conferenceseries.com

17TH GLOBAL DIABETES CONFERENCE & NURSING CARE

March 08-09, 2018 | Paris, France

Assessment of hypoglycemic and hypolipidemic activities of aqueous extract of *Trigonella foenum-graecum* in streptozotocin-induced diabetic rats

Abdelkrim Berroukche, Mohamed Terras, Omar Kharoubi, Amina Kharoubi and **Hafsa Boudia**
Dr Tahar-Moulay University of Saida, Algeria

Background & Aim: Diabetes mellitus is a common disease, treated either with insulin or oral anti-diabetics which have undesirable effects because of their chemical composition. As an alternative, diabetes could be treated by medicinal plants. This study aimed to assess the effects of *Trigonella foenum graecum* (TFG) seeds aqueous extract on biochemical parameters in streptozotocin-induced diabetic rats.

Materials & Methods: A population of forty (40) rats was divided into 4 groups; normal control, experiment control (diabetic rats by STZ), diabetic treated with TFG at the dose 1 mL (100 mg/mL) and non-diabetic treated (TFG). During 30 days of experiments, body weight and biochemical parameters were measured and statistically analyzed using SigmaPlot software.

Results: No significant difference in body weight was observed in diabetics animals (168±8.5 g/L) and animals treated with TGF (167±4.7 g/L). Significant decrease in blood glucose (1.16±0.15 g/L), triglycerides (0.64±0.21 g/L), serum urea (0.38±0.19 g/L) and creatinine (8.02 mg/L) levels were reported in diabetics treated with TFG compared to diabetic animals non-treated.

Conclusion: *Trigonella foenum-graecum* was able to regulate and maintain glycaemia and lipid profile at normal levels at diabetic animals.

Biography

Abdekrim Berroukche is currently a Lecturer and Teacher-Researcher, Biology Department, Faculty of Science, University of Saida, Algeria. He has received his PhD in Cell Biology and Nutrition (with Oncology option) from University of Sidi-Bel-Abbes, Algeria. He is Member of Editorial Board of two scientific reviews and is a Peer Reviewer in several journals. He has 32 publications: 30 journal articles and 2 books. He is the Head of research team affiliated to Laboratory of Water Resources and Environment, Biology Department, Faculty of Science, University of Saida, Algeria.

Abdelkrim.berroukche@univ-saida.dz

Notes: