

Some medicinal plants of Mandsaur district commonly used for the treatment of Snakebite

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Abstract-Snakebite is a common acute medical emergency faced by tribal and rural populations in Mandsaur district with heavy rainfall and humid climate. Present study deals with 9 plant species belonging to 8 genera and 5 families, used traditionally by Bhil and Bhilala tribes and rural people of Mandsaur district (Madhya Pradesh) for the treatment of snakebite. *Achyranthes aspera* Linn is the most common plant of Madhya Pradesh and others parts of India used for the treatment of snakebite.

Keywords: - Snakebite, Tribes, Antiserum, Therapeutic agent, Phytomedicinal Diversity.

I. INTRODUCTION

Snakebite is a common acute medical emergency faced by tribal and rural population in tropical and subtropical countries with heavy rainfall and humid climate [1]. Snakebite accidents globally reach one million, and more than 20,000 deaths annually [4], [14]. In India more than 200,000 cases of snakebites are reported and estimated 35,000 to 50,000 people die each year. Maximum cases are being reported from the rural areas where farmers are engaged in various farming activities.

Antiserum is the only therapeutic agent available throughout the world. Traditional healers use a wide range of plants for snakebite. The traditional medicines used to treat snakebite in tribal population where people depend mostly on forest products for their basic daily needs [8]. It has been observed that a group of inhabitants called Saperas have an excellent herbal remedies for snakebite e.g. *Achyranthes aspera* Linn., *Butea monosperma* Lamk., *Calotropis procera* R. Br. etc [10]. Besides them some other rural physicians have also adequate knowledge of herbs in the treatment of these ailments and they whisper certain mantras during the courses of the treatment [4].

Madhya Pradesh is veritable niche of growing healing herbs which are being used in Indian system of medicine like Ayurveda, Unani and Siddha. Mandsaur (M.P.) district is very rich in phytomedicinal diversity. Rich flora is found specially in Gandhi Sagar Wild Life Sanctuary, Takhaji, and Hinglaj garh. Bhil and Bhilala are the main tribes of

Mandsaur district. They have been using many plants for the treatment of snakebite e.g. *Achyranthes aspera* Linn, *Calotropis gigantea* R. Br, *Holarrhena antidysenteric* Wall. etc.

II. METHODOLOGY

A. STUDY AREA

Mandsaur is a district of archeological and historical heritage, famous for the temple of Lord Pashupatinath, located on the bank of Shivna River. It is also famous for the Opium production. It is situated in the central part of Agro Climate Zone- 4 of Malwa plateau. It lies between the parallel of latitude 23°45'50" North and 25°2'55" North and between the meridians of longitude 74°42'30" East and 75°50'20" East and spreaded over an area of 5521 sq. km.

B. CLIMATE

The climate of this district is generally dry and it comes under semi arid region-Zone 4. May is the hottest month in which temperature goes up to 45°C. January is the coldest month with minimum temperature up to 2°-3°C. The average annual rainfall is 786.6mm. Typical vegetation of the area is tropical dry deciduous forests [3].

C. SURVEY AND COLLECTION

We visited the Gandhi Sagar Wild Life Sanctuary, Takhaji Hinglaj garh, Navali, Catchment area of Chambal river and surrounding area of Mandsaur city.

We found a number of medicinal plants which are used for the treatment of snakebite. We discussed and collected

information from tribal people, local vaidyas and traders. Samples were collected, preserved and mounted on the herbarium sheet and identified with the help of Flora [5].



Figure : 1

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III. RESULTS AND DISCUSSION

We found 9 plants of different families which are commonly used for the treatment of snakebite.

Table 1: Medicinal plants commonly used for the treatment of snakebite

S.No.	Plant Name	Common Name	Family	Part use
1	<i>Achyranthus aspera</i> Linn.	Aandhijara	Amaranthaceae	Root
2	<i>Balanites aegyptiaca</i> Delile	Hingote	Balanitaceae	Fruit
3	<i>Butea monosperma</i> Lamk.	Palash	Fabaceae	Leaf
4	<i>Calotropis gigantea</i> R. Br.	Aakra	Asclepiadaceae	Root
5	<i>Calotropis procera</i> R. Br.	Kala aakra	Asclepiadaceae	Root
6	<i>Gymneama sylvestre</i> R. Br.	Gurmar	Asclepiadaceae	Root

7	<i>Holarrhena antidysenterica</i> Wall.	Kutaj	Apocynaceae	Bark
8	<i>Mimosa pudica</i> Linn.	Chhui-mui	Fabaceae	Root
9	<i>Tamarindus indica</i> Linn.	Imali	Fabaceae	Seed

Achyranthes aspera Linn. is the most common plant of Madhya Pradesh and others parts of India used for the treatment of snakebite [9], [12], [7], [10], [11]. *Calotropis gigantea* R. Br. is also used by tribes of Madhya Pradesh, Tamil Nadu, Andhra Pradesh, Rajasthan and Maharashtra [2], [12], [11], [13]. Similarly different parts of commonly found trees of Mandsaur district like *Holarrhena antidysenterica* Wall., *Balanites aegyptiaca* Delile., *Butea monosperma* Lamk. and *Tamarindus indica* Linn. have been used by tribes and rural people of M. P. Therefore it can be concluded that traditional medicines remain an integral part of the health system specially in rural area. The present study revealed that Mandsaur district is rich in medicinal plants commonly used for snakebite.

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