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Ethnomedicinal Plants Traditionally Used by The Tribals of R. D. F. Poshina Range of Sabarkantha District, North Gujarat, India

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ABSTRACT

The present paper reviews plants traditionally used by tribals in R.D.F.Poshina forest range of Sabarkantha district, north Gujarat, India. About 15 plant species were observed during my research work. Plant species of these forest areas are documented here with their botanical names, local names, family and their ethnobotanical uses. The species were arranged family vise according to the flora of Gujarat state. The present data were collected from the tribals and local people residing in the hamlets of the remote forest area.The botanical names, Local names, families, biodata of informators are given in the present research paper. The adivasi dwelling in the forest have good knowledge of different plants. Ethnobotany is a preliminary method of research, Suitable for gathering information on the use of plants. During the last few decades there has being an increasing interest in study of medicinal plant and their traditional use in different parts of world but documenting the indigenous knowledge through ethno botanical studies is important for conservation and utilization of biological resources.

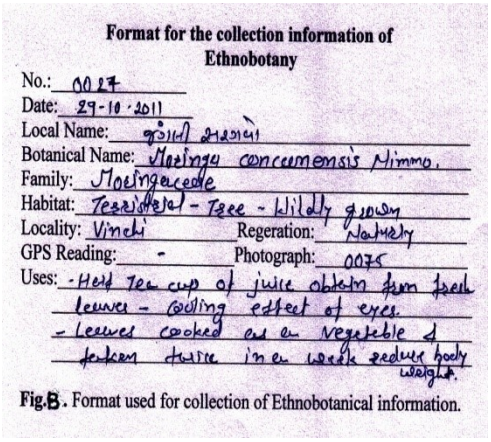
Key words: Traditionally, Sabarkantha district, R.D.F. Poshina forest range, Tribals.

I. INTRODUCTION

Medico-ethno botany acts as a bridge between botany and tribal knowledge regarding medicinal aspects of plants. India is very rich in floristic diversity as well as in ancient's folk literature which may be tapped for information since all systems of medicine have their roots, in one way of the other in folk medicines and house hold remedies. Ethnobotany deals with direct relationship between man and plants. Many currently widely used plants owe the origin of their use to ethnobotanical knowledge. During the last few decades there has being an increasing interest in study of medicinal plant and their traditional use in different parts of world but documenting the indigenous knowledge through ethno botanical studies is important for conservation and utilization of biological resources.

II. MATERIALS AND METHOD

Regular field trips were undertaken in the hamlets of the R.D.F. Poshina forest areas during the research period. The information regarding the traditional uses of plants growing in the forest was collected from the tribal and local vaidyas and was confirmed by making frequent inquiries with other resources. Information about utensils, agriculture implements, household instruments, medicinal uses, musical instruments, hunting, fishing etc. was considered as fairly authentic original and they were also compared with the referenced literature.



Format for the collection information of Ethnobotany

No.: 0027
Date: 29-10-2011
Local Name: ગોળી સરગવો
Botanical Name: Moringa concanensis Nimmo.
Family: Moringaceae
Habitat: Terrestrial - Tree - Wildly grown
Locality: Vinchi Regeration: Naturely
GPS Reading: - Photograph: 0075
Uses: - Herb Tea cup of juice obtain from fresh leaves - cooling effect of eyes.
- Leaves cooked as a vegetable & taken twice in a week reduce body weight.

Fig.3. Format used for collection of Ethnobotanical information.

Systematically the data pertained to the useful part, uses and mode of use, local name of the plant and animal etc. was recorded. Ethnobotanical informators personal bio-data were collected and taken photographs. Some tribal leaders were contacted and collected medico ethnobotanical information for various plants. Regular field trips were carried out to the area and the information was gathered through interviews with knowledgeable local inhabitants. The information regarding the local names, useful plant parts and the methods of using them are systematically documented. The medical terminology of different diseases used in this work was confirmed with local doctors. Photographs of these plants are also taken. The information gathered from one person was cross-examined by repeated interview with users.

III. STUDY AREA

Origin and History:

Sabarkantha district previously belonged to Mahi Kantha Agency. In 1948 it was named as a Mahi Kantha district. The name Mahi Kantha was changed in to Sabarkantha as a result of agitation by social workers. The district at present takes its name from the river Sabarmati which separates it from Banaskantha and Mahesana district on the west.

Khedbrahma is a taluka of Poshina range forest of Sabarkantha district. It is known for its historical value, Lord Brahma's temple and Goddess Ambika's birth place. There are only two temples of Lord Brahma in the world, one is in Pushkar and other is in Khedbrahma. Hence the name is given Khedbrahma.

Location and area:

Sabarkantha district having hilly and forest area near the range of Arvalli hills. The district Sabarkantha is situated in the north eastern part of Gujarat state between 23°03' and 24°30' north latitudes and 72°43' and 73°39' east longitudes. It covers an area of 7,390 km² of 13 talukas. Sabarkantha district has a population of 2,427,346 of which 2,064,318 (85.04 %) of rural and 363,028 (14.96 %) of urban as of 2011 census. Sabarkantha District is bounded by Rajasthan state to the northeast, Banaskantha and Mehsana districts to the west, Gandinagar and Kheda districts to the south and Panchmahal district to the east. Sabarkantha district take it name from the river Sabarmati which flows through it. Sabarkantha district is located in the southern part of Gujarat.

Plate:1 Map of the R. D. F. Poshina Range forest Area

Khedbrahma is located at northern part of Sabarkantha district. It lies between latitudes 24°1'42" north and longitudes 73°2'29" east. The rural commonly are Brahmin, Patel, Vania, Rajput and Muslims etc. The adivasi commonly are Bhils, Parmar, Pardhi, Sarar, Dabhi, Angari, Kher, Kapedia, Rohisa, Bangadia, Lakhumada, Chunara, Damors and many more. Their principal means of livelihood is agriculture and live stalk. The main crops raised are maize, whete, chana, peddy, tuvar, bajra, and rajko.

Before 1979 Poshina forest range was under the control of Jagirdas but after 1979 it was separated from the Dharoi range.

The Tribal:

Tribal are a distinct ethnic group who are usually confined to definite geographical areas, speak a common dialect, and are culturally homogenous and a unifying social organization. The R. D. F. Poshina range forest is mainly inhibited by different sub-tribes like Bhils, Parmar, Pardhi, Sarar, Dabhi, Angari, Kher, Kapedia, Rohisa, Bangadia, Lakhumada, Chunara, Damors and many more.

Live hood:

Their lives depend upon agriculture and cattle activities. They are mostly depending on forest for their survival in lean season. This results a variety of relationship between the resources and the ethnic groups of the area.

IV. RESULT AND DISCUSSION

Enumeration:

The collected plant specimens were identified and arranged according to Bentham and Hooker's system of angiospermic classification described in the Gujarat flora by Shah (1978).Valid scientific name, Local name, Family and ethno medicinally uses are described.

(1) *Miliusa tomentosa* (Roxb.) (Annonaceae) UMBH:

Internal stomach swollen (pet no andarno sojo): Leaves of *Miliusa* and *Diospyros* are crushed in water is filtered with cloth and extract is given for relief from internal stomach swollen (pet no andarno sojo).

(2) Capparis decidua (Forsk) Edgew. (Capparaceae) KERDO / KINGARNI:

Throat pain: Soil is digging periphery to the stem, heated on the charcoal and applied on throat to remove throat pain (galano dukhavo dur karva).

Toothache: Root is washed with water and chewing to remove toothache (dantno dukhavo matadva).

(3) Crateva nurvla Buch.-Ham. (Capparaceae) VAYVARNO:

Healing (vadhiya matadva): Stem bark is crushed with water on the rough stone and making pest to apply on wound affected part to cure healing (vadhiya matadva). (Makanabhai- 55 year, Movatpura village).

Gas trouble (vayu rog mate): Leaves are boiled in water and bath to it to remove gas trouble. (Keshabhai-45 year, Demti- Eran village).

Gas trouble (vayu rog mate): By preparing the juice by crushing the roots and applying it for gas trouble (vayu rog mate).

Abscess (gha matadva): By applying the pest of stem bark on abscess (gha matadva) and bandage on it, there will be a relief.

Fever (tav): By placing the hot leaves on head tiding bandage to relief from fever.

(4) Abelmoschus manihot (L.) Medic. (Malvaceae) BHINDO:

Heal crack (taza garmi): Leaves are crushed in water with adding salt, boiled in water, filtered and the filtrate is apply on had surface to remove heal crack (taza garmi).

Dandruff (khodo dur karva): Leaves are crushed and making pest to apply on the hair to remove dandruff (khodo dur karva).

(5) Gossypium herbaceum auct.non L. (Malvaceae) KAPAS:

Wound healing (vadhiya matadva): Ash of the burned cotton / outgrowth of the seeds is applied to cure wound healing (vadhiya matadva

Fracture of animals: Cotton fibers and SARSAV oil are bandage on it and change after every third day to cure it.

(6) Ailanthus excelsa (Roxb.)(Simaroubaceae) MOTO ARDUSO:

Pain of body (sarir no dukhavo matadva): Leaves are heated on charcoal tied on painful parts of the body with cotton Gossypium herbaceum auct. non L. cloth to relief the pain of body.

Mouth ulcer (modhana chanda mate): Leaves are crushed in water and making juice is taken two tea spoonfuls twice in a day to cure mouth ulcer (modhana chanda mate). **Fever and cough (cough ane tav matadva):** Stem bark is drown in water in whole night boiled in morning, taken half cup without breakfast to cure fever and cough (cough ane tav matadva).

Diarrhea (zada thay tyre): Stem bark is crushed with goat milk is taken two tea spoonfuls twice in a day to relief from diarrhea (zada thay tyre).

To cure snake poison (sap nu zer utarva): Stem bark is crushed in water filtrate is given to snake bite patient once in a day to cure snake poison.

(7) Zizyphus mauritiana Lam. (Rhamnaceae) BORDI:

Healing (vadhiya matadva): Leaves are crushed and making pest to apply on wound affected part to cure healing (vadhiya matadva).

Wound (Gha): Leaves are crushed and making pest to apply on wound.

Diarrhea (zada thay tyre): Root is crushed with the root of Bauhinia purpurea L.(Caesalpiniaceae) ASHETRI, filtered with cloth and filtrate is taken with curds to cure diarrhea (zada thay tyre).

Scorpion bite (vinchi karadva par): Leaf of Zizyphus mauritiana Lam. (Rhamnaceae) BORDI and Ficus racemosa L. (Moraceae) UMRO, crushed on stone surface and making pest is apply on scorpion bite thrice in a day for relief.

(8) Moringa concanensis Nimmo (Moringaceae) JANGLI SARAGAVO:

Reduce cholesterol and body weight (motapo ane vajan ochu karva): Half tea cup of juice obtained from the fresh leaves is to be taken for a week in the early morning in an empty stomach to reduce cholesterol and body weight (motapo ane vajan ochu karva).

Cooling effect of eyes (ankhoni thandak mate): Leaves were collected, washed and cooked as a vegetable and taken internally twice in a week will produce cooling effect of eyes (ankhoni thandak mate).

Fertility in women (chokru rakhva): Approximately 30 gm. of juice of fresh leaves is to be taken internally on empty stomach to fertility in women.

Tiredness (thak dur karva): Leaf is mixed with sugar and taken in the early morning in an empty stomach for a week to cure tiredness (thak dur karva).

(9) Solanum surattense (Burm.f.) (Solanaceae) BHOYRINGNI:

Dental diseases (dantna rogo mate): Dried seeds mixed with til (Sesamun) oil and heat on iron plate, inhale the waper to cure dental diseases (dantna rogo mate).

For energy: Fruits are used by tribal people as vegetable for energy purpose.

Ear pain and pas: Juice from unripe fruits is filtrate with cotton cloth and 2-3 drops of filtrate is put in ear to relief from ear pain (kanno dukhavo dur karva) and pus (kannu paru ane dukhava mate).

(10) Eucalyptus globulus Labill. (Myrtaceae) NILGIRI:

Lumbago (sarirno va mate): Leaves of Vitex and Eucalyptus are crushed and boiled in water and bath to cure lumbago (sarirno va mate).

Solid bitten: Leaves are crushed and make pest is applied on solid bitten. (kachhar vage tyre).

(11) Nyctanthes arbortristis L. (Oleaceae) PARIJATAK:

Itch (khujali matadva)and eczema (khas ane khujali): Leaves are crushed in the milk is applied on itch (khujali matadva) and eczema (khas ane khujali).

Dandruff (khodo dur karva): Seeds are crushed in water making pest applied on hair the washed it after an hour to remove dandruff (khodo dur karva).

Snake biting (sap karadva par): Leaf juice is given on snake biting (sap karadva par) thrice in a day to cure relief from poison.

(12) Calotropis procera (Ait.) R. Br. (Asclepiadaceae) AKADO:

Spine bite: Milkey latex of the plant used to treat on spine bite.

Hadeache: Leaf is heated on burning charcoal and placed on head to cure hadeache.

Swelling of knee: Leaf is heated on burning charcoal and placed on swelling part to cure relief from it.

Spine sticking and itch: Latex from the plant is applied for 3-4 days on spine sticking and also itch (khujali matadva).

Scorpion biting: Root pest is applied on scorpion biting (vinchi karde tyre).

Jaundice (kamla mate): Fresh root is burned in burning charcoal and inhale the Root is crushed in boiled rice extract (Chokha nu dhovaman) two to three drops dropping in nose in morning time to relief from jaundice (kamla mate).

(13) Ficus religiosa L.(Moraceae) PIPLO:

On old ulcer / wound (gha ane chanda dur karva mate): Crushed the leaves and boiled in pan with water than applied on the surface of ulcer for relief.

For removing the deformity of tongue of children (balaknu totadapanu dur karva mate): The ripe fruits are made the children eat for removing this deformity.

To remove the pimples on the body of children (adai dur karva mate): The stem bark is mixed with soil clay, crushed on the stone and to apply on the body for relief.

(14) Achyranthes aspera L. (Amaranthaceae) ANDHEDI:

On cough and lounge infection: whole plant wash in tape water dry in sunlight and make an ash. Ash is taken with honey twice in a day in empty stomach to cure it.

Jaundice (kamla mate) : Achyranthes root is crush in buttermilk given empty stomach early in the morning to cure it.

(15) Phoenix sylvestris (L.) Roxb. (Arecaceae) KHAJURI:

On the scorpion biting (vinchi dansh): The rot is washed with water and the juice is used orally and the rest of fibers are applied on the sting.

Decreasing the effect of wine (daruno nasho utarva mate:. The fruits are mixed with water and after half an hour it is crushed, filtered with cotton cloths and filtrate is used for decreasing the effect of wine (daruno nasho utarva mate).

For headache (mathano dukhavo matadva): Phoenix seed crushed on the stone surface with water, making pest is applied on head for relief in pain.

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VI. REFERENCES

[1]. Ahuja, K. K. and R. D. Pataskar (1970). Additions to the Flora of Gujarat. Indian forester, 96(8): 628-629.

[2]. Bole P. V. & Pathak J. M. (1988). Flora of Saurashtra. Part 2 & 3. Director, botanical Survey of India.

[3]. Cooke, Theodore. (1958). Flora of the Presidency of Bombay. Vol. 1, 2, & 3. Botanical Survey of India, Calcutta (reprint).

[4]. Jain, S.K. (1991). Dictionary of Indian Folk Medicine and Ethnobotany, Deep Publication, Delhi.

[5]. Pandey, C.N., B.R. Raval, Seema Mali and Harshad Salvi. (2005). Medicinal Plants of Gujarat. GEER Foundation, Gandhinagar.

[6]. Patel, K.C. (2003) Floristics and Ethnobotanical Studies on Danta Forest of North Gujarat; Ph.D. thesis submitted to Sardar Patel University, Vallabh Vidyanagar.

[7]. Patel, R.S. (2002) Floristics and Ethnobotanical Studies of Ambaji Forest on North Gujarat; Ph.D. thesis submitted to Sardar Patel University, Vallabh Vidyanagar.

[8]. Raghavan, R.S., B.M.Wadhwa, M.Y. Ansari and R.S.Rao. (1981). A checklist of the Plants of Gujarat. Rec. Bot. Surv. India. 21(2) 1-127.

[9]. Reddy, A. S. (1987). Flora of Dharampur Forest Part 1 & 2. PH. D. Thesis, Department of biosciences, S.P.University, Vallabh Vidyanagar, Gujarat- INDIA.

[10]. Santapau, H. (1962). The Flora of Saurashtra. Part-I. Ranunculaceae to Rubiaceae. Saurashtra Research Society, Rajkot.

[11]. Saxton, W. T. and Sedgwick, L. J. (1918). Plants of Northern Gujarat. Rec. Bot. Surv. India, 6(7): 209-323.

[12]. Shah, G. L. (1978). Flora of Gujarat State. Vol. I & II. Sardar Patel University Press, Vallabh Vidyanagar.

[13]. Yogi, D. V. (1970). A contribution to the flora of North Gujarat. Ph.D. Thesis, S.P. University, Vallabh Vidyanagar.