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Acute Oral Toxicity Study of Mystroxylon aethiopicum Root Bark Aqueous Extract in Albino Mice

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Abstract : Acute oral toxicity of Mystroxylon aethiopicum root bark aqueous was evaluated in albino mice of either sex. In this study, five groups of mice were orally treated with doses of 1000, 2000, 3000, 4000 and 5000 mg/kg body weight of the crude extract. The mortality, signs of toxicity and body weights were observed individually for two weeks. At the end of the two weeks study, all animals were sacrificed, and the hematological and biochemical parameters, as well as organ weights relative to body weight of each animal, were determined. No mortality, signs of toxicity and abnormalities in vital organs were observed in the entire period of study for both treated and control groups of mice. Additionally, there were no significant changes ($p > 0.05$) in the blood hematology and biochemical analysis. However, the body weights of all mice increased significantly. The Mystroxylon aethiopicum root bark aqueous extract were found to have a high safe margin when administered orally. Hence, the extract can be utilized for pharmaceutical formulations.

Keywords : acute oral toxicity, albino mice, Mystroxylon aethiopicum, safety
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