IJBAF, December, 2013, 1(12): 547-550

ISSN: 2320 – 0774

International Journal of Biotechnology and Allied Fields (IJBAF)

www.ijbaf.com

' Connecting Researchers... '

SCREENING OF SOIL BACTERIA FOR ANTIBACTERIAL COMPONENTS

KHAN JA[1*] AND MISHRA PK[2]

1: R&D Division, MRD LifeSciences (P) Ltd., Lucknow, Uttar Pradesh, India

2: Dr. M.P.S College of Business Studies, Agra, Uttar Pradesh, India

***Corresponding Author: E Mail:** jahir.mrdls@gmail.com

ABSTRACT

Antibacterial is a widely studied group of antimicrobials. Most of the antimicrobials use are from the bacteria. Bacteria are easy to isolate, culture, maintain and to improve their strain. In the present study 28 bacterial colonies obtained from various soil samples were isolated by Serial dilution and crowded plate method. Then these 28 colonies were selected for secondary screening of antimicrobial production. These mixed cultures were further purified by Discontinuous Quadrant Streaking to obtain pure cultures of bacteria. Antibiogram analysis was performed by Agar Well Diffusion Method against three test pathogens which. *Escherichia coli, Staphylococcus aureus & Pseudomonas aeroginosa.* Culture number MJPM2013 25 was observed with clear and larger Zone of Inhibition against all the pathogens.

Keywords: *Bacillus megaterium*, Antimicrobials, Solvent Extraction

INTRODUCTION

An antibacterial is an agent that inhibits bacterial growth or kills bacteria. The term is often used synonymously with the term antibiotic(s). Today, however, with increased knowledge of the causative agents of various infectious diseases, antibiotic(s) has come to denote a broader range of antimicrobial compounds, including anti-fungal and other compounds. The term "antibiotic" was coined by Selman Waksman in 1942 to describe any substance produced by a microorganism that is antagonistic to the growth of other microorganisms in high dilution. This definition excluded substances that kill bacteria but are not produced by microorganisms (such as gastric juices and hydrogen peroxide). It also excluded synthetic antibacterial compounds such as the sulfonamides. Many antibacterial compounds are relatively small molecules with a