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## Assessment of possible efficacy of aqueous leaves extract of *Psoralea bituminosa* L. for antihyperglycaemic activity

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*Psoralea bituminosa* L. (*P. bituminosa*) (syn. *Bituminaria bituminosa* L.), commonly known as the Arabian pea or pitch trefoil, is a perennial herb species widely distributed in the Mediterranean region. It has been used as animal feed especially for dairy goats. Moreover, the plant is a rich source of secondary metabolites with considerable pharmacologic properties. *P. bituminosa* is known for producing furanocoumarins such as psoralen and angelicin used in the treatment of skin diseases, pterocarpanes such as bitucarpin A and B with antitumor activity against colon cancer. In the north-west region of Algeria (Tlemcen), some population is found to use leaf decoction of *P. bituminosa* to treat diabetes, but up to now, there are no scientific data available for its antidiabetic effect. The aim of this study was to assess the possible antihyperglycaemic activity of aqueous leaves extract of *P. bituminosa* both in normal and Streptozotocin (STZ)-induced diabetic rats. The aqueous extract was screened for its phytochemicals and revealed the presence of tannins, alkaloids, flavonoids, anthocyanins, terpenes and sterols. The results of acute toxicity showed that the rats had good tolerance to high doses of extract (up to 1.5 g/kg) and no mortality was observed. The extract has shown a good blood glucose lowering effect in the oral glucose tolerance test. After 21 days of daily oral administration of the extract to streptozotocin induced diabetic rats, the aqueous extract can reduce hyperglycemia reaching over more than 31%.

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