

Abstract:

The medicinal plant *Calotropis gigantea* has been used in Ayurveda. This medicinal plant has great potential for treating a wide range of conditions that have plagued people throughout history. We generated extracts from the leaves of *Calotropis gigantea* with ethanol, methanol, and n-hexane as different solvents. Different phytochemical bioactive components from each type of extract were discovered using LC-MS analysis. Different methods were used to assess the antimicrobial activities of leaves extract. Antibacterial activity against various bacterial strains gram-positive (*Bacillus subtilis*, *Bacillus muralis*) and gram-negative (*E. coli*, *Acetobacter rhizospheres*) were assessed using the well-diffusion method. The ABTS and DPPH tests were used to detect antioxidant activity. The results of this investigation suggest that *C. gigantea* is a potential source of antioxidant and antibacterial agents.