



ABSTRACT

The objective of this study was to produce antimicrobial compounds from *Bacillus subtilis* DSM 10. In this research, bacilysin and fengycin were produced. Yield was obtained by using solid state fermentation. The optimal conditions of temperature, pH and minerals were maintained, and the bioassays of the produced antimicrobial substances were conducted.

The antimicrobial compounds synthesized in the laboratory were synthesized using fermentation methods. The fermentation conditions were later optimized to get the maximum yield of the antimicrobial substances. Antimicrobial compounds were tested for various other bacteria and the inhibition zones calculated were reported.

Thus, optimal conditions were reported to give better yield of the antimicrobial compounds from *Bacillus subtilis* DSM 10.