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Antioxidant and anti-epileptic activity of *Acalyphaindica* leaf extracts

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People of uttermost parts of the world are eagerly looking for the all time best remedies of herbal drugs.Nowadays herbal drugs came to scene and drawing focus because of their efficacy and cost effectiveness. According to W.H.O. from ancient times to this modern Era recognition and application of herbal drugs is greatly appreciated. The present study was designed to evaluate the phytochemical composition, antioxidant and anti-epileptic activities of methanoland hexaneextracts of *Acalyphaindica*. *Acalyphaindica* has been extensively used in Ayurveda system of medicine for various ailments.It belongs to the family Euphorbiaceae. It occurs throughout tropical India and Sri Lanka and in South Africa, as well as in Pakistan. The leaf extracts possesses steroids, triterpinoids, saponins, flavonoides, carbohydrates, glycosides, amino acids and phenolic compounds. The obtained extracts were tested for antioxidant activity was studied using DPPH, ferric educing antioxidant potential (FRAP), thiobarbituric acid (TBA), respectively. From the two extracts, the methanol extract showed good antioxidant activity compared to hexane.Of the various methods used for inducing experimental epileptic models, the intracortical administration of ferric chloride (FeCl(3)) into sensorimotor cortex induces recurrent seizures and epileptic discharge in S.D rats. Study was observed on effect of Acalypha extract on the behavioralchanges in FeCl(3)-induced rat epileptogenesis. Topical administration of FeCl(3) (5 microL; 100 mM) into the sensorimotor cortex of rats showed an increase in the wet dog shake behavior, spike wave discharges. Treatment with *Acalyphaindica*extract (200 mg/kg b.w., p.o. for 14 days) decreased the WDS behavior.This study clearly showed that methanol extract of *Acalyphaindica*possesses the ability for preventing the development of FeCl(3) induced epileptogenesis, which in turn exhibit the potentiality of *Acalyphaindica* to be developed as an effective anti-epileptic drug.

Biography

Anupalli Roja Ranil had completed her Bachelor's, Master's degree from Osmania University and Ph.D. in Life Science (Plant science Biotechnology) from Hyderabad Central University, Hyderabad under the guidance of Dr. G. Padmaja. She joined the University with teaching as my basic criteria and served as Assistant Professor in Department of Genetics, Osmania University for 2years and in College for Women, Koti for 5 years. Then she came back to University College of Science, Osmania University and stated my research along with teaching. Currently, she is working as Associate professor, Chairperson BOS in Genetics, Incharge Plant Genetics and Deputy Director for UGC, CAS project in the Department of Genetics, Osmania University. She has completed UGC MJRP project, while UGC-CEPEPA, DST PURSE and DST EMPRO funded projects are in progress. She has 19 publications in International journals. She was selected for Raman Fellowship for Post-Doctoral Research in United States of America for the year 2013-2014. Her group have identified new principle compound (Acemannan) from Aloe CIM Sheetal and applying for patent. Her area of research interest includes plant tissue culture, plant transformation, molecular biology, qualitative and quantitative assessment of biochemical compounds of medicinal value. Currently, eight students are working for their Ph.D. degree and 3 Project students under my supervision.

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