Phytochemical screening and toxicological study of *Aristolochia baetica* linn roots: Histopathological and Biochemical evidence

Mohammed Bourhia
Hassan II University, Morocco

*Aristolochia baetica* (*A. baetica*) is a wild species of Aristolochiaceae family, its roots are used by Moroccan people against cancer for many years ago. The objective of the study was to investigate the phytochemical screening, acute and subacute toxicity of *A. baetica* roots growing in the north of Morocco. Qualitative and quantitative analysis of *A. baetica* roots were performed using standard methods, the acute toxicity of the roots extract of the studied plant was assessed in mice by gavage of single doses of 1, 2, and 4 g/kg body weight for 14 days, by the time the subacute toxicity was done using repeated doses 1, 1.5 and 2 g/kg/day for 28 days. Histological changes, biochemical parameters as markers of kidney and liver function were evaluated. The results of phytochemical screening showed the presence of polyphenols, tannins, alkaloids, flavonoids, saponins, and the absence of anthraquinones, sterols, and terpenes. The results of acute toxicity showed the absence of mortality and signs of toxicity in groups treated with 1 and 2 g/kg, however, the clinical signs of toxicity were important and rate of mortality was estimated at 16 % in the group treated with 4 g/kg. The results of subacute toxicity showed several changes of serum parameters registered in groups treated with 1.5 and 2 g/kg/day respectively. The results should also the absence of histological injuries in groups treated with 1 and 1.5 g/kg/day, meanwhile, the histological alterations were remarkable in treated group with the highest dose administered of 2 g/kg/day. The outcome of this work showed that the roots extract of the studied plant was toxic in mice with repeated doses, but no toxic effect was observed with a single dose under 4g/kg.

e: bourhiamohammed@gmail.com

Notes: