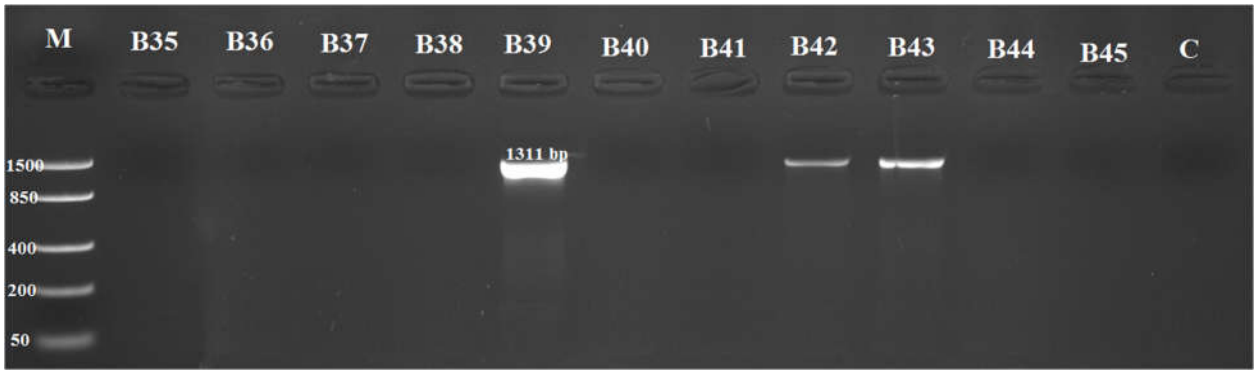



***Supplementary Materials Figure S2***. Phylogenetic tree based on the neighbor-joining (NJ) analysis of 16S rDNA gene sequences for selected *Bacillus* spp. isolates (*B. velezensis* B42; *B. subtilis* B43; *B. mojavensis* B44, B46; *B. amyloliquefaciens* B50; *B. halotolerans* B66) and related *Bacillus* spp. strains from the NCBI database.

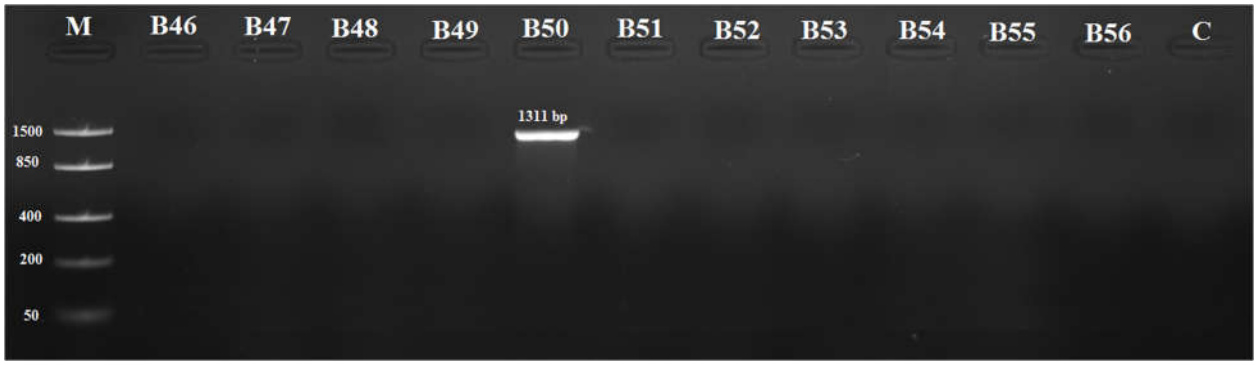
***Supplementary Materials Table S1.*** Primers and corresponding genes for PCR detection of lytic enzymes and cyclic lipopeptides

| Target Gene | Primers | Sequence (5′-3) | Amplicon size (bp) | Reference |
|---|---|---|---|---|
| *ChiA* | Qchi-f | 5′-GATATCGACTGGGAGTTCCC-3′ | ~225 | [29] |
| | Qchi-r | 5′-CATAGAAGTCGTAGGTCATC-3′ | | |
| Endoglucanase | EN1F | 5′-CCAGTAGCCAAGAATGGCCAGC-3′ | ~1311 | [30] |
| | EN1R | 5′-GGAATAATCGCCGCTTTGTGC-3′ | | |
| *Sfp* | Sfp-f | 5′-ATGAAGATTTACGGAATTTA-3′ | ~675 | [29] |
| | Sfp-r | 5′-TTATAAAAGCTCTTCGTACG-3′ | | |
| *BamC* | Bacc1-f | 5′ -GAAGGACACGGAGAGAGTC-3′ | ~875 | [29] |
| | Bacc1-r | 5′-CGTGATGACTGTTCATGCT-3′ | | |
| *ItuA-ItuB* | ITUP1-F | 5'-AGCTTAGGGAACAATTGTCATCGGGGCTTC-3' | ~2000 | [27] |
| | ITUP1-R | 5'-TCAGATAGGCCGCCATATCGGAATGATTCG-3' | | |
| *FenD* | FenD1-f | 5′-TTTGGCAGCAGGAGAAGTTT-3′ | ~964 | [29] |
| | FenD1-r | 5′-GCTGTCCGTTCTGCTTTTTC-3′ | | |

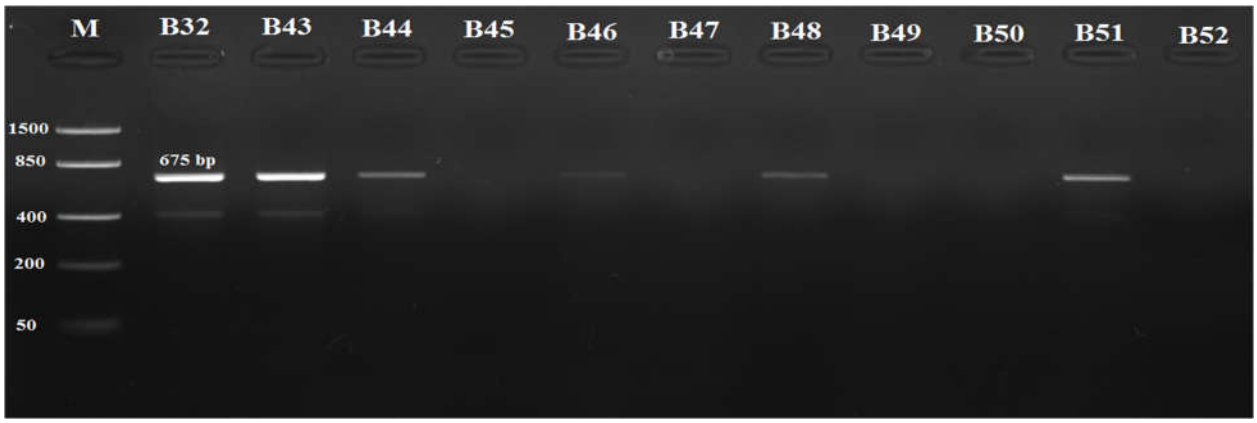
*ChiA*, endoglucanase, *Sfp*, *BamC*, *ItuA-ItuB*, and *FenD*: Genes encoding for chitinase, endoglucanase, surfactin, bacillomycin D, parts of the genes *ituA* and *ituB* and intergenic sequences between them, and fengycin , respectively.



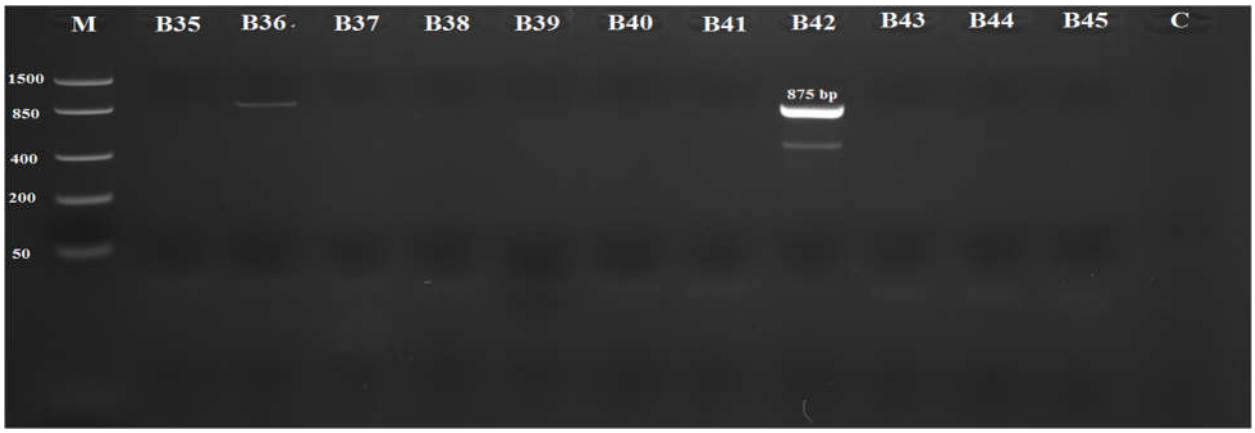

***Supplementary Materials Figure S3.*** Polymerase chain reaction (PCR) screening for endoglucanase biosynthetic gene (~1311 bp) in *Bacillus* spp. isolates (B35–B45). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.



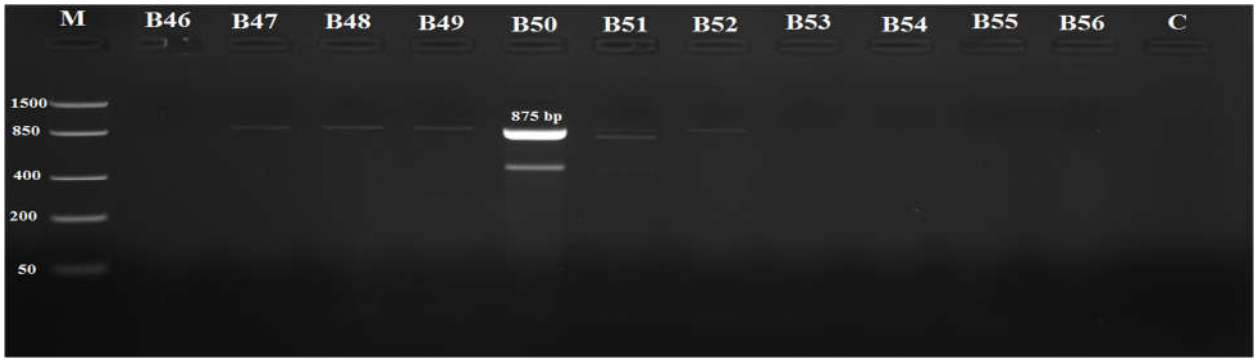

***Supplementary Materials Figure S4.*** Polymerase chain reaction (PCR) screening for endoglucanase biosynthetic gene (~1311 bp) in *Bacillus* spp. isolates (B46–B56). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.



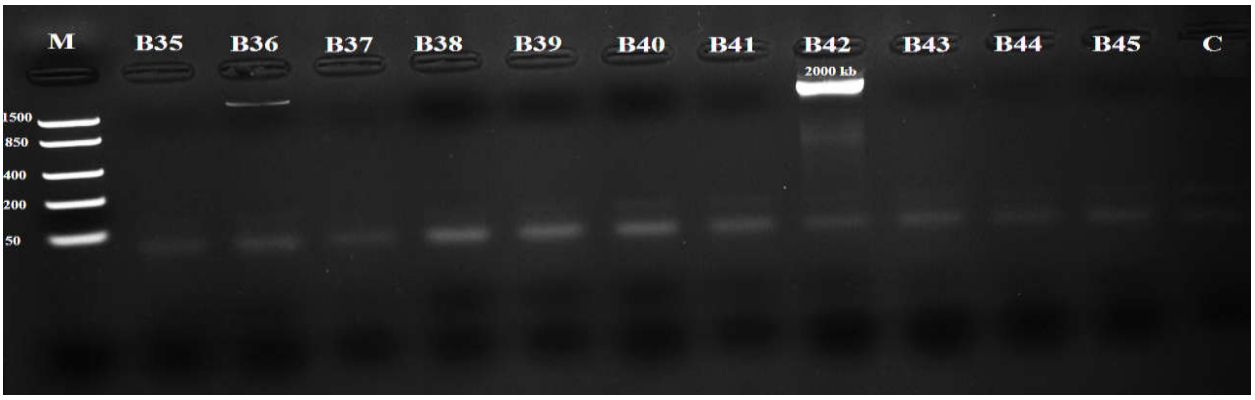

***Supplementary Materials Figure S5.*** Polymerase chain reaction (PCR) screening for surfactin biosynthetic gene (~675 bp) in *Bacillus* spp. isolates (B43–B52). (M) PCR marker (Step Ladder, 50–1500 bp), (B32) positive control, (C) negative control.



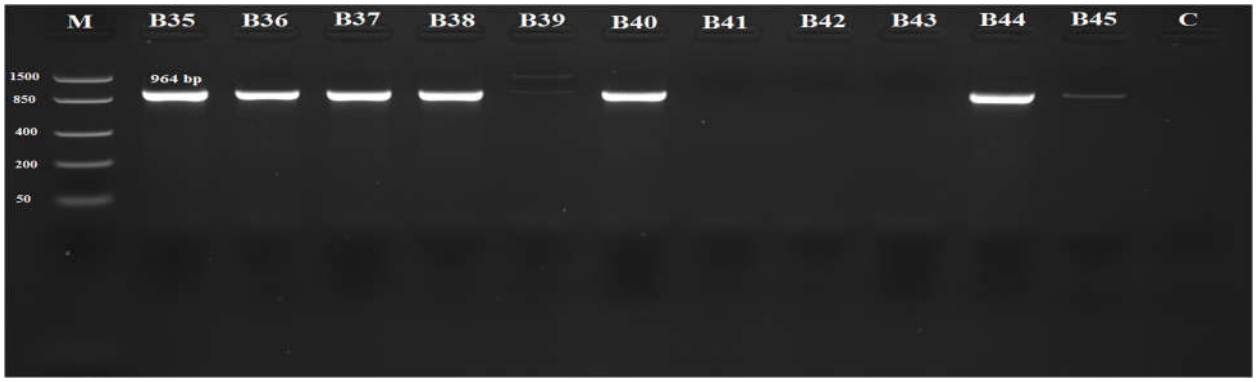

***Supplementary Materials Figure S6.*** Polymerase chain reaction (PCR) screening for bacillomycin biosynthetic gene (~875 bp) in *Bacillus* spp. isolates (B35–B45). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.



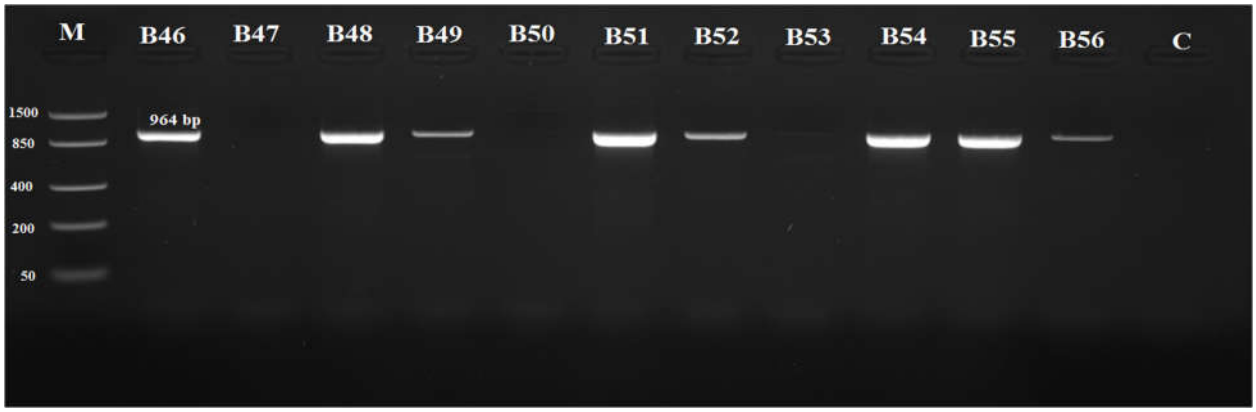

***Supplementary Materials Figure S7.*** Polymerase chain reaction (PCR) screening for bacillomycin biosynthetic gene (~875 bp) in *Bacillus* spp. isolates (B46–B56). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.




***Supplementary Materials Figure S8.*** Polymerase chain reaction (PCR) screening for iturin biosynthetic gene (~2000 bp) in *Bacillus* spp. isolates (B35–B45). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.




***Supplementary Materials Figure S9.*** Polymerase chain reaction (PCR) screening for fengycin biosynthetic gene (~964 bp) in *Bacillus* spp. isolates (B35–B45). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.




***Supplementary Materials Figure S10.*** Polymerase chain reaction (PCR) screening for fengycin biosynthetic gene (~964 bp) in *Bacillus* spp. isolates (B46–B56). (M) PCR marker (Step Ladder, 50–1500 bp), (C) negative control.