

Ethno-Medicinal Plants Used to Cure Different Diseases by Tribals of Jhalod Taluka of Dahod District, Gujarat, India

R. N. Maru* and Dr. R. S. Patel**

* Department of Biology, Government Science College, Gandhinagar, (Gujarat), India

** Department of Biology, KKSJ Maninagar Science College, Ahmedabad, (Gujarat), India

Abstract- Dahod District Is One Of The Tribal District Of The Gujarat State. It Is Situated In The North-East Fringe of the Gujarat State, Adjoins With Rajasthan and Madhya Pradesh State. Total Forest Area Of Jhalod Is 788.39 Sq. Km. Area. Ethno Botanical Studies Were Carried Out To Collect Information On The Use Of Some Plants By Local Communities In Jhalod Taluka Of Dahod District, Gujarat, India. These Area Lies Under Bio-Geographic Zone-4 – The Semi Arid - Biotic Province -4b Gujarat-Rajwada, Sub Category 4b₅-Plains In Central Gujarat. Main Tribes Are Machhaar, Sangoda, Baria, Ninama, Vasaiya, Vasava, Parmar, Chauhan Etc. During This Study. The Authors Have Conducted An Extensive Field Survey In The Tribal Belts And Other Interior Villages Adjoining Forest Areas In The District To Collect Ethno Botanical Lore. First Hand Information Was Gathered Through Interactions With Tribal And Rural People Including Members Of Forest Protection Committees. A Number Of Group Discussions Were Also Conducted During The Period Of Investigation. In The Following Enumeration, Plant Names Have Been Arranged Alphabetically In Disease Wise. The Study Provides Information On 36 Plant Species.

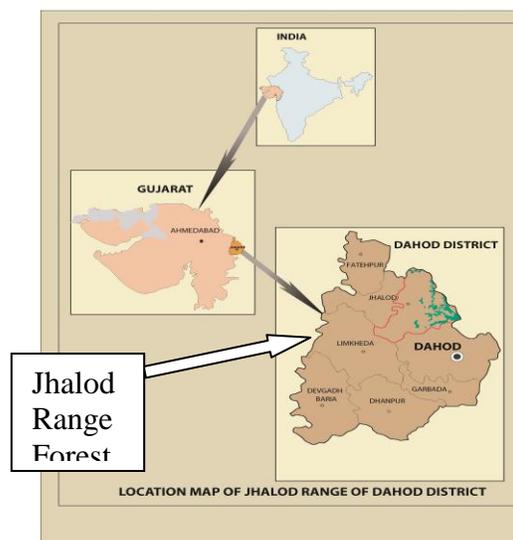
Index Terms- ethno botany, ethnomedicine, jhalod taluka, traditional uses., tribals.

I. INTRODUCTION

The Study Area, Popularly Known As Jhalod Forest And Its Surrounding Areas. Jhalod Taluka Is Located Between 23°-6'.07' N And 74°-9' To 74.46° E In The District Dahod, Gujarat State.. The Vegetation And Forests Are Tropical Mixed Dry Deciduous Type Of The Area. The Forest Area Is Hilly, Most Of The Hills Run In East To West Direction And Only Some In North To East Direction. The Flat Land In Between Are Under Cultivation By Tribal. In This Area Fresh Water Resources Availabilit Is Very Poor. The Drainage From Hills Have Been Dammed At Several Places In Forest. Jhalod Taluka In The Dahod District In The State Of Gujarat. Jhalod Taluka Is Situated Between The Banks Of The Tintodi River. The District Head Quarters Are Located At Dahod. The District Occupies An Area Of 2749 Km² And Has A Population Of 3,68,484 (2001 Census). It Is The Third-Most Backward District In Gujarat. It Was Only 6.96% Urban As Of 2001. Ethnobotanical Studies Were Carried Out To Collect Information On The Use Of Medicinal Plants By Local Communities Of Jhalod Taluka Of Dahod District. The

Utilization Of Plants For Medicine Is An Ancient, Global Tradition That Represents The Cornerstone Of Health Care For Many Rural Communities And Citizens In Developing Countries (Robbins, 2000). Earlier Works On An Ethnobotanical And Medicinal Aspects Of Plants Were Carried Out By A Good Number Of Workers Namely Thaker (1910), Saxton And Sedgwick (1918), Nadkarni(1926), Santapau (1954), Patel (1971), Shah (1978), Jain (1991), Shashtri (1996), Punjani(1997), Patel (2001), Bhatt,Et.Al. (2003), Jangid (2003). Dahod District Is One Of The Tribal District Of The Gujarat State. It Is Situated In The North-East Fringe Of The Gujarat State, Adjoins With Rajasthan And Madhya Pradesh State. The District Occupies An Area Of 2749 Km² And Has A Population Of 3, 68,484 (2001 Census). **Study Area:** Dahod District Consists Of Seven Talukas, Having 696 City / Towns. The Total Population Is 16,35,374 As Per 2001 Censes Having Total Occupational Area Of 3,63,277.16 Hectors. **The Surrounding Of The District Can Be Mentioned As Below:** North Side- Banaskantha District & Vanswada District Of Rajasthan. West Side- Godhara District East Side - Part Of Vadodara District & Zabua District Of M.P. South Side-Part Of Vadodara District & Zabua District Of M.P.

Map of the Study Area:



II. MATERIAL AND METHODS

During The Present Work I Had Visited Various Villages And Forests Area Including Hill And Hillocks For Collection Of Angiosperm Plants Taxa. Good Number Of The Trips Were Arranged In Different Season. During Monsoon And At The End Of The Season Frequency Was More Because Of Good Number Of Plant Taxa Were Available In Collection. The Collected Plants Were Brought To The Laboratory, Identified Up To Species Level Wherever It Was Possible And Then Dried With Customary Method Which Was Mounted On Herbarium Sheet And Labeled. The Field Study (Jan-Aug-2011) Centered On Villages In Jhalod. Informers Were Asked About The Ritual Importance Of The Plant, Why It Is Respected, Which Parts Are Used, And For What Purposes. The Informers Were Mainly Chosen According To Their Knowledge Of Common Traditions And/Or Religious Status.

III. RESULTS AND DISCUSSION

The Tribal People Of The Jhalod Used Different Plant Materials In Various Diseases Like Fever Cough,, Headache , Hepatitis , Constipation ,Scorpion Bite, Muscular Pain, Asthma, Snake_Bite_Total 30 Ethnomedicinal Plants Belonging 29 Genera And 21 Families . Dosages Are Repeated Until The Taste Returns To Normal. Recent Efforts Have Been Made To Elucidate The Efficacy Of Herbal Remedies That Are Used To Treat Snakebites (Houghton And Osibogun, 1993). In A Study By (Mors *Et AL.*, 1989). In View Of The Importance Of Traditional Medicine Which Provides Health Services To 75-80% Of The World Population, Increased Demand Of Herbal Drugs By The Pharmaceuticals And Depleting Natural Plant Resources, It Is High Time To Document The Medicinal Utility Of Less Known Plants Available In Remote Areas Of Country (Zaidi And Crow 2005)

Table:1 Enumeration of ethnomedicinal plants of Jhalod taluka

Sr. no	Botanical Name	Local Name	Family	Uses
1	<i>Abrus precatorius</i> L.	CHANOTHI	Fabaceae	A paste of the leaves is used to cure mouth ulcer.
2	<i>Achyranthes aspera</i> L.	ANDHEDO	Amaranthaceae	The boiled leaves are consumed to relieve internal piles and the roots are used as a brush to relieve pain and clean the teeth. -Crushed roots are used on scorpion bites to ease irritation. "kheer" is made from seed powder with ghee and jiggery, it is taken orally, tribal believe that when its taken there is no necessary to eat anything long time
3	<i>Aegle marmelos</i> (L.) Corr.	BILI	Rutaceae	Decoction of pulp of fruits use to cure dysentery. and pain of abdomen
4	<i>Alhagi psedalhagi</i> L.	JAVASO	Fabaceae	Dry powdered stem and leaf sarso oil is used for treating muscle pain
5	<i>Aloe vera</i> (Linn.) Burm	KUVARPAT HU	Liliaceae	Fresh juice is used as cathartic and for cooling. It is also used in treating fever eye infections and ulcer.
6	<i>Andrographis paniculata</i> (Brum. f.) Wall.	KARIYATU	Acanthaceae	leaf used in malaria and other fever.
7	<i>Annona squamosa</i> L.	SITAPHAL	Annonaceae	Dry leaves and seeds powder is use for remove teak and dandruff. (Rathod Abhaya Shih)
8	<i>Argyrea nervosa</i> (Brum. f.)Boj.	SAMUDRAS OS	Convolvulaceae	Whole plant is crushed and applied on abscess.
9	<i>Bauhinia racemosa</i> Lam.	ASATRI	Caesalpiniaceae	Pulp of Cucumis and stem bark of bauhinia is mixed with water and one cup is taken orally for easy delivery.
10	<i>Boswellia serrata</i> Roxb. ex. Colebr.	SALADI GUGAL	Burseraceae	Stem bark used for bleeding diarrhea with curd. Gum used as tonic for backache
11	<i>Boerhavia verticillata</i> Poir.	MOTO SATODO	Nyctaginaceae	Root pieces are kept in the mouse to cure mouth ulcers.
12	<i>Butea monosperma</i> (Lam.) Taub.	KHAKHRO, PALASH	Fabaceae	The flowers are boiled in water and the obtained juice is used as cooling agent.
13	<i>Eucalyptus globulus</i> Labill.	NILGIRI	Myrtaceae	Smog of boil leaves is taken through nostril for close nose.
14	<i>Gymnema sylvestris</i> (Retz) Schult.	MADUNASHI NI	Asclepiadaceae	Leaves powder use as a anti diabetic.
15	<i>Senna italica</i> Miller	SONA MUKHI	Caesalpiniaceae	A solution made from boiling the leaves in water is used for treating constipation and stomach cramps
16	<i>Commiphora wightii</i> (Arn.) Bhandari.	GUGAL	Burseraceae	Gum are used as air purifier and for exorcizing insect.
17	<i>Delonix elata</i> (L.) Gamble.	SANDESARO	Caesalpiniaceae	Stem bark juice is use is taken orally to cure bone fracture
18	<i>Desmodium gangeticum</i> (L.) DC. var. <i>gangeticum</i>	SALPARNI	Fabaceae	Plant is used in gynecological diseases and prepared "Salampak" for tonic.
19	<i>Hemidesmus indicus</i> (R. Br.) Nannari.	ANANT MULI	Periplocaceae	The leaf, root extract is used for blood purification.(Vasaiya Gamanbhai)
20	<i>Holarrhena antidysenterica</i> (L.) Wall ex G.	INDRAJAV	Apocynaceae	Stem bark is used for bleeding diarrhea.
21	<i>Madhuca Indica</i> J. F. Gmel	MAHUDO	Sapotaceae	Seed oil applied on body to cure cough,
22	<i>Mangifera indica</i> L.	MANGO	Anacardiaceae	Latex of fruit pedicel is use to cure .
23	<i>Pergularia daemia</i> (Forsk.) Chiov.	CHAMAR DUDHELI	Asclepiadaceae	One tea spoonful Powder of fruits given orally progeny less
24	<i>Polygonum glabrum</i> Willd.	POLIGONUM	Polygonaceae	Equal Mixture of variyali, khadi sakar and dry root powder of plant given orally for progeny less.

25	<i>Saraca asoca</i> (Roxb.) de Wilde.	ASHOK	Caesalpiniaceae	One cup Decoction of stem bark is taken orally to cure leucorrhea and “rakt pradai”
26	<i>Solanum indicum</i> L.	UBHI RINGANI	Solanaceae	One tea spoonful dry Powder Whole plant is used to cure asthma, hooping cough.
27	<i>Solanum surattense</i> Burm. f.	BHORINGNI	Solanaceae	Decoction of whole plant is used for fever ,asthma and hepatitis.
28	<i>Soymida febrifuga</i> (Roxb.) A. Juss.	RAGAT ROHIDO	Meliaceae	One cup Decoction of stem bark is taken orally to cure “rakt pradai”
29	<i>Sterculia urens</i> Roxb.	KADAI,KAD AYO	Sterculiaceae	Decoction of stem bark is taken orally to cure relief body pain
30	<i>Terminalia crenulata</i> Roth.	SADAD	Combretaceae	Dry stem bark is taken orally to cure heart problems.

IV. CONCLUSION

Plants play an important role in every aspect of our lives and without them life is not possible. Plants not only regulate the concentration of gases in the air, but also the only organisms capable of transforming sunlight into food energy on which all other forms of life ultimately depend upon. Apart from that this paper throws some light on various traditional and medicinal aspects and utility of plants.

ACKNOWLEDGEMENT

I m very thankful to all informators of my study area for giving me valuable information, I m also thankful to my guide Dr.R.S.Patel for providing me important and useful suggestions.

REFERENCES

- [1] Jangid, M.S. (2003). Ph.D. Thesis: Ethnomedicinal uses of some selected climbers of Modasataluka in N.G. Adv. Bio. Sci. Vol.2 (39-40).
- [2] Patel, N.K. (2001). Study of angiospermic plants with relation to phytosociological and Ethnobotanical study of Danta taluka, Di. B.K. Ph.D.thesis. H.N.G.Uni, Patan
- [3] Punjani, B.L. (1997). An Ethnobotanical study of tribal areas of district S.K. (N.G.).Ph.D.Thesis, H.N.G.Uni, Patan.
- [4] Jain, S.K. (1991). Dictionary of Indian Folk Medicine and Ethnobotany Deep Publications, New Delhi.

- [5] Shah, G.L. (1978). Flora of Gujarat State. Part I and II, Sardar Patel University, Vallabh Vidhyanagar.
- [6] Santapau, H. (1954). Contribution to the botany of Dangs forest in Gujarat. Guj. Res.Soc. 16:204-320 and 17:1-59.
- [7] Nadkarni, K.M. (1926). *Indian Materia Medica*, Vol. I and II, Popular Prakashan. Ltd. Mumbai.
- [8] Saxton, W.T. and Sedgwick, L.J. (1918). Plants of Northern Gujarat Ibid. 6 (7): 209-326 and I - Xiii.
- [9] Houghton, P.J., Osibogun, IM., 1993. Flowering plants used against snakebite. *Journal of Ethnopharmacology*. 39: 1-29.
- [10] Robbins, C. 2000. Comparative analysis of management regimes and medicinal plant trade monitoring mechanism for American Ginseng and Goldenseal. *Conservation Biology*. 14 (5): 1422-1434.
- [11] Jain, SK., 2001. Ethnobotany in Modern India. Phytomorphology Golden Jubilee Issue: Trends in Plant Sciences 39-54.
- [12] Zaidi, MA., Crow, SA., 2005. Biologically active traditional medicinal herbs from Balochistan, Pakistan. *J. Ethnopharmacol.* 96: 331-334.

AUTHORS

First Author – R. N. Maru, Department Of Biology, Government Science College, Gandhinagar, (Gujarat), India
Second Author – Dr. R. S. Patel, Department Of Biology, KKSJ Maninagar Science College, Ahmedabad, (Gujarat), India,
E- mail: rnmru1268@gmail.com