

Effective Utilization Of *Ocimum Tenuiflorum* in Tropical Environment for Therapy and Reinforce the Importance of Eno-Botanical Approach as Potential Source Of Bioactive Substances.

Mohammed Ahmad Abba Kaka*¹ and Abdullateef Baba²

¹Intergrated Science Department, Umar Ibn Elkanemi College of Education, Science and Technology, P.M.B. 16, Bama, Nigeria.

²Chemistry Department, Faculty of Science, University of Maiduguri, P.M.B. 1069, Maiduguri, Nigeria

***Corresponding Author:** Mohammed Ahmad Abba Kaka

E-mail: ahmad04589@gmail.com;+2348089076149

ABSTRACT

The medicinal plants are widely used by the traditional practitioners for curing various diseases in their day to day practice. In traditional system medicine of medicine, *Ocimum tenuiflorum* have been recommended for the treatment of bronchitis, malaria, diarrhea, dysentery, skin diseases, arthritis etc. It possess antifertility, anticancer, antidiabetic, antifungal, antimicrobial, cardioprotective, analgesic, antispasmodic and adoptogene action. The methanolic leaf extract of *Ocimum tenuiflorum* action was subject to phytochemical screening and antimicrobial test. The extract revealed the presence of cardioglucoside, terpenoid, saponin glucoside, flavanoid, carbohydrate. The antimicrobial activity of the plant extract assayed by the agar plate disc diffusion and natures broath delusion techniques test organisms were *Staphylococcus*, *Streptococcus pyogenes*, *Bacillus substilis*, *Corynebacteria*, *Escherichia coli*, *Salmonella typhi*, *Klepsiella pneumonia*, *Pseudomonas aeroginosa* and *Candida albica*. The extract inhibited the growth of all the tested Organisms especially against *Pseudomonas aeroginosa*. The extract inhibited the entire tested organism, with all various concentrations except *candida*, *anbica*, *Escherichia coli* and *Klepsiella pneumonia*. It showed a Minimum Inhibitory Concentration (MIC) of 12.5 mg/ml and 6.2 mg/ml against *Bacillus substillis*, *Corynebacteria species*, *Pseudomonas aeroginosa* while MIC against *Bacillus substillis* were 100 mg/ml respectively. The minimum bacteria concentration (MBC) was 25 mg/ml, 12.5 mg/ml and 6.25 mg/ml against *Bacillus substilis*, *Corynebacteria species*, *Pseudomonas aeroginosa* with MBC was 50 mg/ml against *Bacillus substilis*. Therefore, it was concluded that this study laid credibility for the use of the plant. *Ocimum tenuiflorum* have been found to be largely responsible for the therapeutic potentials.

Key Word: *Ocimum Tenuiflorum*, Medicinal, Environment, Therapy, eno-botanical, bioactive,