

Herbal Remedies Used in the Treatment of Scorpion Sting from the Nizamabad District, Andhra Pradesh, India

Vijigiri Dinesh¹, Shivraj Kashinath Bembekar² and P P Sharma³

Department of Botany

¹ Shri Renukadevi College of Arts, Commerce and Science College, Mahur, Nanded (Maharashtra) India.

² Baliram Patil College, Kinwat, Nanded (Maharashtra), India.

³ Muktanand College, Gangapur, Aurangabad (Maharashtra), India.

vijigiri_dinesh@yahoo.co.in

ABSTRACT

The present survey provides information on the therapeutic properties of 18 crude drugs used for by the natives of Nizamabad District. Of the Eighteen species that presented here, 12 had not been previously reported. Information on botanical names, vernacular name, family, part used, mode of drug preparation and administration is provided.

Keywords: Scorpion sting, Indigenous folklore, Nizamabad, Andhra Pradesh.

INTRODUCTION

Nizamabad district is situated in the northern part of the Andhra Pradesh and is one of the 10 districts of Telangana region in the state of Andhra Pradesh. It lies between 18-5' and 19'-0' of the northern latitudes, 77-40' and 78-37' of the eastern longitudes. The district is bounded on the North by Adilabad district, East by Karimnagar District, South by Medak district and West by Bidar District of Karnataka and Nanded district of Maharashtra. The geographical area is 7956 Sq. Km's i.e. 19,80,586 acres spread over 923 villages in 36 mandals. Major rivers, such as, **Godavari** and **Manjeera** crosses Nizamabad district with some other streams Kalyani, Kaulas, Peddavagu also exist in the district.

The forest is covering an area of 1.67 lakes hectares (4,18,450 acres) forming 22% of the total geographical area of the district. The forests fall under the category of Southern Tropical dry deciduous type. Thick forest belt produces a major population of *Dalbergia*, *Tectona*, *Terminalia*, *Rhynchosia* species. The forest produce, which includes timber, fuel, bamboo and *Diospyros* leaves, yields good revenue. Mangoes and Custard apples grow well in the district.

Plants used in Scorpion sting were compared with major published literature (Ambasta, 1992; Anonymous, 1948-1976; Asolkar *et al.*, 1992;

Chhaya Bhalshankar, 2012; Chopra *et al.*, 1956; 1969; Dabgar, 2012; Devesh & Mishra, 2011; Hari Shankar & Sanjay, 2012; Jain, 1991; Jain, 1996; Jain, 1999; Kapur, 2001; Kirtikar & Basu, 1933; Ladda *et al.*, 2013; Lal & Singh, 2012; Mohammad and Suradkar, 2011; Patil & Biradar, 2011; Prachi *et al.*, 2009; Rajesham *et al.*, 2013; Reddy, 2007; Reddy, 2008; Sainkhediya & Ray 2012; Sharma & Singh, 2001; Varsha, 2011; Vijaybaskar, 2008 and Vijigiri Dinesh *et al.*, 2013).

Uses which are not mentioned in the literature are considered as uses less known in India and are marked by asterisks (*) in the present paper.

METHODOLOGY

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during the period 2009- 2013. Data presented here is based on personal observations and interviews with traditional healers (Viz. medicine men, hakims and old aged people) and methodology used is based on the methods available in literature (Jain, 1989) and (Jain and Mudgal, 1999).

Ethnobotanical information about scorpion sting gathered was documented in datasheets prepared. For collection of plant material, local informer accompanied to authors.

Plant identification was done by using regional flora and flora of adjoining districts Pullaiah and Rao, 1995; Pullaiah *et al.*, 1992; Singh and Karthikeyan, 2000; Singh *et al.*, 2001 and Cooke, 1958.

ENUMERATION: The present ethno-botanical explorations conducted in forest area of Nizamabad resulted in the traditional plant uses in scorpion sting of 18 plant species belonging to 15 families. Following data includes botanical name of the species, vernacular name, family, plant part

used, method of preparation of medicine and mode of administration and details about its application.

RESULTS AND DISCUSSION

The drug yielding plants was arranged in alphabetical order followed by botanical name, local name, family and use (Table 1). Our taxonomic analysis of crude drugs yielded 18 species belonging to 15 families used for scorpion sting

Botanical Name	Family	Local Name	Use
<i>Abutilon indicum</i> (L.) Sweet	Malvaceae	Thuthura benda	*Leaf paste applied externally at the site of scorpion sting to relieve pain.
<i>Acorus calamus</i> L.	Araceae	Vaja, Vasa	*Rhizome paste applied externally at the site of scorpion sting to relieve pain.
<i>Anisomeles malabarica</i> R.Br.	Lamiaceae	Kartika tulasi	Leaf paste applied externally at the site of scorpion sting to relieve pain.
<i>Cassia auriculata</i> L.	Caesalpiniaceae	Thangedu	Leaves extract applied externally at the side of scorpion sting to relieve pain.
<i>Datura metel</i> L.	Solanaceae	Nalla ummetta	Leaf paste applied externally at the side of scorpion sting to relive pain.
<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	Chenchela koora	*Leaf paste applied externally at the site of scorpion sting to relieve pain and also one tea cup leaf juice taken orally twice in a day only.
<i>Enicostema axillare</i> (Lam.) Raynal	Gentianaceae	Nela gorimadu	*One tea cup extract of leaves taken orally, 3 doses are taken at the interval of one hour.
<i>Gloriosa superba</i> L.	Liliaceae	Adavi nabi	Root tuber paste applied externally over Scorpion sting to relive pain.
<i>Gymnema sylvestre</i> (Retz.) R. Br. ex Schultes	Asclepiadaceae	Podapatri	*One small glass juice of leaves taken orally and leaf paste applied externally at the site of scorpion sting to relieve pain.
<i>Heliotropium indicum</i> L.	Boraginaceae	Telu mani	Leaf paste applied externally at the site of scorpion sting to relieve pain.
<i>Mangifera indica</i> L.	Anacardiaceae	Mamidi chettu	Flowers extract applied externally at the side of scorpion sting to relieve pain.
<i>Martynia annua</i> L.	Martyniaceae	Telukondi	* Fruit paste is prepared and applied over scorpion sting.
<i>Oxalis corniculata</i> L.	Oxalidaceae	Pulichintha	*Whole plant paste applied externally at the site of scorpion sting to relieve pain.
<i>Phyllanthus reticulatus</i> Poir.	Euphorbiaceae	Pulcharu	*Leaf paste applied externally at the site of scorpion sting to relieve pain.
<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Chitra mulamu	*Root extract applied externally at the site of scorpion sting to relieve pain.
<i>Pupalia lappacea</i> (L.) A. L. Juss.	Amaranthaceae	Gandu uttarani	*Leaf extract applied externally at the side of scorpion sting to relieve pain.
<i>Solanum nigrum</i> L.	Solanaceae	Nalla buddakashi	*Leaf paste applied on scorpion sting acts as pain reducer.
<i>Solanum virginianum</i> L.	Solanaceae	Nala mulaka	*Paste of roots with red lime applied externally on sting point to relive pain.

Among them 06 viz; *Anisomeles malabarica*, *Cassia auriculata*, *Datura metel*, *Gloriosa superba*, *Heliotropium indicum* and *Mangifera indica* had been previously reported for scorpion sting (Ambasta, 1992; Anonymous, 1948-1976; Asolkar et al., 1992; Chopra et al., 1956 & 1969; Jain, 1991; Jain, 1996; Jain, 1999; Kapur, 2001; Kirtikar & Basu, 1933 and Sharma & Singh, 2001. Information on

the remaining 12 crude drugs was not found in the literature.

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