

Study of acute toxicity and behavioral changes in mice using various extracts of leaf and bark of *Holoptelea integrifolia* Planch.

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Phytochemicals of natural origin are the important source of bioactive compounds used in the treatment of various diseases and development of novel therapeutic agents. Plants constitute approximately 25% of prescribed medicines. Among the known plant species small percentage investigated phytochemically and pharmacologically. The medicinal plant product as subject matter of pharmacognosy was directly and closely connected with traditional knowledge of its use. Scientific advancement within the area of medicinal plant research proceeded mainly with respect to the biological and the chemical nature of plant drugs. In present investigation various parts of *Holoptelea integrifolia*, is selected which was indicated by Charaka Samhitha, Sushrutha Samhitha and other traditional systems used for the treatment of inflammations, acid gastritis, dyspepsia, flatulence, colic, intestinal worms, vomiting, wounds, vitiligo, leprosy, filariasis, diabetes, haemorrhoids, dysmenorrhoea and especially in rheumatism.

In acute toxicity (single dose) study, the drug i.e., various extracts of dried leaves and bark of using petroleum ether, chloroform, ethyl acetate and methanol in the doses like 100mg, 200mg, 400mg, 600mg, and 1000mg were given orally and observed continuously and carefully for 2 hrs followed by occasionally for further 4 hrs, and the behavior and mortality of mice was observed up to 24 hrs. To determine the gross behavior and LD₅₀/MLD. Therefore the toxicity study of a new chemical entity or crude extracts of plant material was essential and animal toxicity data may give little guidance to hazards in human beings and observation of behavioral changes will guide to go for further screening of the proposed pharmacological activities.

Biography

Padmaja V completed M.Pharm from Kakatiya University Warangal, Andhra Pradesh and now pursuing her Ph.D. under Jawaharlal Nehru Technological University Hyderabad, Andhra Pradesh. She is working as an Assistant Professor in the Department of Pharmacognosy in Vaagdevi Institute of Pharmaceutical Sciences, Warangal. She has published two papers in reputed journals and has presented many oral and poster presentations in various seminars.