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Assessment of anti-diabetic activity of the aqueous extract of leaves of *Astilboides tabularis*

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Abstract

Ethnopharmacological relevance

Astilboides tabularis has a long history of usage as the functional food with the effect of adjunctive therapy of diabetic in northeast of China. The present study was undertaken to assess anti-diabetic activity of the aqueous extract of leaves of *A. tabularis* and provided experimental evidence for the clinical usage of *A. tabularis* in the treatment of diabetes mellitus.

Materials and methods

The aqueous extracts of leaves of *A. tabularis* (EAT) were orally administered at 300 and 600 mg/kg dose to epinephrine-induced and alloxan-induced diabetes mice. Hypoglycemic effects, change in body weight, water intake, food intake, lipid profile and lipid peroxidant were assessed. Furthermore, the main chemical components of EAT were isolated and high performance liquid chromatography (HPLC) analysis was employed to identify the phytochemical composition of the plant extract. The finally, total flavonoids content and total phenolic content were quantified by colorimetric assay.

Results

EAT showed a significant reduction in blood glucose level at both 300 and 600 mg/kg

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