

Effect of saponosides crude extract isolated from *Citrullus Colocynthis* (L.) seeds on blood glucose level in normal and streptozotocin induced diabetic rats

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Abstract :

The effect of saponosides crude extract isolated from the seeds of *Citrullus Colocynthis* L. Schrad (Cucurbitaceae) on blood glucose level were investigated in normal and diabetic rats (streptozotocin induced). A single and non toxic dose (20 mg/kg bw) of saponosides crude extract were administrated to animals by intraperitoneal route. Lethal doses of saponosides crude extract in healthy rats (DL50 and DL100) were found to be 200 and 250 mg/kg bw, respectively. The results obtained from this study showed no change of glycaemia in normal rats. Whereas, in STZ-treated diabetic animals, the blood glucose level decrease significantly ($p < 0.05$) to reach its normal value 48 h after administration of saponosides crude extract. This antihyperglycaemic effect was maintained during twenty six days after a unique intraperitoneal injection. This effect can be reproduced after return to the diabetic state. Saponosides instigate an antihyperglycaemic and sustainable action in STZ-diabetic rats.

Keywords : *Citrullus colocynthis* L., antidiabetic, saponosides, streptozotocin, rats.

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