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ANTIBACTERIAL ACTIVITY OF EXTRACTS FROM NINE MEDICINAL PLANTS AGAINST MAJOR SKIN PATHOGENS

UDGIRE M[1*] AND PATHADE GR[2]

1: Manager, Rishi Biotech, Mumbai, India

2: Associate Professor and Head, Dept. of Biotechnology, Fergusson College, Pune, India

***Corresponding Author: E Mail: umeghna@yahoo.com; Tel: 022-40120576**

ABSTRACT

There is a continuous and imperative need to discover new antimicrobial compounds with novel chemical structures and properties. However, the present scenario of emergence of multiple drug resistance patterns among human pathogenic bacteria has necessitated a search for new antimicrobial substances from sources including plants. In the present study methanol extract of nine plants viz. *Allium sativum, Azadiracta indica, Bacopa monnerii, Eucalyptus camaldulensis, Ocimum basillicum*, *Piper longum , Syzygium aromaticum, Valneria wallchii, Vitis vinifera* were analysed against skin bacterial pathogens bacteria viz. *Staphylococcus aureus, Staphylococcus epidermidis, Escherichia coli*, *Klebsiella pneumoniae* ,*Pseudomonas aeruginosa, Proteus mirabilis* and *Proteus vulgaris*. The in-vitro antibacterial activity was performed by agar well diffusion method. Amongst the plant species studied, methanol extract from *Syzygium aromaticum and Eucalyptus camaldulensis* showed the best broad spectrum antimicrobial activity.

Keywords: Skin Pathogens, Antibacterial, Medicinal Plant

INTRODUCTION

Skin is often known as largest organ of the human body. As the primary interface between the body and exterior environment, skin provides the first line of defense against broad injury by microbial pathogens. It has been estimated that skin diseases account for 34% of all occupational diseases, most of them are caused as a result of the skin invasion by pathogenic microorganisms **[1]**. Additional factors such as immune deficiency diseases, diabetes mellitus and systemic or