

EVALUATION OF ANTIMICROBIAL AND ANTIOXIDANT ACTIVITY OF CRUDE METHANOL EXTRACT AND ITS FRACTIONS OF MUSSAENDA PHILIPPICA LEAVES

Debashisa Mishra¹, Susanta Kumar Rout² & GB. Alaka Kar³

^{1,3}Research Scholar, IMT Pharmacy College, Puri, Odisha, India

²Research Scholar, Department of Science & Technology, Patent Information Centre, Odisha, India

ABSTRACT

Aim: To evaluate the antimicrobial and antioxidant activities of crude methanol extract and its fractions of the leaves of *Mussaenda Philippica*.

Methods: MIC through disc diffusion methods and MBC are two methods to evaluate the antimicrobial activities. For studying the antioxidant activity the free radical scavenging was studied in vitro method by measuring DPPH, Hydrogen peroxide scavenging activity, Superoxide free radical (O₂) and Nitric oxide (NO) free radical scavenging activity measured by considering standard antioxidant e.g. ascorbic acid.

Results: The test compounds like different fractions i.e. chloroform, methanol and ethyl acetate and crude methanol extract produced significant effect both in antioxidant as well as antimicrobial activities. Different microorganisms namely. *E. faecalis*, *S. aureus*, *A. baumannii*, *E. coli*, *P.merabilis*, *P.aeruginosa* are responded in higher concentration all the test compounds. Different fungal strains like *C.albicans* and *A. niger* are not inhibited by different test compounds.

Conclusions: The results revealed that the crude methanolic extract and different fractions like methanol and ethyl acetate are produces remarkable antimicrobial and antioxidant activities. It may assume that the activity of the test compound may be due to the active compounds such as flavonoids, terpenes, alkaloids and saponins.

KEYWORDS: *Musa Philippica*, Antimicrobial, Antioxidant, MIC

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