

Antidiabetic effect of *Chenopodium ambrosioides*

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Abstract

Chenopodium ambrosioides is an important medicinal plant widely used in the traditional medicine all over the world. Its folk medicinal uses include its antidiabetic profile. A study was designed to determine its hypoglycemic effect. Mice used in experiment were fed with high-fat diet for two weeks before induction of Diabetes mellitus by injection of streptozocine (STZ). Animals treated with crude extract (100, 200 and 300 mg/kg) showed significant ($p < 0.05$) hypoglycemic effect in comparison to control. This preliminary but significant study highlighted the profound potential of *Chenopodium ambrosioides* to be investigated further for bioactive compounds responsible for antidiabetic effect.

Keywords: *Chenopodium ambrosioides*; streptozocine; antidiabetic activity; hypoglycemic effect

Introduction

Diabetes mellitus (DM) is classified into two major categories: type 1 diabetes and type 2 diabetes (Skyler, 2004). As a devastating disease, diabetes is affecting approximately 3% of the population worldwide, 90% of which suffer from type 2 diabetes (Skyler, 2004). Although the two types of diabetes have distinct pathogenesises, hyperglycemia and various life-threatening complications resulting from long-term hyperglycemia are common to both (Abaira et al., 1995). Natural products showed a good bright future in the therapy of diabetes and its related complications. *Chenopodium ambrosioides* (CA) is an important medicinal plant widely used in the traditional medicine system in Europe, Asia, North and South America. It is a member of family, *Chenopodiaceae*. Extract of this plant is locally used for