

Abstract

Traditional Herbal Medicine Systems (THMS) also known as Complementary and Alternative Systems of Medicine (CAM) are one of the most researched fields in today's time. Genus *Ixora* belonging to the Family Rubiaceae also known as the Madder family is comprised of 500 species and is one of the most researched herbal plants today. *Ixora* a tropical and subtropical shrub is widely distributed and cultivated on Asian, African, and European soil. Ethnic groups have been widely incorporating various parts of the *Ixora* plant (flowers, leaves, stems, and roots) into Ayurveda for centuries now to treat various ailments. Due to the vast use of Genus *Ixora* in traditional medicine, researchers felt the need to develop the phytochemical profile of its various species. *Ixora parviflora* one of the most famous *Ixora* specie is being researched in today's time. Phytochemical investigations carried out on the plant have revealed its rich phytochemical profile consisting of a wide range of phenolic compounds, poly-sterols, Terpenoids, etc. The phytochemical studies carried out have revealed the composition of the plant extract and helped develop an extensive pharmacological profile in the process with good anti-microbial and anti-oxidant properties thus providing scientific proof of the plant's ethno-medicinal uses. The phytochemical profile also gave evidence of the presence of bio-reducing agents that led to the synthesis of Ag-Nanoparticles. The UV-VIS and FTIR analysis confirmed the formation of Biogenic Ag-NPs.