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# 5 Antidiabetic Herbal Formulations

## *An Effective Therapeutic Approach to Diabetes*

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### CONTENTS

5.1	Introduction .....	89
5.1.1	Area of Present Study .....	90
5.2	Methodology .....	91
5.3	Results and Discussions .....	91
5.3.1	Diversity of Antidiabetic Plants in the Study Area .....	91
5.3.2	Life Forms Analysis .....	92
5.3.3	Efficacy of Herbal Formulations in Antidiabetic Treatments .....	92
5.3.4	Diabetic-Associated Health Problems .....	97
5.3.5	Popularization of Herbal Formulations in the Study Area .....	98
5.3.6	Major Threats to the Medicinal Flora of the Study Area .....	98
5.4	Conclusion .....	99
	References .....	100

### 5.1 INTRODUCTION

Diabetes is a chronic disorder of carbohydrate, fat and protein metabolism characterized by increased fasting and postprandial blood sugar levels. It is a complex metabolic disorder resulting from either insulin insufficiency or insulin dysfunction (Ramachandran et al. 2002). The different types of diabetes have been identified and categorized as type I, II and gestational diabetes. Type I is also referred as insulin-dependent diabetes mellitus or juvenile diabetes (IDDM), which results from the body's failure to produce insulin and presently requires the person to inject insulin. Type II diabetes also referred as non-insulin-dependent diabetes mellitus or adult-onset diabetes (NIDDM). This result from insulin resistance, a condition in which cells fail to use insulin properly (Binu Thomas et al. 2012). The other type is gestational diabetes, which is observed in pregnant women who have never had diabetes before and who have a high blood glucose level during pregnancy. It may precede development of type II. The other forms of diabetes mellitus include congenital diabetes, which is due to the genetic defect of insulin secretion; cystic fibrosis-related