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PHYTOCHEMICAL PROPERTIES AND ANTIBACTERIAL ACTIVITY OF *Calotropis procera* EXTRACT AGAINST HUMAN PATHOGENS

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Calotropis procera is a shrub or small tree, rarely branched, woody and fissured. In the present study, the leaves and latex extracts of *C.procera* were investigated for invitro antibacterial activity and phytochemical analysis. The antibacterial activity of *C.procera* was studied using disc diffusion method and the activity was tested against the human pathogens like *E.coli, Pseudomonas aeruginosa, Staphylococus aureus, Enterobacter feacelis.* On the basis of zone of inhibition the results have been illustrated. It is suggested that the leaves and latex of this plant contain good antibacterial activity that could be developed and used as natural antibacterial agents.

INTRODUCTION

Medicinal plants being an effective source of both traditional and modern medicines are genuinely useful for primary healthcare. Plants have been rich source of medicines because they produce wide range array of bioactive molecules. It was further added that the use of plant extracts and phytochemical with antimicrobial properties may be of importance in therapeutic treatments (Agharkar, 1991). It is therefore pertinent to investigate such plants thoroughly to determine their pharmacological properties as well as the efficiency of their various parts for antimicrobial activities (Ellof, 1998).

Calotropis procera is a shrub or small tree, stem usually simple, rarely branched, woody at base and covered with a fissured, corky bark, early glabrescent parts of the plant exude white latex when cut or broken. *C.procera* is drough resistant, small-tolerant to a relatively high degree.

It is a small to medium - sized upto 5.5m high, occasionally branches to a height of 2.5m.The bark is fibrous, scally, deeply fissured when old, grey to light brown. It is commonly called the Sodom apple (Dalziel,1937).The present work reports the phytochemical properties and antibacterial activities of the extracts of leaves and latex of *C. procera*.

MATERIALS AND METHODS

Collections of plant materials

The fresh and disease free *C.procera* plants were collected from road sides. The plant was first identified at the field using standard keys and descriptions (Gill, 1987).The leaves were

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