



## Antiepileptic Activity of Nelumbo Nucifera Fruit

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### Abstract

Epilepsy is the most commonly encountered neurological disorder affecting around 70 million people worldwide, out of which approximately 80% belongs to developing countries. Several shortcomings appeared with the use of conventional antiepileptic agents like, inadequate seizure control, side effects and cost which limit their use. Thus extensive studies are necessary to investigate the pharmacological effects of plants, which would facilitate discovery of novel drugs from herbal source permitting their use to benefit mankind. Hence current study was focused to evaluate the antiepileptic potential of Nelumbo nucifera fruit (NNF) in order to ascertain its therapeutic potential. Anti-epileptic activity was assessed using strychnine induced seizure model in 35 male Wister rats divided in five groups i.e. control, reference and 3 test groups. Each group was composed of 7 animals and was given 2% gum tragacanth (control), diazepam 1 mg/kg PO (reference) and NNF 50, 100 and 200 mg/kg PO (test) OD for 15 days. NNF extract at 200 mg/kg exhibited extremely noteworthy delay in the inception of convulsions as compared to control however duration of convulsions was increased significantly but intensity of convulsions was reduced resulting in better survival rate i.e. 42.85% which was comparable to diazepam. Therefore it can be concluded that NNF may be valuable in managing epilepsy but further preclinical and clinical trials are required to confirm these findings.

published 17 articles in journals of international repute which have been cited over 55 times and many articles are under peer review process. His research interest many encompasses Neuropharmacology and clinical Pharmacology. He has a teaching experience of more than 12 years and currently serving at Multan Medical & Dental College, Multan, Pakistan as Associate Professor in the Department of Pharmacology. He has attended many national & international conferences as speaker and OCM at various occasions.

### Speaker Publications:

1. Rajput M.A, Zehra T, Zafar S. "Toxicological evaluation of Nelumbo nucifera fruit ethanol extract"; IJPRAS. 2020/ 9(3): 1-13.
2. Rajput M.A, Khan R.A, Zafar S. "Assessment of anticoagulant activity of Nelumbo nucifera fruit"; Pak. J. Pharm. Sci. 2019/ 32(6): 2561-64
3. Khan R.A, Rajput M.A, Assad T. "Effect of Nelumbo nucifera Fruit on Scopolamine Induced Memory deficits and on Motor Coordination". Metab Brain Dis. 2018/ 34(1):87-92.
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5. Rajput M.A and Khan R.A. "Phytochemical screening, acute toxicity, anxiolytic and antidepressant activities of Nelumbo nucifera fruit"; Metab Brain Dis. 2017/32,743-749.

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### Biography:

Muhammad Ali is the young researcher and Medical doctor from Pakistan who has attained PhD and MPhil degrees in Pharmacology from University of Karachi, Karachi and MBBS degree from Liaquat University of Medical & Health Sciences Jamshoro, Pakistan. He is also a member of American Society of Pharmacology and Experimental Therapeutics i.e. ASPET. He is well oriented with scientific writing and has so far