



Category: Miscellaneous

Genetic diversity of Antimicrobial compound producing *Bacillus subtilis* isolated from Lonar lake, India

R.D. Barde¹ and S.M. More^{2*}

¹Department of Zoology, SGB Mahavidyalaya, Purna Dist Parbhani 431511, INDIA

²Department of Microbiology, Yeshwant College, Nanded 431602, INDIA

Presenting and *Corresponding author: drsanmore@gmail.com

Abstract

The halophilic and alkaliphilic *Bacillus subtilis* isolates were isolated from Alkaline Meteorite Crater Lake Lonar situated in district Buldhana, India and were subjected to primary screening for antimicrobial compound production. The antibiotic producing ability of the halophilic and alkaliphilic *Bacillus subtilis* were compared by screening the activity of the antimicrobial compound was determined against different microorganisms like, *Staphylococcus aureus*, *E. coli*, *P. aeruginosa*, *Candida tropicalis*, *Candida parapsilosis*.

Repetitive DNA polymerase chain reaction-based fingerprinting (rep-PCR) using repetitive extragenic palindromic (rep) and enterobacterial repetitive intergenic consensus (ERIC) and BOX primers were used to assess the genetic diversity. Cluster analysis done by combining the banding patterns of REP-PCR, ERIC-PCR and BOX-PCR clearly separated two diverse groups within species.

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