

Chapter-14

ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED IN THE MANAGEMENT OF DIABETES IN THE URBAN AREAS OF KHURDA, ODISHA, INDIA

Jiban Mishra, Gyanranjan Mahalik*

Department of Botany, School of Applied Sciences, Centurion
University of Technology and Management, Odisha, India

ABSTRACT: The present work deals in collecting information about the medicinal plant species used for treatment of diabetes by the traditional healers in the urban areas of Khurda districts of Odisha and identification as well as documentation of these species. Extensive field survey was conducted in the study area, information about plants were collected from local herbal practitioners, village elders, patients and traditional healers through normal conversations, interviews and discussion. During survey 40 medicinal plant species belonging to 36 genera and 25 families were identified and documented having anti diabetic activity. Most of the species were trees (47.5%) followed by shrubs (32.5%) and herbs (20%). It was observed that amongst all the parts, generally leaves were mostly used. During this survey work, *Gymnema sylvestre* paid the attention and found as the most common species used by traditional healers. From current findings, it was concluded that medicinal plants have the potential to replace the synthetic drugs which are restricted by their efficiency and side effects.

INTRODUCTION

Diabetes was first recognized as a disease about 3000 years ago in the ancient Egypt [1]. Diabetes is rapidly emerging as serious and major public health care problem throughout the world. Diabetes mellitus is a metabolic disturbance of carbohydrates, proteins, and fat due to relative lack or complete absence of insulin and insulin resistance [2]. Diabetes is a metabolic disorder where human body does not produce or properly use insulin, a hormone that is required to convert sugar, starches, and other food into energy. It is characterized by high levels of blood glucose [3]. In Ayurveda diabetes mellitus (DM) is referred to as Madhumeha or