



Research article

Preclinical evaluation of standardized anti-diabetic herbal formulation (ADC-05)

Tapas Kumar Sur*, Avijit Hazra

Department of Pharmacology, Institute of Post Graduate Medical Education & Research 244 B, AJC Bose Road, Kolkata 700020, West Bengal, India.

Key words: Diabetes, herbs, glucose, antioxidant, α -amylase, α -glucosidase.

***Corresponding Author: Tapas K. Sur**

Department of Pharmacology, Institute of Post Graduate Medical Education & Research 244 B, AJC Bose Road, Kolkata 700020, West Bengal, India.

Abstract

ADC-05 a new formulation was prepared with nine standardized herbal extracts for anti-diabetic actions to find out the anti-diabetic potentialities in experimental animals as well as explore its potential mode of actions. ADC-05 exhibited rich in phenolics and showed DPPH antioxidant scavenging actions. Moreover, it showed α -amylase and α -glucosidase inhibition dose dependently. ADC-05 did not showed any signs of toxicity or mortality up to 2.0 g/kg per oral dose in mice. Oral administration of ADC-05 at the dose of 100 mg/kg and 200 mg/kg significantly declined the fasting blood sugar level within 2 h and 14 days consecutive treatments, similar to Glibenclamide in Streptozotocin induced hyperglycemic rats. In conclusion it may infer that new formulation ADC-05 has antidiabetic potentialities in rats.
