PHYTOCHEMISTRY, PHARMACOGNOSY AND ANTIMICROBIAL ACTIVITY OF SOME MEDICINAL PLANTS OF KAKKAYAM FOREST, KOZHIKODE IN KERALA

JOSHY ANTONEY and A. JOHN DE BRITTO

Department of Botany,
St. Xavier’s College (Autonomous), Palayamkottai.
Tirunelveli, Tamil Nadu, India

ABSTRACT

Plant based drugs have been used worldwide in traditional medicines for treatment of various diseases. India is the largest producer of medicinal herbs and appropriately called the ‘Botanical garden of the world’. New drug discoveries have shifted attention from synthetic models and compounds to natural products of plants origin. So the present investigation is aimed to investigate the phytochemistry, pharmacognosy and anti-microbial activity of leaves of *Embelia ribes* and roots of *Chonemorpha fragrans* of Kakayam forest of Kozhikode in Kerala. Pharmacognostical characters like microscopic, physicochemical analyses and fluorescence analysis of powdered drug was carried out along with quantitative and qualitative investigation of phytochemical analysis. The extracts of the plant also tested against various microorganisms and cell lines for the investigation of antimicrobial property and anti-cancerous property. The various results of the plants clearly indicate that the two medicinal plants, *Embelia ribes* and *Chonemorpha fragrans* possess very unique, macroscopic, microscopic, phytochemical, antimicrobial and anticancerous properties. These findings will be useful for establishing pharmacognostic standards on identification, quality, purity and classification of the plant in drug research. It may also help in the discovery of new chemical classes of antibiotic and anticancerous drugs. Further studies on *Embelia ribes* and *Chonemorpha fragrans* are warranted inorder to isolate, identify, charactarize and elucidate the structure of the bio-active compounds.

**Keywords:** Pharmacognosy, *Embelia ribes*, *Chonemorpha fragrans*, Phytochemistry, Biological activity.