

## Polyherbal formulations based on Indian medicinal plants as antidiabetic phytotherapeutics

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### Abstract

In spite of all the advances in therapeutics, diabetes still remains a major cause of morbidity and mortality in the world. Herbal formulations are becoming popular now days particularly in the treatment of Type 2 diabetes. Though there are various approaches to reduce the ill effects of diabetes and its secondary complications, herbal formulations are preferred due to lesser side effect and low cost. This review focuses on the potential of different polyherbal formulation in the treatment of diabetes and also reviews their pharmacological investigations.

**Key words:** Polyherbal, formulation, antidiabetic activity, medicinal plants, Type 2 diabetes, ayurvedic

### Introduction

Diabetes is a heterogeneous metabolic disorder characterized by altered carbohydrate, lipid, and protein metabolism which causes hyperglycemia resulting from insufficient insulin secretion, insulin action or both (Joseph, 2011; Mutalik 2003). It is one of the refractory diseases identified by Indian Council of Medical Research for which an alternative medicine is a need for the treatment. Diabetes mellitus has become a growing problem in the contemporary world (Piyush *et al* 2006). India has today become the diabetic capital of the world with over 20 million diabetes and this number is likely to increase to 57 million by 2025 (Cook *et al*,2008). This astronomic increase in the prevalence of diabetes has made diabetes a major public health challenge for India and is become important human ailment afflicting many from various walks of life in different countries and once again the whole world being looked upon Ayurvedic the oldest healing system of medicine for the treatment of diabetes (Joseph, 2011). Although there are many synthetic medicines developed for patients, but it is the fact that it has never been reported that someone had recovered totally from diabetes (Zhengh *et al*, 2004). The modern oral hypoglycemic agents produce undesirable and side effects. Thus in the recent years considerable attention has been directed towards the antidiabetic potential