

## **BIOPHARMACEUTICAL POTENTIAL OF NEMATOCYST VENOM OF CHIOPSALMUS QUADRIGATUS HAECKEL, 1880**

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### **Abstract**

Drug from marine species is drawing attention for the well being of humankind. The present study was taken up to establish the toxicity of this species, elucidate its chemical nature, and identify an antidote for the toxin. The *Chiropsalmus quadrigatus* venom contains less protein in 0.6 ml ( $1.264 \pm 0.16$ ) and more protein in 0.2ml fraction ( $1.602 \pm 0.14$ ). Significant lethal action of *C. quadrigatus* in mice required 2:36 min and toxicity of this lethal toxin increased beyond the initial level dosage. Induced with (0.25 ml) escape reaction was active and with (0.50 ml) the escape reaction was dull, in the case of (0.75 ml) symptoms appear to escape reaction, palpitation and with (1.0 ml) the symptoms of Grooming, very active, palpitation reaction were observed. High analgesic activity of tail flick response after 30 min by male albino mice is noted when injected with 25% of 0.50 ml crude ( $4.23 \pm 0.13$ ) and low analgesic activity was noted from 75% of 50 ml crude ( $0.84 \pm 0.06$ ). Estimation of protein from the venom, toxicity and analgesic activity on mice was elaborately discussed in this work.

*Keywords:* *Chiropsalmus quadrigatus*, Nematocyst, Biotoxin, Drug and Pharmacology.