

SUB-CHRONIC TOXICITY STUDY OF THE SEEDS OF *SWIETENIA MACROPHYLLA* IN WISTER RATS

ABSTRACT : *The present investigation deals with sub-chronic toxicity study on Swietenia macrophylla seeds (Meliaceae) on wister albino rats in the amount of 500mg/kg, 1200mg/kg, 2000mg/kg body weight was administered orally for 28 days, in accordance with the Schedule Y of drugs and Cosmetic Act (1946). Healthy adult Wister strain albino rats of both sexes between 6-8 weeks of age and weighing 98-110 gms were used for the study. Animal were allowed to acclimatize for a period of 2 weeks in our laboratory environment prior to the study. The animals of both sex from control and different dose groups exhibited normal body weight gain throughout the dosing period of 28 days. Control group was consumed normal laboratory diet. The extract was found to be potent nontoxic as evidenced by mortality rate of 0%. The study was demonstrated by a significant result of haematology (haemoglobin, reticulocyte, hematocrit, neutrophils, lymphocytes, monocytes, $p<0.05$) and biochemical investigation (blood urea nitrogen, serum glutamic pyruvic transaminase, serum glutamic oxaloacetic transaminase, serum alkaline phosphatase, blood sugar, $p<0.05$) comparable to control group. The extract also showed there was no significant change in the organs of the wistar albino rat. No histopathological changes were noticed in liver, intestine, heart, kidney and stomach of the experimental group of animals.*

Key words: *Swietenia macrophylla seeds, Nontoxic, haematology, biochemical investigation and histopathology.*
