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Traditional Phytotherapy for Snake bites by Tribes of Chitradurga District, Karnataka, India

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Abstract

Chitradurga is one of the central districts of Karnataka state and is flanked by Davangere, Tumkur, Chikmagalur and Bellary districts of Karnataka and Anantapur district of Andhrapradesh with much racial and socio-cultural diversity resulting in a cultural mosaic. Bedas, Besthas, Gollas, idigas, Kurubas and tribes such as Lambanis, Hakki-pikki, Jenukurubas, and Fruligas are the communities who are intimately associated with the local forests. The district at its extreme limits is situated between longitudinal parallels of $76^{\circ} 01'$ and $77^{\circ} 01'$ east of Greenwich and latitudinal parallels of $13^{\circ} 34'$ and $15^{\circ} 02'$ north of equator. The geographical area of the district is 8388 square kilometers. The terrain is not uniform throughout the district and is characterised by vast stretches of undulating plains with intermittent parallel chains of hills. The district is characterised in having mixed and dry deciduous forests. An ethno-medicinal survey was undertaken in the district to collect information from traditional health healers/tribals on the use of medicinal plants for snake bites through questionnaire and personal interviews during study visits.

The investigation reveals that the local health healers/tribals used 15 plants belonging to 11 families with 12 formulations (02 multiple applications and 10 single plant applications). The study reveals that roots were most frequently used (09 species), followed by leaf extract (04 species), latex and gum with one (01) species each. The study also reveals that many people of the district still continue to rely on traditional medicine for their primary healthcare. Recent trend shows a decline in the number of traditional health

practitioners in the region since the younger generation is not interested to continue this tradition.

There is little documentation of the ethnomedicinal knowledge was carried out in the district. In addition, several wild medicinal plants are declining in number due to the destruction and unscientific collection of plants from forests. Hence there is an urgent need for exploration and documentation of the traditional knowledge in order to ascertain the local ethnomedicinal plants. Therefore present study is an attempt to present ethnomedicinal observations recorded with respect to snake bites.

Key words: Phytotherapy, Ethnomedicine, Hakki-pikki, Snake bite.

Introduction

The vast diversity of flora and fauna is the outcome of millions years of organic evolution on the earth. They are interdependent, interrelated and interacting with the physico-chemical environment facilitating the flow of energy and material cycling. Since ages man relied on plants as a sole source of medicine. The knowledge has been transmitted from generation to generation. Out of 250,000 flowering plant species only 1.2% have been analysed for medicinal value.

The art of herbal healing has very deep roots in Indian culture and folklore. Even today in most of the rural areas, people are depending on local traditional healing systems for their primary health care. Documentation of indigenous knowledge through ethnobotanical studies is important for the conservation and utilization of biological resources. Today 80% of the world's population depends on traditional medicine for their primary health care needs (WHO). Medicinal plants are the backbone of the traditional medicine, this means that, 3300 million people in the underdeveloped countries utilize medicinal plants on a regular basis (Dobriyal and Narayana 1998). The objective of the present study was to document the richness of ethno-medicinal plant species used by the tribal and traditional health healers of Chitradurga district and the practices of the people towards the conservation and sustainable utilization of biological resources of the said region. Similar type of studies has been carried out by several workers in several parts of the country (Hebbar *et.al.* 2002, Harsha V.H. *et.al.* 2003, Ignacimuthu S, *et.al.* 2006).

Methodology

Periodic field surveys were carried out in different villages of Chitradurga district. Data were collected from the tribals, local vaidyas, village elders through personal communication and questionnaire. The data include the plant name, local name, part used and therapeutic uses and the frequency of collection of plants etc. Voucher specimens were collected and identified by referring standard flora (Hooker, 1884; Gamble 1936, Saldhana, 1984). All the voucher specimens were maintained in the herbarium at SJM College of Arts, Science & Commerce, Chitradurga, Karnataka (India). It was found that some of the present information has not so far been available in literature.

Results and Discussion

The present investigation reveals that the plants used to treat snake bite are commonly available in the local forests. The method of preparation and mode of action is also simple and convenient. Hence most of the local people can afford the traditional treatment and having personal faith and believe gave encouraging results in the treatment of snake bites. The present paper gives a detailed account of 12 plants (Table.1.) as herbal remedies for snake bite by the tribal and traditional health healers of Chitradurga region. The data indicates that tribal people used 15 plants for the treatment of snake bite under 12 formulations. (Fig.1.)

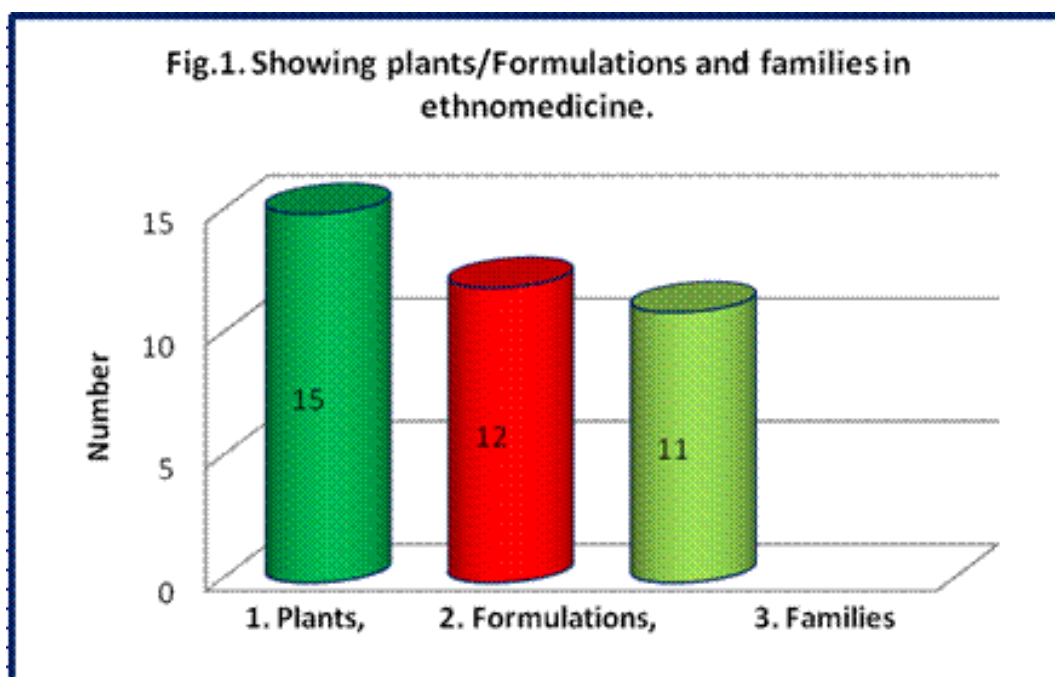


Table.1. Showing plant parts used for curing Snake bites by the tribes of Chitradurga district, Karnataka State.

Botanical Name	Family	Local Name	Plant parts used / Formulations
<i>Tinospora cordifolia</i> (Willd.) Hook.	Minispermaceae	Amrutha balli	Leaf juice along with garlic paste is applied on the spot and also taken orally.
<i>Acacia arabica</i> Benth.	Mimosaceae	Jali mara	Leaf and areca nut with betel leaf paste is applied.
<i>Urtica dioica</i> L.	Urticaceae	Thurse gida	Root extract along with cow urine, pepper and garlic applied on spot.
<i>Tylophora asthmatica</i> (L.f) Wright & Arn.,	Asclepiadaceae	Adumuttada gida	Root extract with pepper and garlic or onion juice is taken orally.

<i>Ophiorrhiza mungos</i> L.	Rubiaceae	Havina gedde	Root extract with powder of gulaganji (white) to make paste and apply and also given orally.
<i>Achyranthus aspera</i> L.	Acanthaceae	Kempu Uttarani	Root extract is applied on the spot and taken orally also.
<i>Aristolochia indica</i> L.	Aristolocaceae	Eshwari gida	Fresh root extract along with pepper is applied on the spot.
<i>Moringa pterygosperma non Lam.</i>	Moringaceae	Nugge	Gum extract is applied on the affected area.
<i>Calotropis gigantea</i> (L.)	Asclepiadaceae	Ekke	Plant latex is mixed with asafoetida (ingu) grind well and applied on the spot.
<i>Adathoda vasaka</i> Nees.	Acanthaceae	Adusoge	The root paste along with goat milk is given orally.
<i>Canthium parviflorum</i> Lam.	Rubiaceae	Kare	The root mixtures of these plants along with goat milk give orally and the paste is applied on the spot.
<i>Aristolochia indica</i> L. Castor	Aristolocaceae	Eshwari gida	
	Euphorbiaceae	Adavi oudala	
<i>Todalia asiatica</i> (L.) Lam	Rutaceae	Kadu menasu	The leaf paste of these plants along with garlic and pepper given orally.
<i>Azima tetracantha</i> Lam.	Salvadoraceae	Uppi mullu	

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