Medico-Biowealth of India Vol. II



Rajkumari Supriya Devi Sanjeet Kumar Rim Samir Hamdy Agatha Sylvia Khalkho Title: *Medico-Biowealth of India Vol. II / edited by Rajkumari Supriya Devi, Sanjeet Kumar, Rim Samir Hamdy & Agatha Sylvia Khalkho* Description: Includes bibliographical references Subject: Medicinal Plants India/ Ethnobotany India/ Ethnopharmacology/ Ecological and Social impacts

Published by: APRF Publishers Ambika Prasad Research Foundation First Floor, Saraswati Tower, Laxmisagar Bhubaneswar PIN- 751006, Odisha, India Email-Id: sanjeet.biotech@gmail.com www.aprf.org.in

Medico-Biowealth of India Vol. II First Edition :2021 Copyright©Ambika Prasad Research Foundation

The content of this book is tried best to provide authenticated information. All the references necessary are listed. All attempts have been made to publish reliable information and acknowledge the copyright holders. If any copyright material has not been acknowledged, please inform us so we may rectify in our future reprints.

All rights reserved. No part of this work may be reproduced, stored in any revival system or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior permission of the publisher.

Price: Rs. 1650/-

Cover Page: Ficus benjamina fruit, Memecylon umbellatum flower, Adina cordifolia Back Page: Diospyros sylvatica Designed by: APRF, Odisha ISBN: 978-81-952750-2-1

Contents

Contributors

1.	Medicinal plants used against diabetes
2.	L
3.	ecological and social impacts in a mixed bamboo forest, Tengnoupal district, Manipur, Northeast India
4.	42 Evanylla Kharlyngdoh, Dinabandhu Sahoo and Jitendra Shukla Medicinal carnivorous plants of Odisha: a source of future drugs
5.	54 Sweta Mishra and Sanjeet Kumar Ethnobotanically important fodder crops of Northern fringes of Kolkata, West Bengal
6.	
7.	Radhika Ethnomedicinal aspects of Rutaceae
8.	
9.	
10	
11.	Ushashee Mandal and Gyanranjan Mahalik . Traditional healing herbs of Maihar Tehsil, Satna, Madhya Pradesh in respiratory problems
12	
	Reshmi Chatterjee, N.V.Jayanthbabu and G.M.Narasimha Rao

CHAPTER 1

Medicinal plants used against diabetes

Ashish Kumar^{1*}, Jnanesha AC¹, Saba Siddiqui² & Mohammad Haris Siddiqui² ¹CSIR-Central Institute of Medicinal and Aromatic Plants, Research Centre, Boduppal, Hyderabad-500092, Telangana, India ²Integral Institute of Agricultural Science & Technology (IIAST) Integral University, Lucknow – 226 026, Uttar Pradesh, India *Email-id: <u>devashish121@gmail.com</u>

ABSTRACT

Diabetes mellitus is one of the most common non-communicable diseases globally. It is the fourth leading causes of death in the most developed countries and there in substantial even diced that it in epidemic in many developing and newly industrialized nations. Sedentary life style and stressful mental conditions in the present scenario have invited many distressing diseases. The number of people suffering from diabetes all over the world is increasing progressively. Diabetes mellitus is a metabolic disorder characterized by hyperglycemia due to defect in insulin secretion, insulin action or both. Scientific reports revealed that diabetes cannot be cured completely. Allopathic drugs have not shown any significant effect for the treatment of the disease. Hence, focus has been turned towards traditional system of medicine. The Secondary metabolites of (Medicinal Plants) MPs are play an important role in management of diabetes mellitus viz., Berberis aristata, Pterocarpus marsupium, Gymnema sylvestre, Rubia cordifolia, Trigonella foenum-graecum, Tinospora cordifolia, and Costus speciosus have acquired enough reputation for managing diabetes. Herbal medicines have shown good clinical practice in the therapy of diabetic mellitus. Thus, it seems that physicians can rely on these herbs and advise for the patients to improve management of diabetes.

Key words: Diabetes, Tinospora cordifolia, Cosutus speciosus, Gymnema sylvestre

1.1 INTRODUCTION

Diabetes is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The chronic