

MEDICINAL PLANTS USED BY TRIBALS OF PANCHMAHALS DISTRICT, GUJARAT

R.M. PAINULI and J.K. MAHESWARI

National Botanical Research Institute, Lucknow – 226 001, India.

Received: 26 August, 1993

Accepted: 9 September, 1993

ABSTRACT: An ethnobotanical survey was conducted in 20 tribal villages of Panchmahals district of Gujarat, inhabited by various tribal groups. The present communication records 36 plant species belonging to 34 genera and 27 families used by them in the treatment of various diseases and ailments.

INTRODUCTION

Gujarat State ranks fifth in the country in tribal population. The tribal belt stretches along the eastern border of the state which is characterized by hilly terrain, rocky soil, uncertain rainfall and presence of forest over large areas. Tribals are mostly concentrated in 8 districts viz. Banaskantha, Sabarkantha, Panchmahals, Vadodara, Bharuch, Surat, Valsad and Dang. The Panchmahals district lies between $22^{\circ} - 31'$ to $23^{\circ} - 10'$ N latitude and $73^{\circ} - 35'$ to $79^{\circ} - 10'$ E longitude and covers an area of about 5811 Sq.Km. The northern portion of the district is more or less plain, while the south western and eastern hilly portion with an elevation of 283-280 mt. above MSL is covered with dry deciduous forest. It is inhabited by tribes like Bhil, Dhanka, Kolidhor, Naika and Rathwa. The tribes practice folk medicine and utilize a number of these herbs in their daily life as well as consume tubers, bulbs, flowers and fruits of various plant species as food in times of emergency and famine. The tribal medicine man called 'Badwa' collected various species of forest flora and use them in the treatment of diseases and ailments. Some noteworthy plant species are:

Alangium salvifolium (L.f.) Wang; *Borassus flabellifer* L.; *Bosewellia serrata* Roxb. Ex Coleor; *Cassia fistula* L.;

Morinda tomentosa Heyne ex Roth and *Urginea indica* Roxb. The richness and diversity of the flora have attracted many botanists and ethnobotanists viz. Chavan *et al.* (1963), Bedi (1968, 78) and Shan (1978). The ethnobotanical information presented herewith is not reported in earlier literature.

During the course of this study, the data on the identity of plants, parts used and their mode of preparation of recipes and dosage were gathered. The voucher specimens are preserved in the Ethnobotanical Herbarium of National Botanical Research Institute, Lucknow. The plants are arranged in an alphabetical order followed by family, locality and traditional ethnomedical uses.

ENUMERATION OF PLANTS:

1. *Acacia leucophloea* (Roxb). Willd.
(Mimosaceae)

Loc. Name : Range Loc. : Dhanpur

Stem bark decoction used in dysentery and cattle diseases.
(RMP – EBH 8321)

2. *Achyranthes aspera* L. (Amaranthaceae)

Loc. Name : Anghedo *Loc. :* Saktala forest

Root powder (10-20 gm) mixed with curd and used in acute – dysentery
(RMP – EBH 8532)

3. *Adina Cordifolia* Hook. f. ex Brandis (Rubiaceae)

Loc. Name : Haldi *Loc. :* Kangata

Stem bark decoction used in jaundice. Leaf paste applied as an antidote of poisonous insects.
(RMP – EBH 8351).

4. *Alangium salvifolium* (L.f.) Wang (Alangiaceae)

Loc. Name : Ankol *Loc. :* Sanktala forest

Root decoction (25 – 30 ml) used as blood purifier and in fever.
(RMP – EBH 8348).

5. *Amorphophallus paconifolius* (Dennst.) Nicolson (Aracceae)

Loc. Name : Suran *Loc. :* Limkhada

Root powder (5 – 10 gm) mixed with jaggery and used in piles
(RMP – EBH 8360)

6. *Annona squamosa* L. (Annonaceae)

Loc. Name : Andure *Loc. :* Saktala forest

Leaf paste used for wound healing, boils and pimples

(RMP – Ebh 8306)

7. *Balanites aegyptiaca* (L.) Del (Balanitaceae)

Stem bark used as vermifuge, Fruit pulp applied on scorpion stings
(RMP – EBH 8354)

8. *Borassus flabellifer* L. (Areacaceae)

Loc. Name : Tad *Loc. :* Sakala forest

Fresh toody (200 – 500 ml) collected early in the morning to cure tuberculosis.
(RMP – EBH 8345)

9. *Boswellia serrata* Roxb. Ex Colebr (Burseraceae)

Loc. Name : Dhupedio, gugal *Loc. :* Andarpura

Bark Powder used in fever
(RMP – EBH 8353)

10. *Butea monosperma* (Lamk.) Taub (Fabaceae)

Loc. Name : Khakro *Loc. :* Udalmora

Stem bark paste applied in bone fracture.
(RMP – EBH 8328)

11. *Careya arborea* Roxb (Lecythidaceae)

Loc. Name : Kumbe *Loc. :* Fangia

Fruit used in colic pain
(RMP – EBH 8334)

12. *Cassia auriculata* L. (Caesaplinaceae)

Loc. Name : Avar *Loc. :* Lakhna

Seed oil used extremely in muscular pain
(RMP – EBH 8357)

13. *C. fistula* L. (Caesalpinaeae)

Loc. Name : Garmala *Loc.* : Udankhada

Seed paste mixed with jaggery used in colic pain. Bark used in loose motions.
(RMP – EBH 8314)

14. *Cassine glauca* (Rottb.) O. Ktze
(Celastraceae)

Loc. Name : Bhatede *Loc.* : Ratanmahal

Stem bark used in headache and fever of children
(RMP – EBH 8329)

15. *Celastrus paniculatus* Willd
(Celastraceae)

Loc. Name : Kangne *Loc.* : Ratanmahal

Seed oil used externally in headache. Leaf juice used in piles.
(RMP – EBH 8336)

16. *Echinops echinatus* Roxb. (Asteraceae)

Loc. Name : Kantachidia *Loc.* : Tokarwa

Root juice dropped into eyes in conjunctivitis
(RMP – EBH 8324)

17. *Euphorbia neriifolia* L. (Euphorbiaceae)

Loc. Name : Thur *Loc.* : Tokarwa

Latex mixed with salt and pitcher mud applied externally in ulcer.
(RMP – EBH 8311)

18. *Ficus hispida* L.f. (Moraceae)

Loc. Name : Bhareumere *Loc.* : Udalmora

Fruits are given to cattle as tonic in weakness
(RMP – EBH 8316)

19. *Holarrhena pubescens* Wall. Ex. G. Don
(Apocynaceae)

Loc. Name : Kudo *Loc.* : Moruya

Stem bark used in fever and joint pain
(RMP – EBII 8313)

20. *Jatropha curcas* L. (Euphorbiaceae)

Loc. Name : Tande *Loc.* : Savnea

Stem and leaf juice applied on toothache
(RMP – EBH 8356)

21. *J. gossypifolia* L. (Euphorbiaceae)

Loc. Name : Ratanjot *Loc.* : Lakhna

Twigs used as toothbrush in gum disease. Leaf paste applied on blisters of mouth.
(RMP – EBH 8359).

22. *Lowsonia inermis* L. (Lythraceae)

Loc. Name : Mandhe *Loc.* : Tokarwa

Leaf decoction used in Jaundice. Root paste used in leucorrhoea
(RMP – EBH 8305)

23. *Ludwigia adscendens* (L) Hara
(Onagraceae)

Loc. Name : Jaljambu *Loc.* : Sadra
Whole plant used in fever
(RMP – EBH 8319)

24. *Marsdenia tenacissima* (Roxb.) Moon
(Asclepidaceae)
- Loc. Name* : Kawdardodi *Loc.* : Tokarwa
Root powder used in whooping cough of children
(RMP – EBH 8301)
25. *Martune annua* L.
- Loc. Name* : Bichhwa *Loc.* : Sadra
Seed oil used in skin diseases
(RMP – EBH 8309)
26. *Morinda tomentosa* Heyne ex. Roth
(Rubiaceae)
- Loc. Name* : Alande *Loc.* : Udalmora
Stem bark used in fever and jaundice
(RMP – EBH 8322)
27. *Pongamia pinnata* (L.). Pierre
Anderpura (Fabaceae)
- Loc. Name* : Karanga *Loc.* : Anderpura
Stem bark applied externally in scabies
(RMP – EBH 8326).
28. *Ricinus communis* L. (Euphorbiaceae)
- Loc. Name* : Arando *Loc.* : Kawade
29. *Solenum Surattense* Burm. f.
(Solanaceae)
- Loc. Name* : Bhoringe *Loc.* : Udalmora
Fruit and root decoction used in toothache.
(RMP – EBH 8325)
30. *Sowmide fabrifuga* A. Jus. (Meliaceae)
- Loc. Name* : Royan *Loc.* : Pipergota
Bark decoction used in cough and fever
(RMP – EBH 8362)
31. *Syzygium heyneanum* Wall. ex. W. & A.
(Myrtaceae)
- Loc. Name* : Jal Jambu *Loc.* : Kawade
Bark powder used in colic pain alongwith ‘mehuwa’ liquor
(RMP – EBH 8347)
32. *Tridax procumbens* L. (Asteraceae)
- Loc. Name* : Ganthe *Loc.* : Udalmora
Plant juice (100 – 200 ml) taken orally in weakness of body
(RMP – EBH 8331).
33. *Typha angustata* Bory & Chaub
(Typhaceae)
- Loc. Name* : Ghabhajara *Loc.* : Tokarwa
Flower paste used for wound healing. Root in blood purification.
(RMP – EBH 8319)
34. *Urginea indica* L. (Liliaceae)
- Loc. Name* : Jangle payaz *Loc.* : Savnea
Bulb used in abortion
(RMP – EBH 8365)
35. *Vanda tessellate* (Roxb.) Hook. f.
(Orchidaceae).
- Loc. Name* : Sagdeyaka vandal *Loc.* : Udalmora

Plant paste applied on swollen part of body and juice is taken orally in blood purification
(RMP – EBH 8320)

36. *Viscum articulatum* Burm.
f.(Loranthaceae)

Loc. Name : Timru ka vandal *Loc* : Sagtala

Plant paste applied in muscular pain. Plant decoction used in dysentery.
(RMP – EBH 8304)

ACKNOWLEDGEMENT

The authors are thankful to the Ministry of Environment and Forests, Government of India for providing financial assistance and encouragement.

REFERENCES

1. Bedi, S.J. Studies on the vegetation and flora of Ratan Mahal Hills, Gujarat State, India. *Proc. Symp. "Deccan Trap Country"*, *Bull. I.N.S.A.* No. 46 pp 1-9 (1968).
2. Bedi, S.J. Ethnobotany of the Ratan Mahal Hills, Gujarat, India, *Econ. Bot.* 32 : 278 – 284 (1978).
3. Chavan, A.R., S.J. Bedi and S.D. Sabnis, On useful plants of Devgadh Hills, Gujarat State. *Bull. Bot. Soc. Coll Sci. Nagpur* 4 : 25 – 32 (1963).
4. Shah, G.L., Flora of Gujarat State – Part I & II, pp. 1074 Sardar Patel University, Vallabh Vidayanagar (1978).