ASSESSMENT OF POSSIBLE EFFICACY OF AQUEOUS LEAVES EXTRACT OF PSORALEA BITUMINOSA L. FOR ANTIHYPERGLYCAEMIC ACTIVITY

AUTHORS
LEMOUCHI RADIA / UNIVERSITY BADJI MOKHTAR ANNABA, ALGERIA, 1172 LOGT BL46 N411 ANNABA, ALGERIA, ANNABA

PURPOSE OF THE ABSTRACT
ASSESSMENT OF POSSIBLE EFFICACY OF AQUEOUS LEAVES EXTRACT OF PSORALEA BITUMINOSA L. FOR ANTIHYPERGLYCAEMIC ACTIVITY

Radia Lemouchi1, Chaouki Selles2, Houria Medjdoub3 and Boufiedja Tabti2
1Laboratoire de Biologie Végétale et Environnement, Département de biologie, Université de Annaba, Annaba 23000, Algeria
2Laboratoire des Substances Naturelles et Bioactives, Département de chimie, Université de Tlemcen, Tlemcen 13000, Algeria
3Laboratoire de Chimie Physique des Macromolécules et Interfaces Biologiques, Département de biologie, Université de Mascara, Mascara 29000, Algeria.

Objective: To evaluate for the first time the anti-hyperglycaemic potential of Psoralea bituminosa L. leaves in normal and streptozotocin-induced diabetic rats.

Methods: The aqueous extract was screened for its phytochemicals and tested for acute toxicity. Diabetes was induced in male Wistar rats by the administration of streptozotocin (50 mg/kg, i.v.). The aqueous extract was administered orally once a day for a period of 21 days [1]. Body weight and blood glucose lowering capacity were determined in different experimental days [2].

Results: The results of acute toxicity showed that the rats had a good tolerance to high doses of extract (up to 1.5 g/kg) and that no mortality was observed. The extract had 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 by reaching more than 31%.

Conclusions: Aqueous extract possesses a good anti-hyperglycaemic effect and is showing a bright future in the therapy of diabetes mellitus.
FIGURES

FIGURE 1

FIGURE 2

KEYWORDS
Diabetes mellitus | Psoralea bituminosa L. | Aqueous extract | Phytochemical

BIBLIOGRAPHY
References