



Original Research Article

Ethnomedicinal Plants used for Wound and Swelling in R.D.F. Poshina Forest Range of Sabarkantha District, North Gujarat, India

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ABSTRACT

Keywords

Ethnomedicinal plants, Wound, swelling, R.D.F. Poshina forest range Sabarkantha district

The present paper reviews plants traditionally used by tribals in R.D.F.Poshina forest range of sabarkantha district, north Gujarat, India. About 14 plant species belonging to 8 families 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 wise according to the flora of Gujarat state. The adivasi dwelling in the forest have good knowledge of different plants like VAYVARNO *Crateva nurvla* Buch.-Ham.KAPAS *Gossypium herbaceum auct.non* L., BOR/BORDI *Zizyphus mauritiana* Lam., KHAKHRO /KESUDO *Butea monosperma* (Lam.) Taub., AVAL *Cassia auriculata* L., GARMALO *Cassia fistula* L., MAHUDO *Madhuka indica* J.F.Gmel., RAYAN *Manilkara hexandra* (Roxb.) Dub, AKADO *Calotropis procera* (Ait.) R. Br., CHAMARDUDHELI *Pergularia daemia* (Forsk.), NAGOD *Vitex negundo* L., RATANJOT *Jatropha carcus* L., ARENDO/DIVELO *Ricinus communis* L., KUNVARPATO *Aloe barbadensis* Mill., etc. were observed as a commonly useful plants in the R.D.F. Poshina Forest during the year 2010-2011.

Introduction

Ethnobotany is the study of how people of a particular culture and region make use of indigenous plants. Ethnobotanists explore how plants are used for such things as food, shelter, medicine, clothing, hunting, and religious ceremonies. The administrative headquarters of the district is Himmatnagar, about 80 km from Ahmadabad. Sabarkantha District has a population of 2,082,531 of which 10.81% were urban as of 2001. It covers an area of 7,390 km². Sabarkantha District is bounded by Rajasthan state to the

northeast, Banaskantha and Mehsanadistricts to the west, Gandhinagar and Kheda districts to the south and Panchmahal District to the east. Sabarkantha district takes its name from the river Sabarmati which flows through it. The Sabarkantha district is located in the southern part of Gujarat. Ninety percent of the population is rural. The main occupations of these people are dairy farming and agriculture. Himmatnagar is the district headquarters and the famous Sabar dairy is situated here. The major crop

of this area is cotton and groundnut. Several taxonomists and ethno-botanists continued to survey many areas of North Gujarat in length and breadth such as, plants of North Gujarat (Saxton and Sedgwick, 1918), Addition to Gujarat Flora (Ahuja and Pataskar, 1970), North Gujarat Flora & Ethnobotany (Yogi 1970; Patel & Reddy, 2007; Patel, 2002).

About the study area

Sabarkantha District having hilly and forest area near the range of Arvalli hills. Sabarkantha district is the backward district of Gujarat state. The total population according to 2001 census is 1027 million. The rural population is 15, 75,918 (86.48%) and tribal population is 18.41%. 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.

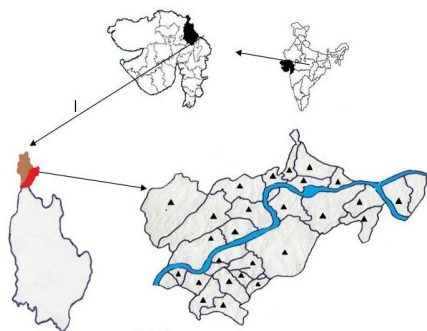


Plate:1 Map of the R. D. F. Poshina Range forest Area

Poshina range is divided into two ranges, Poshina forest range and R.D.F. (Rehabilitation of degraded forest range) Poshina forest ranges. The R.D.F. Poshina forest range is a tribal area located in

Khedbrahma taluka of Sabarkantha district of North Gujarat, India. The R.D.F. Poshina forest range belongs to Sabarkantha forest division of Gujarat state. The total area of R.D.F. Poshina forest range is 8156.03 H.A., of which reserve forest under section-20 is 921.43 H.A. and un-classed forest under section-4 is 7234.60 H.A. The total 25 villages are in the study area.

Materials and Method

Extensive field trips were organized during the year 2010-2011 in R.D.F. Poshina Forest range area of Sabarkantha district in North Gujarat. Forest areas and villages of such regions were frequently visited, to collect the information about the forest wealth and uses of plant species were noted. Village wise men, experienced informants, elderly people, head man of the hamlets, tribal medicine men, 'vaidya', 'bhagat', 'bhuwa', etc. were contact and by repeat queries data was gathered. These people are the only source of information about the local plant names and their ethnobotanical uses. This is the original and ancient knowledge, which was not documented systematically earlier but from last few decades several ethnobotanical workers have been worked on this subject. 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 ethnomedicinally uses are described.

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)Ver. Name: VAYVARNO

Bot. Name: *Crateva nurvla* Buch.-Ham.

Family: Capparaceae

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

(2)Ver. Name: KAPAS

Bot. Name: *Gossypium herbaceum auct.non L.*

Family: Malvaceae

Uses: Ash of the burned cotton / outgrowth of the seeds is applied to cure wound healing. (Jagubhai 25 years-Dedka village)

(3)Ver. Name: BOR/BORDI

Bot. Name: *Zizyphus mauritiana* Lam.

Family: Rhamnaceae

Uses: Leaves are crushed and making pest to applied on wound affected part to cure healing. (Jagubhai 25 years-Dedka village)

(4) Ver. Name: KHAKHRO /KESUDO

Bot. Name: *Butea monosperma* (Lam.) Taub.

Sub- Family: Papilionaceae

Family: Leguminosae

Uses: Unmatured leaves are boiled in water to applied on swelling part and tide with cotton cloths for two to three days to cure swelling. (Lalubhai 45years – Vinchi village)

Gum from the stem bark is applied on wound affected part thrice in day to cure healing.(Makanabhai 57 years-Dedka village)

(5)Ver. Name: AVAL

Bot. Name: *Cassia auriculata* L.

Sub- Family: Caesalpiniaceae

Family: Leguminosae

Uses: Leaves are crushed and boiled in water to applied on swelling part to cure

within ten days.(Parmarbhai 40 years-Lambadia village)

(6)Ver. Name: GARMALO

Bot. Name: *Cassia fistula* L.

Sub- Family: Caesalpiniaceae

Family: Leguminosae

Uses: Stem bark is crushed in water , filtered with clothes, filtrate is taken twice in a day to cure stomach ulcer. (Udabhai 50 years-Vinchi village)

(7)Ver. Name: MAHUDO

Bot. Name: *Madhuka indica* J.F.Gmel.

Family: Sapotaceae

Uses: Flowers are crushed and making pest to apply on septic wound for healing. (Lalubhai 45years – Vinchi village)

Leaves are heat on charcoal and tied with cotton on swelling part twice in a day to cure healing. (Udabhai 50 years-Vinchi village)

(8)Ver. Name: RAYAN

Bot. Name: *Manilkara hexandra* (Roxb.) Dub

Family: Sapotaceae

Uses: Milky latex of the plant used to treat on wound healing. (Makanabhai 57 years-Dedka village)

(9)Ver. Name: AKADO

Bot. Name: *Calotropis procera* (Ait.) R. Br.

Family: Asclepiadaceae

Uses: Milky latex of the plant used to treat on spine bite. (Makanabhai 57 years-Dedka village)

(10)Ver. Name: CHAMARDUDHELI

Bot. Name: *Pergularia daemia* (Forsk.)

Family: Asclepiadaceae

Uses: Milky latex of the plant used to treat on wound healing and also treat as an antiseptic. (Makanabhai 57 years- Dedka village)

Informeters



Lalubhai – Vinchi Village

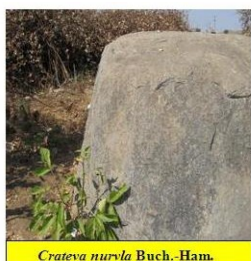


Udabhai – Vinchi Village



Maknabhai – Dedka Village

Ethnomedicinal plants



Crateva nurva Buch.-Ham.



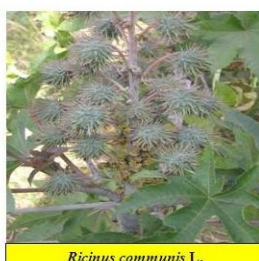
Gossypium herbaceum auct.non. L.



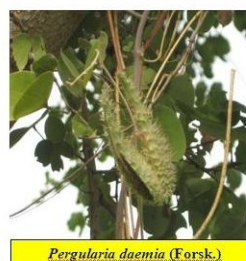
Zizyphus mauritana Lam.



Butea monosperma (Lam.) Taub.



Ricinus communis L.



Pergularia daemia (Forsk.)

(11) Ver. Name: NAGOD

Bot. Name: *Vitex negundo* L.

Family: Verbenaceae

Uses: Leaves are crushed with water and making pest, applied on swelling part. (Parmarbhahi 40 years-Lambadia village)

(12) Ver. Name: RATANJOT

Bot. Name: *Jatropha carcus* L.

Family: Euphorbiaceae

Uses: Leaves are crushed and making pest, applied on wound to stop bleeding and wound healing. (Lalubhai 45years - Vinchi village)

(13) Ver. Name: ARENDO/DIVELO

Bot. Name: *Ricinus communis* L.

Family: Euphorbiaceae

Uses: Leaves are heat on char coal and tied with cloths to cure swelling within twelve hour. (Mohanbhahi 31 years-Polapan village)

(14) Ver. Name: KUNVARPATO

Bot. Name: *Aloe barbadensis* Mill.

Family: Liliaceae

Uses: Leaves are boiled in water and pulp from the leaves is tied with cottoncloths for two days to cure wound healing. (Jagubhai 25 years-Dedka village)

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References

- Ahuja, K. K. and R. D. Pataskar (1970). Additions to the Flora of Gujarat. Indian forester, 96(8): 628-629.
- Bole P. V. & Pathak J. M. (1988). *Flora of Saurashtra*. Part 2 & 3. Director, botanical Survey of India.
- Cooke, Theodore. (1958). *Flora of the Presidency of Bombay*. Vol. 1, 2, & 3. Botanical Survey of India, Calcutta (reprint).
- Jain, S.K. (1991). *Dictionary of Indian Folk Medicine and Ethnobotany*, Deep Publication, Delhi.
- Pandey, C.N., B.R. Raval, Seema Mali and Harshad Salvi. (2005). *Medicinal Plants of Gujarat*. GEER Foundation, Gandhinagar.
- Patel, K.C. (2003) Floristics and Ethnobotanical Studies on Danta Forest of North Gujarat; Ph.D. thesis submitted to Sardar Patel University, Vallabh Vidyanagar.
- Patel, R.S. (2002) Floristics and Ethnobotanical Studies of Ambaji Forest on North Gujarat; Ph.D. thesis submitted to Sardar Patel University, Vallabh Vidyanagar.
- 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.
- Reddy, A. S. (1987). *Flora of Dharampur Forest Part 1 & 2*. PH. D. Thesis, Department of biosciences, S.P.University, Vallabh Vidyanagar, Gujarat- INDIA.

- Santapau, H. (1962). *The Flora of Saurashtra*. Part-I. Ranunculaceae to Rubiaceae. Saurashtra Research Society, Rajkot.
- Saxton, W. T. and Sedgwick, L. J. (1918). *Plants of Northern Gujarat*. *Rec. Bot. Surv. India*, 6(7): 209-323.
- Shah, G. L. (1978). *Flora of Gujarat State*. Vol. I & II. Sardar Patel University Press, Vallabh Vidyanagar.
- Yogi, D. V. (1970). A contribution to the flora of North Gujarat. Ph.D. Thesis, S.P. University, Vallabh Vidyanagar.