



**EFFECTS OF *Cassiopea andromeda* (UPSIDE-DOWN JELLYFISH)  
EXTRACT TO THE NEURO-MUSCULAR REFLEXES OF  
*Mus musculus* (ALBINO MICE)**

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### ABSTRACT

The study focused on finding the LD<sub>50</sub> and the sub-lethal doses and on knowing the effects of the sub-lethal dosages of the extracted toxins of jellyfish *Cassiopea andromeda* whether it had an effect on the reflex of albino mice *Mus musculus* to the different tests such as tail pricking, flipping test and eye boggle. Extraction of the toxin was done in the simplest method where in the jellyfish was stressed and the toxin was collected with a medicine dropper. The toxin of *Cassiopea andromeda* was not found to have an enzyme namely the Two-D-Galactose binding lectin and heparin binding lectin that had an effect in the muscle contraction and relaxation. The toxin of *Cassiopea andromeda* was found to have an effect in Pain perception, Numbness and Balance. The effect of *Cassiopea andromeda* on the neuromuscular reflexes of *Mus musculus* proved this. The objective was obtained by finding that the LD<sub>50</sub> of the mice was 0.60cc or 60% of the toxin because half of the population were killed using this concentration. A dose higher than 0.60cc was found to kill the whole population. The effects of the toxin of upside-down jellyfish (*Cassiopea andromeda*) to the reflex of *Mus musculus* were found using different concentrations at 0.49cc, 0.43cc and 0.37cc. Different concentrations had different effects in the reflex of the *Mus musculus*. The reflex was tested using different tests namely the Eye Boggle Test, Flipping Test and Tail Pricking Test. This study found out that there was significant difference in the toxin of the upside-down jellyfish when it comes to tail pricking. The researchers concluded that upon doing this experiment there are things that should be focused on, specifically using time in seconds upon the administration of the toxin.



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