

A REVIEW ON PLANTS WITH ANTIDIABETIC POTENTIAL

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Case Report

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Abstract:Herbal and alternative medicines have been widely used from ancient time. Several evidence shows that herbal remedies have been around since the Neanderthal period about 60,000 years ago. Other evidence are 13,000 and 255,000 BC old. Number of the synthetic prescription drugs made today is based on naturally occurring substances and capabilities found in plants. During the past few years some of the new bioactive drugs isolated from plants have been reported to possess antidiabetic activity. Such drugs are known to be more efficient than oral hypoglycemic agents used in clinical therapy. Several researchers has reported the hypo- glycemic effects in the management of diabetes mellitus. By considering such findings, the present work is the compilation of such plants.

Key word: Herbal, hypoglycemic, diabetes mellitus.

INTRODUCTION

Diabetes mellitus is a group of metabolic disorders with one common manifestation is hyperglycemia [1, 2]. Chronic hyperglycemia causes damage to eyes, kidneys, nerves, heart and blood vessels [3]. It is caused by inherited and/or acquired deficiency in production of insulin by the pancreas, or by the ineffectiveness of the insulin produced. It results either from inadequate secretion of hormone insulin, an inadequate response of target cells to insulin, or a combination of these factors. This dis-

ease requires medical diagnosis, treatment and changes in life style. It is projected to become one of the world's main disabilities and killers within the next 25 years. The management of diabetes is a global problem until now and successful treatment is not yet discovered. 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 [4]. The modern oral hypoglycemic agents produce undesirable and side effects. Thus, alternative therapy is required; a need of hour is to shift towards the different indigenous plant and herbal formulations [5-7].

S.No.	Botanical Name	Family	Parts used	References
1	<i>Acacia Arabica</i>	Mimosaceae	Seeds, Gum, Barks	Singh, 1975
2	<i>Azadirachta indica</i>	Meliaceae	Leaves,seeds, root bark, fruits & flowers	Halim, 2003
3	<i>Benincasa hispida</i>	Cucurbitaceae	Fruits & seeds	Chopra, 1956
4	<i>Caesearia esculanta</i> Roxb	Flacourtiaceae	Roots	Prakasam, 2003
5	<i>Centella asiatica</i>	Apiceae	Leaves	Rana, 1999
6	<i>Cinnamomum tamala</i>	Lauraceae	Leaves	Chandola, 1980
7	<i>Ficus bengalensis</i>	Moraceae	Bark, Root bark	Augusti, 1993
8	<i>Lagerstroemic speciosa</i>	Lythraceae	Leaves and fruits	Garcia, 1982
9	<i>Lupinus albul</i>	Leguminosae	Seeds	Orestano, 1940
10	<i>Momordica charantia</i>	Cucurbitaceae	Fruit, seeds,leaves	Miura, 2004
11	<i>Mucuna prurita</i> Hook	Leguminosae	Seeds fruits	Dhar, 1968
12	<i>Musa paradisiacal</i>	Musaceae	Juice of flowers	Rao, 1994
13	<i>Olea europaea</i> linn	Oleaceae	Leaves	Craker, 2002
14	<i>Orthosiphon spiralis</i> Merrill	Lamiaceae	Leaves	Seidl, 1954
15	<i>Pinus roxburghii</i> Sarg	Pinaceae	Barks & Roots	Jain, 1967
16	<i>Portulaca oleracea</i> Linn	Portulacaceae	Whole plant	Sinha, 1963
17	<i>Prunus persica</i> Batsch	Osaceae	Leaves	Zaidi, 1975
18	<i>Quercus infectoria</i> Olivier	Fabaceae	Galls	Dar, 1976
19	<i>Quercus loncaefolia</i> Roxb	Fabaceae	Stem bark	Dhar, 1968
20	<i>Rourea santaloides</i>	Connaraceae	Roots	Nandkarni, 1992
21	<i>Salacia macroserma</i> Wight	Hippocrataceae	Leaves & Roots	Arora, 1973
22	<i>Securigera securidaca</i> Linn	Fabaceae	Seeds	Al-Hachim, 1970
23	<i>Spathodae campanulata</i> Beauv	Bignoniaceae	Stem bark	Niyonzima, 1993
24	<i>Swertia chirayita</i>	Gentianaceae	Whole plant	Chandrashekar, 1990
25	<i>Syzygium cuminii</i>	Myrtaceae	Seeds, fruits	Ravi, 2004
S.No.	Botanical Name	Family	Parts used	References
26	<i>Tinospora cordifolia</i>	Menispermaceae	Stem	Raghunathan, 1969
27	<i>Trifolium alexandrinum</i> Linn	Fabaceae	Seeds	Helmi, 1969
28	<i>Trigonella Foenumgracum</i>	Fabaceae	Seeds	Preet, 2005
29	<i>Xanthiam strumarium</i> Linn	Compositae	Seeds	Subramanian, 1967
30	<i>Zea mays</i> Linn	Graminae	Styles	Menczel, 1962
31	<i>Zingiber officinale</i>	Zingiberaceae	Rhizomes	Sharma, 1977
32	<i>Zizyphus jujuba</i> Mill	Rhamnaceae	Leaves	Mohopatra, 1976

CONCLUSION

The above review study forcefully drags the attention of researchers towards new researches on the plants having antidiabetic potential. Moreover, such plants should be studied for the formulation of new effective drugs for diabetes.

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