

Ethno Medicinal Plants Used In Diabetes by Tribals of Jhalawar District (Raj.)

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Abstract

Diabetes Mellitus is human trouble. This metabolic disorder is characterized by a reduction in protein and lipid catabolism. There are two major types one, called insulin-dependent diabetes mellitus, is referred to as IDDM or DM1. the other, non-insulin-dependent diabetes mellitus, is referred to as NIDDM or DM2.

Several permanent and nomadic tribes like Meena kanjar, Banjara, Bheel are residing in the tribal belt of Jhalawar, out of them Sahariya is most primitive and back ward tribe. They use wild Plants in their traditional system of medicine food, shelter and for other domestic purposes. These tribal people and their traditional healers possess valuable informations about properties and medicinal uses of wild plants. Frequent field visits were conducted though out the year from 2009- 2010 in different eco-region of Jhalawar district. The data was collected by using questionnaire method, group discussion and contact with traditional healers.

The present paper deals with the herbal treatment of diabetes by tribal people of Jhalawar district through a good number of medicinal plants with Local name, ethno medicinal uses and their mode of administration of Diabetes.

Keywords: Diabetes, DM1, DM2 Jhalawar, Ethnomedicinal Study, Folklore

Introduction

The district of Jhalawar lies in the South-East corner of Rajasthan at the edge of the Malwa plateau between 23^o 45'20" N to 24^o 52'17" N latitudes and 75^o 27'35" E to 76^o 56'48" E longitudes. The district is rich in its floristic diversity and plant resources. The district is inhabited by several tribes. Most of them are dependent on the surrounding forests for their day-to-day needs. Even their cultivated land is very marginal and the farm produce is hardly enough for 4-5 months. Afterwards they have to depend on naturally occurring wild food plants. The climate of Jhalawar district is on the whole fairly dry and healthy. It is one of the rainiest part of the Rajasthan state. Keeping this point of view, an attempt has been made to document the information about wild plants used in treatment of diabetes, in the remote areas of Jhalawar district.

Materials and Methods

The adjoining villages of Jhalawar were selected for sampling sites these are Bagher, Bhim Sagar, Gagron, Balindaghat, Bijlia Bharak, Darah and Rata Devi etc. Ethnobotanical information about medical plants was gathered through personal observations and discussions with the villagers. Markets of tribal villages called as "Haat Bazar" were also surveyed. The collected medicinal plants were taxonomically identified with the help of flora (Hooker 1872-1897, Sharma and Tyagi 1979, Singh and Shetty 1987-1993, Bhandari 1990) and expert opinion of plant taxonomist at different Botanical department and research centre.

Summary

District Jhalawar which is in South-East corner of Rajasthan at the edge of the Malwa plateau, having a good number of floristic diversity and tribals which dependent on them have a vast knowledge of herbal treatment for a wide range of physical ailments. Objective of the work is to document ethnomedicinal uses of plant for diabetic problem. The study comprises 22 genera of the aforesaid 17 families with their use and mode of administration, is described in Table 1. The indigenous knowledge system of herbal practice is still very rich and available amongst tribal and rural commodity of Jhalawar. The value of traditional healing system is fast eroding due to modernization, and the tendency amongst younger generation to discard their traditional life style. The establishment of modern medicinal health centers is also in progress in many rural areas and that may gradually change the existing pattern of ethnic system of healthcare. Hence, it is necessary to document the traditional knowledge related to medicinal plants and their therapeutic uses before

being lost forever from the community. The present study was done through structured questionnaires method with tribal and elder people and has resulted for documentation of these medicinal plants of Jhalawar District (Rajasthan).

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Table 1 Medicinal Plants Used in Diabetes

S. No.	Botanical Name	Local Name	Family	Ethnomedicinal uses / plant part in use in diabetics
1.	<i>Aloe barbadensis</i> Mill	Gawarpatha	Liliaceae	One tea spoon leaf pulp is taken orally before meal once a day in diabetes.
2.	<i>Argyreia nervosa</i> (Burm.f.) Bojer	Samandar Ki Bel	Convolvulaceae	Infusion of leaves is useful in diabetes.
3.	<i>Asparagus racemosus</i> Willd	Satawari	Liliaceae	In diabetes, decoction of (<i>Asparagus resemosus</i> roots and <i>Azadircta indica</i> stem bark) is given twice a day to cure diabetes.
4.	<i>Azadirachta indica</i> A Juss	Neem	Meliaceae	The leaves taken orally early in the morning to cure diabetes.
5.	<i>Butea monosperma</i> (Lam.) Taub.	Dhauk, Palas	Fabaceae	Equal amount of bark powder of <i>Butea monosperma</i> , <i>Ougeinia oogeinsis</i> , <i>Pterocarpus marsupium</i> and leaves of <i>Tinospora cordifolia</i> are mixed together and one tea spoon powder of this is taken orally once in a day for 15-30 days in diabetes.
6.	<i>Calotropis procera</i> (Ait.) Ait. F. ssp.	Akdo, Aak	Asclepiadaceae	Flowers are eaten empty stomach in diabetes.
7.	<i>Cassia fistula</i> L.	Amaltas, Bahawa	Caesalpinaceae	Fruit pulp confection is taken in diabetes.
8.	<i>Catharanthus roseus</i> (L.) G.Don.	Sadabahar	Apocynaceae	Leaves are chewed in morning
9.	<i>Citrus aurantifolia</i> (Christm.) Swingle	Khatta nimbu,	Vitaceae	Root extract along with infusion of <i>Trifolium repens</i> seeds is taken orally to check sugar level in diabetes.
10.	<i>Coccinia grandis</i> L.	Tindori	Cucurbitaceae	The powder of whole plant is taken orally daily to check blood sugar level in diabetes.
11.	<i>Dalbergia sissoo</i> Roxb.	Sisham,	Fabaceae	Half tea spoon paste of leaves is taken orally early in the morning to cure diabetes.
12.	<i>Feronia limonia</i> (Linn.) Swingle	Kaitha	Rutaceae	Fruit juice is taken orally to control blood sugar level in diabetic patients.
13.	<i>Ficus benghalensis</i> Linn.	Badd, Bargad	Moraceae	Infusion of stem bark is considered useful in diabetes.
14.	<i>Hibiscus roso-sinensis</i> Linn,	Gurhal	Malvaceae	Leaves are taken orally in morning in diabetes.
15.	<i>Mitragyna parvifolia</i> (Roxb.) Korth	Kadam	Rubiaceae	Infusion of stem bark is given orally to the diabetic patients.
16.	<i>Momordica charantia</i> Linn.	Kerala	Cucurbitaceae	Fruit juice is taken early in the morning to check blood sugar level in diabetes.
17.	<i>Emblia officinalis</i> , Gaerth.	Aaula	Euphorbiaceae	One tea spoon powder of dried fruit is taken orally in diabetes.
18.	<i>Pterocarpus marsupium</i>	Bijasal	Fabaceae	The infusion of bark powder is taken early in the morning in diabetes.

S. No.	Botanical Name	Local Name	Family	Ethnomedicinal uses / plant part in use in diabetics
19.	<i>Syzygium cumini</i> L. Skeels	Jamun	Myrtaceae	Power of dry seeds and with honey is taken empty stomach chewing fresh seeds is also beneficial in diabetes.
20.	<i>Tridax procumbens</i> L.	Kalal	Asteraceae	Leaf powder along with <i>Cicer arietinum</i> is taken orally early in the morning to check sugar level in diabetes.
21.	<i>Trigonella carniculata</i> Linn.	Methi	Fabaceae	One tea spoon seed powder is taken orally with water as a good remedy for diabetes.
22.	<i>Withania somnifera</i> (Linn.) Dunal.	Ashwagandha	Solanaceae	The infusion of leaves is taken by the diabetic patients to control blood sugar level.

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