



DOCUMENTATION OF ETHNO-MEDICINAL PLANTS USED BY DIFFERENT TRIBES OF DANGS DISTRICT, GUJARAT, INDIA

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ABSTRACT

The field survey for documentation of Ethno-medicinal plants of different villages of dang's district was carried out during October-2015 to April-2016. Study mainly interviewed 10 traditional healers of different villages like Borigavtha, Jhawda, Galkund, Bhapkhali, Ranpada, Nanapada, Sakarpatal and Bardipada. Almost about 85 different plant species were used as medicine for querying different diseases like Stomach pain, Fracture, Fever, Skin disease, Ulcer, Vomiting, Wounds, and Diabetes and for Cattle diseases. Roots and Bark was used in higher amount as apart used for medicine

Key words: Ethno-medicinal plants, Tribal Healers, Dang's.

INTRODUCTION

Ethno-botany is the study of how people of a particular culture and region make use of indigenous plants. Ethno-botany has its roots in botany, the study of plants. Botany, in turn, originated in part from an interest in finding plants to help fight illness. In fact, medicine and botany have always had close ties. India is one among the 12 mega diversity countries having 3 out of 25 hot spots. The 17,000 sq km long strip of forest along the seaward side of the Western Ghats is enriched with 4050 plant sp. The tribals in the Gujarat state use about 750 medicinal important and 450 economically important plant species. The Dang forest falls on the extreme northern part of Western Ghats. The Dang is a tribal district, with the Bhil, Konkani (Kunvi), Varli, Kotwalia, Kathodi and Gamit being the major tribal groups. The Bheels have historically been residing in the Dang whereas the other tribes came to the Dang in search of a livelihood. The district comprises of 311 villages and one taluka. The total population of the Dang as per 2001 census is 1,86,729, divided in 36,498 households. The villages are small in size. The average population of the villages is 600 persons and the village consists on an average of 117 households. The Dang district bordering Maharashtra state is covered with high hills and rich forests. The Dang is the southernmost district in Gujarat, which starts from the rugged mountain chains of the Sahyadri range of the Western Ghats in the southwest and descends on the western side of extending undulating tract. Dang district is situated between the parallels of latitude 20°33'40" and 21°5'10" and the meridians of longitude 73°27'58" and 73°56'36". The district is bounded in the North by Vyara and Songadh Taluka of Surat district of Gujarat and Navapur Taluka of Dhulia district of Maharashtra; on the east by Sakri taluka of Navsari District of Maharashtra and on the West by Vansda taluka of Navsari district and Vyara of Surat district of Gujarat State. As is well known in tribal communities across the world, the forests form an integral part of our lives. The Dang tribals of the Dang district of south Gujarat have a tradition of medicine-men who are known as 'bhagats' who use forest plants in treating the illness of their community. Some studies have been done to document the plants used by the Dang tribals living in the Saputara and Purna forests also the Waghai forests of Dang district. The area covered by the present study covers more than 20 villages.

These villages were also chosen as the medicine men (bhagats) of these villages were well-known in the entire area. Many researches have been carried out in the South Gujarat like (Kokni et al. 2016), (D'Cruz 2002), (Shah GL 1978), (Navaroja RD and Kanchana M 2012), (Kumar et al., 2002), (Kumar et al., 2004), (Santapau H 1954) etc.

MATERIALS AND METHODS

After choosing the topic for the project, a number of books on ethnobotany were referred so as to give some basic idea as to how the project was to be carried out. Information was obtained about: What is Ethno-botany, methods of research, how to do field work and what kind of information should be collected. The structure of the project work was then drawn up. One task was to identify various 'Bhagats' through different contacts. Before meeting them a set of questions had to be drawn up.

The questions were as follows:

1. Name and Village of the Bhagat.
2. The local name of the medicinal plants.
3. The diseases for which the plants are used.
4. Which part of the plant is used?
5. Preparation of ethno medicine.

Dang district of South Gujarat was chosen as the study area which was then regularly visited every month for 10 days. The questions were asked and a lot of data was collected along with some of the available plants. The discussions with the bhagats were completely done in the local language or in their own languages. Details were written in the Kokni language and then translated into Gujarati and then into English. 10 Bhagats were interviewed.

RESULTS AND DISCUSSION

Table.1: List of Ethno-medicinal plants with family, common name, useful part and disease used.

No.	Scientific Name	Family	Common Name	Useful Parts	Disease
1	<i>Panicum montanum</i> Roxb.	Poaceae	Tokarband	Roots	Stomach pain
2	<i>Acacia catechuoides</i> (Roxb.) Benth.	Mimosaceae	Khair	Bark	Wounds
3	<i>Millettia racemosa</i> (Roxb.) Benth.	Fabaceae	Vela bivla	Whole Plant	Kidney stone
4	<i>Calotropis procera</i> (Ait.) R.Br.	Asclepiadaceae	Rui	Roots	Malaria
5	<i>Grewia hirsuta</i> Vahl, Symb. Bot.	Tiliaceae	Dhamanghas	Roots	Acidity
6	<i>Lantana camara</i> Linn.	Verbenaceae	Sabhardudhi	Leaves, roots	Indigestion
7	<i>Securinega ovata</i> (Willd.) Almeida	Euphorbiaceae	Pichrund	Roots and seeds	Constipation
8	<i>Urena lobata</i> Linn.	Malvaceae	Ranbhindi	Seeds	Heart problems
9	<i>Punica granatum</i> L	Punicaceae	Dadam	Fruits	Increasing eye sight
10	<i>Clerodendrum multiflorum</i> (Burmf.) O. Kutze.	Verbenaceae	Arni	Roots	Eye problems
11	<i>Ervatamia divaricata</i> (Linn.) Burkill, Rec. Bot. Surv. Ind.	Apocynaceae	Tagri	Leaf, Root	Teeth



					problems
12	Santalum album Linn.	Santalaceae	Handan	wood	Headache, fever
13	Cryptostegia grandiflora R.Br.	Periplocaceae	Damvel	Roots	Asthma
14	Jasminum flexile Vahl, Symb. Bot.	Oleaceae	Chameli	Flowers, leaf, roots	Ulcer and vomiting
15	Mimosa pudica Linn.	Mimosaceae	Lagare	Root	Scorpion bite
16	Withaniasomnifera (Linn.) Dunal in DC.	Solanaceae	Asoda	Root	Cough
17	Buchananiacochinchinensis (Lour.) Almeida	Anacardiaceae	Charoli	Leaves	Skin diseases
18	Musa paradisiaca Linn.	Musaceae	Keli	Trunk Sap	Snake bite
19	Ricinus communis Linn.	Euphorbiaceae	Eranda	Oil	Stomach problems
20	Euphorbia tirucalli	Euphorbiaceae	Kharsani	Whole plant	Acidity
21	Riveahypocrateriformis (Desv.) Choisy, Mem. Soc. Phys. Geneve	Convolvulaceae	Fangvel	Whole plant	Anthelmintic
22	Vachelliaferruginea (DC.) Santosh Yadav & Rashmi Sharma	Mimosaceae	Kati	Wood, bark	Asthma
23	Sphaeranthus indicus Linn.	Asteraceae [Compositae]	Gorakhmundi	Bark	Swelling of the neck
24	Citrus limon (Linn.) Burm.f.	Rutaceae	Limbu	Fruit	Digestion
25	Catharanthus roseus (Linn.) G. Don, Syst.	Apocynaceae	Barmasi	Root, flowers	High blood pressure
26	Cymbopogon citratus (DC.) Stapf in Bull.	Poaceae	Lili cha	Leaf	Reliving stress
27	Amorphophalluscampulatus (Roxb.) Blume ex Decne	Araceae	Janglisuran	Tuber	Dysentery
28	Holarrhenapubescens (Buch.-Ham.) Wall. ex G. Don, Gen. Syst.	Apocynaceae	Kudi	Bark, Leaf	Dysentery
29	Curcuma longa L.	Zingiberaceae	Halad	Rhizome	Cough
30	Alstoniascholaris (Linn.) R.Br. in Mem.	Apocynaceae	Sapteparni	Bark	Snake bite
31	Careyaarborea Roxb.	Lecythidaceae	Kumbai	Root	Small children who can't walk
32	Gliricidiasepium (Jacq.) Kunth ex Walp.	Fabaceae	Nalsoti	Leaves	Jaundice
33	Celosia argentia Linn.	Amaranthaceae	Kurdu	Leaves	Leprosy
34	Myristicafragrans Houtt.	Myristicaceae	Jaifal	Fruit	Leprosy
35	Ougeniaoojeinensis (Roxb.) Hochrest, Bull.	Fabaceae [Papilionaceae]	Taan	Whole plant	Baldness in lady
36	Mitragynaparvifolia Roxb.	Rubiaceae	Kalam	Bark	Kidney

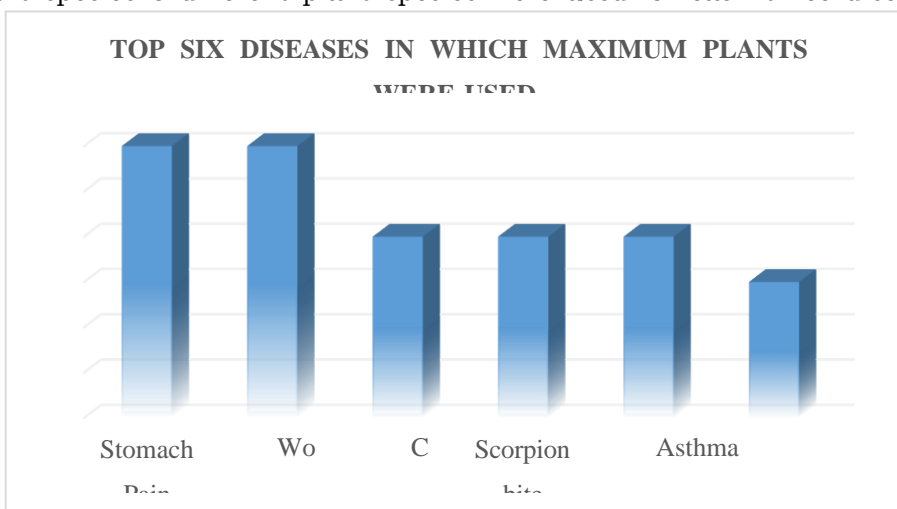


					stone
37	Anacardium occidentale	Anacardiaceae	Kaju	Seed	Brain tonic
38	Melina arborea Roxb.	Verbenaceae	Shivan	Bark	Joints pain
39	Bauhinia malabarica Roxb.	Caesalpiniaceae	Sengal	Leaves	Scorpion bite
40	Cucubita maxima Linn.	Cucurbitaceae	Kolu	Anterior part of plants	Throat pain
41	Euphorbia antiquorum Linn.	Euphorbiaceae	Sabar	Whole plant	Asthma
42	Ipomea aquatic		Borgat	Stick	Wounds of cattle
43	Wrightia tinctoria R.Br.	Apocynaceae	Kudai	Bark	cattle disease
44	Cocculus hirsutus	Menispermaceae	Zalmani	Roots	Fever
45	Ziziphus mauritiana Lamk.	Rhamnaceae	Bor	Bark	Cough
46	Sterculia urens	Sterculiaceae	Kahndol	Roots	Fracture
47	Ocimum tenuiflorum Linn.	Lamiaceae	Tulsi	Leaves	Asthma
48	Dioscoria bulbifera L.	Dioscoriaceae	Digdi	Whole plant	Skin diseases
49	Ipomea aquatic	Convolvulaceae	Nafate	Leaves	Appendix
50	Coriandrum sativum	Apiaceae	Dhana	Seeds	Leprosy
51	Terminalia bellerica Gaertn.	Combretaceae	Behda	Bark	Paralysis
52	Tectona grandisL.f.	Verbenaceae	Saag	Seeds	Kidney stone
53	Phyllanthus emblica Linn.	Euphorbiaceae	Avala	Fruit	Gastric problem
54	Eleusine coracana (L.) Gaertn.	Poaceae	Lagli	Seeds	Diabetes
55	Ailanthus excelsa Roxb.	Simaroubaceae	Bhuthjhad	Bark, Leaves	Stomach pain, Fever
56	Eucalyptus globulus Labill.	Myrtaceae	Nilgiri	Bark	Wounds
57	Careya arboreaRoxb.	Lecythidaceae	Kumbae	Bark	Stomach pain
58	Bridelia spinosa (Roxb.) Willd.	Phyllanthaceae	Asan	Bark	Stomach pain
59	Garuga pinnata		Madul	Bark	Joint pain and acidity
60	Abelmoschus manihot(L.) Medik	Malvaceae	Ranbhendi	Root	control periodic cycle of women
61	Someda fibrifoga		Rohni	Bark	Stomach pain
62	Albizia odoratissima(Linn.f.) Benth.	Mimosaceae	Dhorsiris	Whole plant	Wounds in cattle
63	Cassia tora Linn.	Fabaceae	Taruta	Leaves	scorpion bite
64	Celosia argentea L.	Amaranthaceae	Kurdu	Root	Itching
65	Woodfordia fruticosa(Linn.) Kurz, J. Asiat.	Lythraceae	Dhaiti	Root	Wounds
66	Wrightia tinctoria R.Br.	Apocynaceae	Dudhkudi	Roots	diarrhoea
67	Phoenix dactylifera L.	Palmae	Khajuria	Root	Scorpion bite
	Erythrina variegataLinn.	fabaceae			

68		[papilionaceae]	Pangara	Bark	Cough
69	Pongamiapinnata(L.) Pierre.	Fabaceae	Karanj	Bark	Wounds
70	Pithecellobium dulce (Roxb.) Benth.	Mimosaceae	Elichich	Bark	Diarrhoea
71	Morindacitrifolia L.	Rubiaceae	Aali	Root	Swelling
72	Momordica charantiaDescourt.	Cucurbitaceae	Karela	seed	Diabetes
73	Ficusbenghalensis L.	Moraceae	Vad	Hanging roots	Tooth ache
74	Sidacordata (Burm.f.) Boiss in Blumea,	Malvaceae	Chickne	Small dry stick	Birth problem

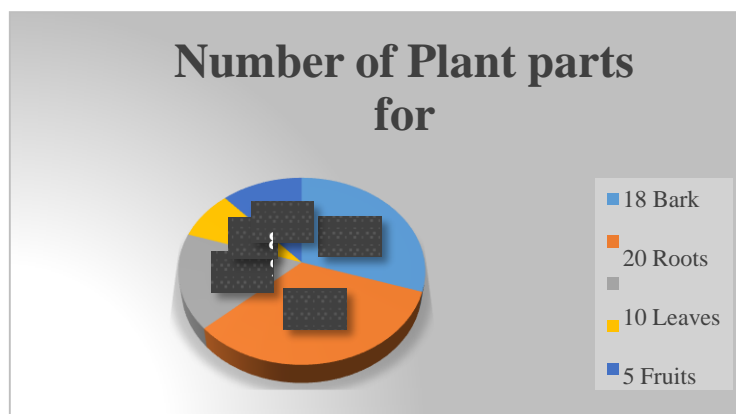
The total of 74 plant species was used for different diseases. The traditional healers used all plantspecies for different diseases. All the plant species were identified up to species level from flora of Gujarat by G.L. Shah.

Graph. 1: Graph showing 6 major diseases according to the number of plants species Among 74 plant species 6 different plant species were used for each three diseases like



Stomach pain, wound in cattle’s and Body pain similarly 5 different plants species were used for each two diseases like wounds and asthma followed by these there were 4 different plant species used for each six disease. There were many diseases in which only one plant species was used as medicine like skin disease, ulcer, vomiting, jaundice, heart problems etc.

Graph.2: Graph showing 5 high number of plants parts used for various diseases



Root and Bark were used for more than 25-30 diseases. This was given as dosage by making apaste or by boiling in water etc.



CONCLUSION

The study covers 20 villages of Dang district in which 74 plant species belonging to 40 families were used for medicinal purposes by Adivasis. From the point of view of diseases [Table-1 and Graph-1], the maximum number of plants were used to treat Stomach pain, and Wounds Cattle disease. This was followed by fracture, fever, skin diseases, ulcers, vomiting, wounds, treatments for diabetes, etc. Significantly, 42 different diseases were treated by the 74 different plant species. Root and Bark was the highest part used as medicine which is mentioned in [Graph-2].

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