

**EXTRACTION OF SECONDARY METABOLITES AND ANTIMICROBIAL
STUDIES ON *MOMORDICA.CYMBALARIA* (FENZYL EX NAUDIN)
AN ENDANGERED MEDICINAL PLANT**

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ABSTRACT

Momordica. Cymbalaria is a medicinal plant of family Cucurbitaceae, and is herbaceous annual or perennial climber, commonly used as medicinal vegetable for cooking purpose. Generally it is distributed in tropical zones of Deccan plateau. In Karnataka, it is found in Raichur, Bellary, Bijapur, and Gulbarga regions, well known as karchikayee. The present study was carried out to explore the phytochemical constituents and antimicrobial activity of fruit *Momordica. Cymbalaria* in comparison with standard antibiotics. The antimicrobial activity of petroleum ether, chloroform, ethanol and aqueous extracts from fruit of the plant was studied using *Escherichia. Coli*, *Salmonella typhi*, *Staphylococcus aureus*, *Vibrio cholera*, *Klebsiella pneumonia* as test organisms, all the extracts were effective against all the five microorganisms. The result reveal that the fruit of *M. cymbalaria* has very good anti-microbial activity against gram negative and gram positive organism when compared to standard antibiotics. The chloroform and ethanol extract has shown significant activity against all the organisms but rather more towards *Escherichia Coli*, *Salmonella typhi*. Similarly, petroleum ether and aqueous extract of plant also showed good inhibition against *Vibrio cholera* and *klebsiella*. This indicates the fruit of *M. cymbalaria* has potential antimicrobial activity with concentration dependent and can fight against these organisms and could be a good substitute to the contemporary medicines.

KEYWORDS: *Momordica cymbalaria*, Antimicrobial Activity, Phytochemical Constituents

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