

Herbals & Natural Remedies

October 26-27, 2015 Chicago, USA

Unravelling the medicinal potencies of unexploited species of Gentianaceae family: Exacum pedunculatum

Lakshmi Huttada

Karnatak University, India

Natural products and medicine have been closely linked from the ancient times through the traditional practices. Plants belonging to the family Gentianaceae are used in herbal medicine to treat various ailments. Scientific developments have allowed progress in understanding the mechanism of action of the traditional medicines. Although most herbal medicines have a long history of traditional use, only their experimental validation gives a clear idea about its safety and efficacy. Exacum Pedunculatum is phytochemically unexplored, traditional medicinal herb. Because of its bitter taste, local people used it as a remedy for diabetes and skin diseases. Present study provides a thorough assessment of the profile of the plant to ensure the rational use in diabetes management. The identification, isolation and biological studies like preliminary phytochemical analysis, Thin layer chromatography, UV-Visible spectroscopy, FT-IR, HPTLC, GC-MS, NMR studies were performed on the plant extract of Exacum pedunculatum. In vivo validation provides an indication of the relative toxicity of the plant. By anticipating potential toxicities or possible herb-drug interactions, by in vivo studies, key parameters like adsorption, distribution, metabolism, and excretion were screened for the use of plant in therapeutic management. Further, analyzing the results of the molecular composition of the extract as potential candidates for developing new therapeutic agents, implication of bio-informatics tools to predict the properties of biologically active components by docking with natural ligands was done for future studies towards therapeutic inventions of diabetes mellitus.

Biography

Lakshmi Huttada has completed her Master's degree in Biotechnology from Kuvempu University, Karnataka and presently pursuing Doctoral studies in the Department of Biotechnology in Karnatak University, Dharwad, India. She worked as Senior Research Fellow in a DBT project titled "Comparative Analysis of Functional and Anonymous SNP Diversity in Legumes: PCR based direct (gene based) and indirect (marker-based) tools for Legume Genome Analysis", in Marker Assisted Selection Laboratory, Gandhi Krishi Vignana Kendra, University of Agricultural Sciences, Bangalore, Karnataka, India.

huttada.lakshmi@gmail.com

Notes: