

PRODUCTION OF AN ANTIFUNGAL COMPOUND BY HALOPHILIC BACILLUS SUBTILIS NA-17

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Abstract

A large number of isolates, from a hypersaline soil were screened for the production of antifungal compounds. We report here the production and characterization of an antifungal compound from a halophilic isolate of *Bacillus subtilis* NA-17. The compound was proteinaceous in nature and active against *Fusarium solani*, *Aspergillus niger*, *Candida albicans* and *Cryptococcus* sp. The compound was produced from growth of NA-17 in modified glycerol asparagine (GA) medium in a fully automated bioreactor. The active compound was purified using a standard solvent extraction procedure followed by chromatographic separation. This is the first report of the production of a proteinaceous antifungal compound from the halophilic *Bacillus subtilis* strain NA-17.

Keywords : Halophilic *Bacillus subtilis*, antifungal compound, active against *Fusarium solani*, *Aspergillus niger*, *Candida albicans* and *Cryptococcus* sp.