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Study of some ethnomedicinal plants of Gopalganj used to cure diabetes mellitus.

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Abstract: The Present paper deals with the enumeration of 15 Ethnomedicinal plants which are commonly used for the treatment of a silent killer disease Diabetes Mellitus.

Key words: Ethnomedicinal Plant, Diabetes Mellitus.

INTRODUCTION

Since time immemorial human being using ethno medicinal plants as medicines. Our Rig veda stand to the testimony. our ancient literature like Charak Samhita and Susruta Samhita provides detail information on ethno medicinal plants (Devraj 1985, Sharma and Goswami, 1992). Ethno medicinal healing practices have been widely accepted during our culture and environmental evolution. Which is acquiring a gigantic challenge. Diabetes mellitus (DM) is defined as elevated blood glucose associated with absent or inadequate pancreatic insulin secretion, with or without concurrent impairment of insulin action. The world wide prevalence of DM has risen dramatically from an estimated 30 million cases in 1985 to 177 million in 2000 and based on the current trends more than 360 million individuals will have diabetes by the year 2030. Now it is very imperative to explore the values of ethno medicinal plants with special emphasis on plants used to cure DM.

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Gopalganj a tarai belts of Nepal and lies between 26° 12' - 26° 39' N latitude and 83° 54' - 85° 55' East longitude. The total geographical area covered by the district is 2033 square Km and about 217 m. above mean sea level. The soil of the District is thick alluvium deposited by River Gandak and its ph ranges from 7-8. Climate is tropical, Temperature ranges 4° C in winter to 40° C – 42° C in summer and rainfall is about 1170.90 mm. the riverian banks, adjoining village and grass land are rich sources of ethno medicinal plants.

MATERIALS AND METHODS

Floristic surveys of different parts were conducted in different seasons for several days to document the ethno medicinal plants information. At the time of floristic survey, a questionnaire was made to collect the information with local peoples, farmers, and experienced healers of the areas.

RESULTS AND DISCUSSION

The detail studies of ethno medicinal plants and medicinal uses of their different parts in DM are given as follows:

Enumeration of ETHNO MEDICINAL Plants.

SL	Botanical Name	Local Name	Family	Parts used	Method of uses
1	<i>Aloe vera</i> (L) burm.F.	Ghekuwar	Liliaceae	Pulp & juice	Its Juice 4-6 ounces daily before each meal.
2	<i>Catharanthus roseus</i> (L)	Sadababar	Apocyanaceae	Leaves	Take 3-4 leaves daily at morning.
3.	<i>Trigonella foenumgraecum</i> (linn)	Methi	Fabaceae	Seeds	Seeds are grind and its powder 5gm thrice daily with milk.
4	<i>Mangifera indica</i> Linn	Mango	Anacardiaceae	Tender Leaves	Its leaves can be dried in shade, powdered and taken 5gm twice a day.
5	<i>Azadirachta indica</i> (L)	Neem	Meliaceae	Leaves	Tender leaves before breakfast used directly.
6	<i>Momordica Charantia</i> (L)	Karela	Cucurbitaceae	Fruits	Fresh fruit juice & dry fruit powder 3-6 gm with water & honey.
7	<i>Maduca butyraceae</i>	Mahua		Flowers	Its flowers mixed with wheat flour & used as mahuwar.
8	<i>Ficus bengalensis</i> (L)	Bargad	Moraceae	Roots & Prop roots	Roots bark & prop roots powder boil in 1/2 lit. water and when 1/8 part is rest used daily in the morning.
9	<i>Cassia tora</i> (L)	Chakrawat	Causalpiniaceae	Roots	10gm roots boiled in 100ml water & when ¼ is rest used daily.
10	<i>Syzygium cuminii</i> (L)	Jammun	Myrtaceae	Seeds	3 mg to 1 gm seeds powder thrice daily.
				Barks	Its assess of barks is very beneficial
11	<i>Aegle marmelos</i> (Corr)	Bel	Rutaceae	Leaves	Its tender leaves with piper nigrum daily at morning.
12	<i>Melia azedarch</i> Linn	Bakain	Meliaceae	Leaves extract	Tender leaves used directly
13	<i>Saraka indica</i>	Sita ashok	Caesalpiniaceae	Dried flower	Dried flower powder
14	<i>Trichosanthes cucumerina</i>	Kunari	Cucurpitaceae	Roots	Fresh juice daily at the morning.
15	<i>Mucuna pruriens</i>	Kawachh	Fabaceae	Fruits, Leaves & Stem	10 to 20ml juice before breakfast

The districts has been blessed by nature with one of the richest vegetation of medicinal plants from which the crude drugs can easily be procured .The above table shows 15 ethno medicinal plants species which are used against a lethal disease of the world DM. These plants available from the different locally growing plants are not reported to have any adverse effects. However, its pharmacognostical investigations are needed to making their better and effective applications. The detailed study of these plants needs proper utilization, collection, popularization, processing and conservation.

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