Toxicological Evaluation of the Ethanolic Extract of *Aristolochia bracteata* in Rabbits

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ABSTRACT

The herb *Aristolochia bracteata* is known in Sudan as Um Galagel and is extensively used in traditional medicine as anti-malarial, antipyretic and in treatment of snake bites. The plant is known to contain several chemical components such as aristolochic acid and aristolochine. This study was conducted to assess the toxicological effect of ethanolic extract of the vegetative parts of *Aristolochia bracteata* in New Zealand albino rabbits. A concentration of 20% ethanolic extract was tested in three groups of New Zealand rabbits, four animals in each. Groups 2, 3 and 4 were, respectively, orally dosed with 250, 500 and 1000 mg/kg bwt, daily for 28 days, while group 1 was left as untreated control. Blood samples were collected every week for haematological and serological examination and necropsy samples for histopathology. The extract showed 100% mortality after 7 days at all dose levels with a significant increase in the activities of the enzymes AST and ALT and in the concentration of creatinine, urea and uric acid and in MCHC. The histopathological examination revealed necrosis, congestion, haemorrhage and inflammatory cells infiltration in the liver, kidney, spleen, heart and intestine. The liver, also, showed fatty degeneration of the hepatocytes. The study concluded that this plant is contra-indicated in systemic treatment rather than topical application unless the safety margin between the curative dose and the minimum toxic dose is adjusted. Although many plants are used for traditional treatment and some of them respond in treatment of several complaints; however, many plants are used without solid scientific basis. They may have side effects or toxic properties that need investigation and evaluation.

Key words: *Aristolochia bracteata*; toxicity; rabbits
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