The Relevance of Some Plant Extracts In Human Patients and Animal Models of Diabetes

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Abstract. *Diabetes is a chronic disease characterized by hyperglycemia; medicinal plants have therapeutic uses in the management of diabetes. Various experiments have been conducted using animal models and clinical trials to explore the use of medicinal plants in the treatment of diabetes. The aim of this work is to present the relevance of some plant extracts in human patients and animal models of diabetes.*

Introduction

Diabetes is a chronic disease characterized by a high level of glucose called hyperglycemia. It is due to a disorder in the secretion and/or action of the insulin secreted by the Beta-pancreatic cells. The main symptoms of hyperglycemia are polyuria, polydipsia, blurred vision, fatigue and involuntary weight loss [1]. According to the American Diabetes Association in 2019[2], diabetes is classified into 4 main types: type 1 diabetes, characterized by insufficient insulin production due to autoimmune destruction of pancreatic cells; type 2 diabetes, the most common form, is due to a deficiency in insulin secretion associated with poor use of insulin by the body; gestational diabetes results from an increase in blood sugar levels during pregnancy; and the fourth type is diabetes due to other causes such as monogenic diabetes syndrome (MODY), medication, etc.