Toxicity of Acacia nilotica (Garad) to Nubian Goats

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Abstract: Variable plants present in nature are used by simple rural and urban people, researchers and drug manufacturers for medicinal purposes. Garad is one of the most commonly used in Sudan for both treatment and prophylaxis of infections in the respiratory, urinogenital tracts and the skin. Water exctracts from Acacia nilotica bods were used in this very experiment to test for their toxicity to Nubian goats at two dose rates under proper experimental conditions. The clinical, pathological, haematological and biological changes in Nubian goats given daily oral doses of 1 and 5 g/kg body weight of Acacia nilotica to two groups of test goats. The goats of the control group were undosed with Acacia nilotica. Other than the dose co-related mortality rates, the clinical signs were observed to be salivation, staggered gait, intermittent loss of voice and low appetite. On histopathological testing, the main lesions were hepatic centrolobular necrosis and fatty changes associated with the significant changes in GGT and ALP are indicating hepatic dysfunction. Renal malfunction is indicated by haemorrhages in addition to the change in the urea concentration. The congested, haemorrhagic, emphysematous, edematous and cyanotic lungs may contribute to the development of dyspnea. Acacia nilotica poisoning may lead to an immunosuppression pointed out by the lymphocyte infiltration. On evaluation of the above results, Acacia nilotica was considered toxic to Nubian goats at the above mentioned doses. Future work for Acacia nilotica was forwarded and practical implications of the result were highlighted.

Keywords : Acaia nilotica, toxicity data, Nubian goats, Garad

Conference Title : ICMAP 2015 : International Conference on Medicinal and Aromatic Plants

Conference Location : Penang, Malaysia

Conference Dates : December 03-04, 2015