



---

**ANALYSIS OF PHYTOCHEMICAL CONSTITUENTS AND ANTIBACTERIAL  
ACTIVITIES OF *CLERODENDRON INERME* L. AGAINST SOME SELECTED  
PATHOGENS**

**ANANDHI K\* AND USHADEVI T**

PG & Research Department of Biotechnology, PRIST University, Thanjavur, Tamil Nadu, India

\*Corresponding Author: E Mail: [rkanandhiigc@gmail.com](mailto:rkanandhiigc@gmail.com)

**ABSTRACT**

The aim of the study was to investigate the *Clerodendron inerme* phyto chemical compounds and antimicrobial activity of different extracts. The phyto chemical compound screened by qualitative and GC-MS method. Qualitatively analyzed tannin, saponin, flavonoids and terpenoids gave positive results and phlobactanins and steroids gave negative results. In the GC-MS analysis, 21 bio active phytochemical compounds were identified in the ethanolic extract of *Clerodendron inerme*. Three different solvents such as aqueous, ethanol and chloroform were used to extract the bioactive compounds from the leaves of *Clerodendron inerme* to screen the antibacterial activity selected plant pathogens by agar diffusion method. The maximum anti bacterial activities were observed in ethanol extracts ( $0.30 \pm 0.10$  nm,  $1.23 \pm 0.05$ nm). Other than aqueous extract chloroform extract. *Clerodendron inerme* plant extract with ethanol can be used as antibacterial agents.

**Keywords: *Clerodendron inerme* , Phytochemical, Antibacterial**

**INTRODUCTION**

Plants have been an important source of medicine for thousands of years. Even today, the world Health Organization estimates that up to 80% of people still take traditional remedies such as herbs for their medicines. Its civilization is very ancient and the country as

a whole has long been known for its rich resources of medicinal plants. Today, Ayurvedic, Hoemoeo and Unani Physicians utilize numerous species of medicinal plants that found their way a long time ago into the Hindu Material Media [1]. Screening