2. AIM AND OBJECTIVES

Ethno-medical importance of various species of *Clerodendrum* genus has been reported in various indigenous systems of medicines and as folk medicines. The genus is being used as medicines specifically in Indian, Chinese, Thai, Korean, Japanese systems of medicine for the treatment of various life threatening diseases, majorly in asthma and inflammation. Literature survey reveals *Clerodendrum* species useful in bronchitis, asthma, inflammations, fevers, tonic antiperiodic and syphilitic rheumatism (Anonymous, 1991). However, *Clerodendrum splendens* has not been comprehensively researched in terms of pharmacognostic, phytochemistry and pharmacological activities. Further, no scientific work is yet reported on *Clerodendrum splendens* plant regarding its pharmacognostic profile helpful in developing standards for quality, purity, identification along with chemical constituent & anti-asthmatic, anti-inflammatory potential. In present work leaves, stem and flowers of *Clerodendrum splendens* (Verbenaceae) plant are selected for pharmacognostic, phytochemical and pharmacological investigations.

In present work; leaves, stem and flowers of *Clerodendrum splendens* were selected for the study and investigated.

1. To study the pharmacognostic parameters of plant part to enable their identification and authentication.
2. To investigate the biological activity based on ethnomedicinal information.
3. To isolate & purify phytoconstituents from extracts of stem, leaves and flower.
4. To characterize the isolated phytoconstituents by advanced analytical technique like UV/VIS Spectrophotometer, FTIR, HNMR, CHNO, GCMS and LCMS.
5. Standardization of marketed Ayurvedic formulation with the marker compounds present in active plant extract, quantification by HPTLC.
6. Design of suitable Drug delivery system for active isolated compound.