

Research Article

Traditional Uses of Bio fencing Plants in Indigenous Folklore of Nizamabad District, Andhra Pradesh, India

Vijigiri Dinesh, Shivraj Kashinath Bembrekar* and PP. Sharma**

Department of Botany, Shri Renukadevi College of Arts, Commerce and Science College, Mahur.

*Baliram Patil College, Kinwat,

**Deogiri College, Aurangabad, Maharashtra, India.

ABSTRACT

The present paper deals with 18 bio-fencing plants, which are being used for control of various diseases in human beings indigenous people of Nizamabad District, Andhra Pradesh. The biomedicines are collected from the plants, which are used as fencing plants to their agricultural fields. This work is being carried out in collaboration with local people of Nizamabad district. The documented ethno medicine information was indexed by plant name, family, local name and uses.

Keywords: Traditional use, Bio Fencing plants, Nizamabad District, 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. 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. Kms 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 area of 1.67 lacs 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 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.

Forest Dwellers: As per 2001 census the total population of the district is 23.55 lacs. Of these tribal population is 1.65 Lacs. Lambada, Naikpod, Yerukalas are major tribal groups in the area. Of these, Lambada is found most abundant throughout the area. Besides these tribal groups, several other communities are residing as forest dwellers.

Methods of survey

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during the period 2010 - 2012. 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 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, Cooke (1958) and Pullaih and Rao (1995).

Medicinal uses of plants were compared with major published literature 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), Pradhan *et al.* (2005), Reddy *et al.* (2007 & 2008), Reddy (2008) and Sharma & Singh (2001).

Enumeration

The present ethno-botanical explorations conducted in forest areas of Nizamabad resulted in the traditional plant uses of 18 plants species belonging to 16 families. Following data includes botanical name of species, vernacular name, family, plant part used, method of preparation of medicine and mode of administration and details about its application. The uses which are not mentioned

in the major literature consulted are considered as uses less known and such plants are marked by asterisk.

Alangium salvifolium (L. f.) Wangerin (Alangiaceae)

Local name: Udugu, Oodugu

Use: Wounds and cuts: Bark powder with coconut oil applied for treating cuts & for healing wounds.

Annona squamosa L. (Annonaceae)

Local name: Seethapalam

Uses: 1. *Skin disease: Leaf paste applied for treating ringworm & itch.

2. Tooth ache: Crushed leaves kept on tooth

Agave americana L. var. **Americana** (Agavaceae)

Local name: Kittanara, Saganara

Use: *Cooling effect: 30-40 ml of leaf extract taken once a day with jaggery for 5-6 days.

Azadirachta indica A. Juss. (Meliaceae)

Local name: Vepa chettu

Use: Diabetes: One tea spoon leaf powder taken orally once a day for 41 days to control diabetes.

Ailanthus excelsa Roxb. (Simaroubaceae)

Local name: Peddamanu

Use: *Arthritic pain: 50 ml decoction of stem bark taken with sugar, twice a day for 4 days.

Balanites aegyptiaca (L.) Del. (Balanitaceae)

Local name: Gare chettu

Use: *Children Hiccough & Vomiting: Fruit, with *Limonia acidissima* leaf juice and *Cuminum cyminum* seeds powder mixed together and, 1 tea spoon given orally with mother's milk for check hiccough & vomiting.

Butea monosperma (Lam.) Taub. (Fabaceae)

Local name: Modhuga

Use: Stomach ache: Paste of two tender leaves, with 5 gm *Cuminum cyminum* seeds, 2 gm lime and 5 gm ghee taken orally once only.

Borassus flabellifer L. (Arecaceae/ Palmae)

Local name: Thati chettu, Taadi

Use: *Mouth ulcers: Flower juice extract used for gargling for 2-3 time a day.

Calotropis gigantea (L.) Ait. (Asclepiadaceae)

Local name: Tella gilledu

Use: *Pus in ear and Ear ache: Mature leaf warmed and few drops of its juice put in ear.

Calotropis procera (Ait.) R Br. (Asclepiadaceae)

Local name: gilladu

Use: Cough: *Piper nigrum* seeds soaked in latex for over night, crushed and made in to pills of 1 gm taken orally daily ones for 15 days.

Caesalpinia bonduc (L.) Roxb. (Caesalpinaceae)

Local name: Pala gachakaya, Gacha podha

Use: *Fits: One tea cup extract of handful leaves taken orally twice a day for two days.

Cereus hexagonous Mill. (Cactaceae)

Local name: Seemajamudu, Brahmajamudu

Use: *Asthma: 40-50 ml extract of stem with seeds of *Alangium salvifolium* and *Pandanus odoratissimus* leaves taken in equal proportions add tamarind fruit juice, salt and butter milk keep entire night taken early morning daily ones for 7 days.

Dendrocalamus strictus (Roxb.) Nees (Poaceae)

Local name: Veduru

Use: *Stomach ache: Stem bark powder 50 gm mixed in 500 ml Alcohol given orally twice a day.

Euphorbia tirucalli L. (Euphorbiaceae)

Local name: Kada jamudu

Use: Warts: latex applied externally twice a day till cure.

Ipomoea carnea Jacq. subsp. **fistulosa** (Mart. ex Choisy) Austin (Convolvulaceae)

Local name: Thootikura, Basaram

Use: *Arthritis: Leaves warmed and wrapped over joints.

Lawsonia inermis L. (Lythraceae)

Local name: Gorinta, Maidaaku

Use: *Loose motions: Leaves with *Cuminum cyminum* seeds, sugar and 'karjura' *Phoenix dactylifera* dried fruit taken equal proportion boiled in butter taken orally daily thrice for two days.

Ricinus communis L. (Euphorbiaceae)

Local name: Amudamu

Uses: 1. Constipation: *Ricinus* oil, honey and *Zingiber officinale* rhizome powder taken in equal proportion and crushed to prepare a solution. 30-40ml taken at night.

2. *Ear ache: 3-4 drops of warmed leaf juice instilled in ear for earache.

Vitex negundo L. (Verbenaceae)

Local Name: Vavili

Use: Ringworm and itch: Leaf juice applied externally to cure ring worm and itch.

RESULTS AND DISCUSSIONS

Information gathered from Nizamabad district indicates that the tribal's, and other village people of this region possess good knowledge of herbal drugs. Majority of the Bio fencing species used in Human disease are from families Asclepiadaceae and Euphorbiaceae and majority of preparation are from leaves (9), bark (4), seeds (2) etc.

To test the scientific validity of the herbal preparations or drugs, clinical studies are required, which can establish therapeutic properties of these preparations for safe use.

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