



**SHORT COMMUNICATION**

**OPEN ACCESS**

## **Medicinal plants used in treatment of some common disease by local people from Danta Taluka**

**I. R. Parmar\* and N. K. Patel**

Department of Botany, Sheth M. N. Science College, Patan

Corresponding Author: **I. R. Parmar**

Email id: [indravijay777@gmail.com](mailto:indravijay777@gmail.com)

### **ABSTRACT**

*In ancient time all over the world's herbal medicine were used to cure all the diseases. But due to the globalization, some other medicinal practices emerge out. On the help of quick relief, many more side effects affect the human health. Therefore, the practioner are come back on the herbal medicines. As the relationship explores, Ethanobotany, the term arises that's means relation of medicinal plants and human beings. The present paper focus on surveys of medicinal plants used by some tribe of Danta taluka. The taluka area is fully covered by the deciduous forest. These people used some plants as to cure the common. About more than 56 plants species were observed out of which some important plants documented in this paper.*

**Keywords:** *ethnobotany, tribal people, herbal botanical garden, Banaskantha district, Gujarat*

Received 22.03.2024

Revised 24.04.2024

Accepted 23.05.2024

### **INTRODUCTION**

Banaskantha is one of the most important districts in Gujarat. The district boundary latitude is 24.3455° N and the longitude is 71.7622° E. The area of the district is 12,703 km<sup>2</sup>. It is connected to the north by Aravali, to the south by Patan District, to the east by Sabarkantha and Mehsana District, and to the west by Kachchh District. Banaskantha district shows a little variation in its climate along the north-south direction. The district is located in the northeast of Gujarat and is presupposedly named after the west Banas River. Banaskatha district mainly features deciduous forests. The summers are hot while the winters are dry and cold; the temperature may drop to 12°C or below 9°C. Herbal Botanical Garden is located near Vashi village in Danta Taluka in the Banaskatha district. In this garden, the natural vegetation of the forest includes a variety of plant species with tremendous medicinal values. The local peoples and some tribes are mostly dependent on these plants. They are plants used as food, as vegetables, and as medicine to cure some common diseases like fever, cold, cough, diarrhea, body pain, etc. Several authors studied the ethnobotany of this district, but this herbal botanical garden and the nearby village area remain untrapped. For this speculated region, we focus on this study area. The study area includes mainly herbal botanical gardens and some nearby villages like Vashi, Divadi, Dhareda etc [1-2]. The current research basically emphasizes the use of different plant parts for wellness over diseases. In the Indian subcontinent, the practices of ethnobotany are common to all the people. So many studies were carried out using the same approach. But, apart from the other studies, the subject work mentions the ethnobotanical procedure and its effectiveness in overcoming human wellness.

### **MATERIAL AND METHODS**

Ethnomedicinal surveys were conducted in 2022–2023 in the winter in the tribal areas of Vashi, Dividi, and Dhareda in the Danta area of district Banskantha. During this survey, we collected all the data about medicinal plants used by the tribal men and villagers [3-5]. These observations are based on the personal interviews of tribal people and villagers, namely

- 1) Dineshbhaipanchal, Garden's supervisor village –Danta
- 2) Nanjibhaithakor, Village-Vashi
- 3) Ramjibhaikhokhariya, Village –Vashi
- 4) BhagabhaiRathod, village- Dhareda.

Also discussed were medicinal value, local names, how to use them, and the locality of plants. Plants were identified using recurrent scientific literature. Herbarium plants were stored in the department of botany at Sheth M.N.Sicence College, Patan.

## RESULT AND DISCUSSION

During survey time, plants and plant parts are used as medicine by tribals and villagers from the Danta area. This analyzed data revealed that 56 medicine plants belong to 39 families, like Fabaceae, Mimosoideae, Solanaceae, Asclepiadaceae, Papaveraceae, Apocynaceae, Leguminosae, etc. These plant species are used by tribals for curing common diseases such as headache, dysentery, skin disease, malaria, cough and cold, fever, toothache, snake bite, wounds, diabetes, mouth ulcer, leprosy, etc. So, there is a need to explore the area and again investigate phytochemical diseases for further research. Due to that, we carried out a survey in the Danta area and also noted all the uses of medicinal plants.

Table: Medicinal plant and their medical values

No.	Plant scientific name	Local name	Family	Ethno medicinal value:
1	<i>Phyllanthus emblica L.</i>	Amla	Phyllanthaceae	The paste of fruit pulp is applied to the skin for a burning sensation. The skin of bark chewed alleviates the dental aches.
2	<i>Tecomell aundulata (Sm.) Seem.</i>	Ragat Rohida	Bignonoaceae	The powder of the bark of Rohida is given in a dose of 3 to 4 g to treat indigestion, lack of appetite, and intestinal worms.
3	<i>Bauhinia purpurea L.</i>	Kanchanar	Caesalpiniaceae	Decoction of root bark is administered for inflammation of the liver. It is also used as a vermifuge.
4	<i>Crateva nurvala Buch.-Ham. var. nurvala</i>	Vaivarno	Cappraceae	Leaves are a remedy for foot swelling and the burning sensation of the soles of feet, and they also help with rheumatism. Leaf smoke is inhaled in cases of caries of the nose.
5	<i>Oroxylum indicum (L.) Vent.</i>	Tetu	Bignonoaceae	Tender fruits are beneficial for carminative and stomachic health. Seeds are purgative. And useful in piles and throat diseases.
6	<i>Aegle marmelos (L.) Corr.</i>	Bili Patra	Rutaceae	The decoction of the root and the stem bark is used in the cure of intermittent fevers. A decoction of small, unripe fruit with fennel seeds and ginger is given for piles.
7	<i>Terminalia bellirica (Gaertn.) Roxb.</i>	Behda	Combretaceae	The fruit is used internally, principally in the treatment of digestive and respiratory problems.
8	<i>GmelinaarboreaRoxb.</i>	Sevan	Verbenaceae	Its leaves are made into paste and applied to the forehead to relieve headaches. Flowers are useful in digestion, bleeding disorders, menstrual bleeding, and balancing kapha and pitta.
9	<i>Terminali aarjuna (Roxb.) W. &amp; A.</i>	ArjunSadam	Combretaceae	Arjuna maintains normal urine flow and helps suppress painful maturation. Leaves are used to cure ulcers and sores externally.
10	<i>Xeromphis spinosa (Thunb.) Keay</i>	Mindhal	Rubiaceae	The powder of seeds in a dose of 2-4 grams with water can also be used for vomiting.
11	<i>Citrus medica var limetta Wt. &amp; Arn.</i>	Bijoru	Rutaceae	One tea cup of fruit juice is given to cure kidney stones. Juice is indicated in mostly digestion problems.
12	<i>Citrus limon (L.) Burm. f.</i>	Limbu	Rutaceae	Fresh Ripen fruit juice, mixed with sugar and salt, is used to relieve vomiting and weakness.
13	<i>Dalbergia latifolia Roxb.</i>	Sisam	Fabaceae	The extract of bark is spasmogenic and anthelmintic. The bark is used to treat indigestion.
14	<i>Clerodendrum</i>	Arani	Verbenaceae	Decoction of leaves acts as a

	<i>multiflorum</i> (Burm. f.) <b>O. Ktze.</b>			bronchodilator and mucolytic in nature, and it is used to break down phlegm and extra mucus and ease it out of the body. The root of this herb is used to treat jaundice and various disorders associated with the liver.
15	<i>Musa paradisiaca</i> L.	Kela	Musaceae	Banana young leaves are used as dressings for skin wounds to treat inflammation.
16	<i>Argyreia nervosa</i> (Burm. f.) Boj.	Samudrashosh	convolvulaceae	Leaves are maturative, absorptive, local stimulant, and rubefacient and are used externally as an emollient paste for wounds and skin diseases.
17	<i>Mimosa pudica</i> L.	Lajamani	Leguminoseae	The decoction of the root in a dose of 45–50 ml is taken to get relief from renal stones, urinary complaints, and asthma.
18	<i>Rauvolfia serpentina</i> (Linn.) Benth. exKurz.	Serpgandha	Apocynaceae	It is used in various parts of the world for the treatment of snake (cobra), scorpion, or reptile bites and stings from any poisonous insects.
19	<i>Withania somnifera</i> (L.) Dunal	Ashwagandha	Solanaceae	Regular use of ashwagandha helps to reduce blood sugar and cholesterol levels.
20	<i>Bacopa monnieri</i> (L.) Wettst.	Bhrami	Scrophulariaceae	The leaf juice can also be used for increasing blood pressure and enhancing the nervous system.
21	<i>Thevetia peruviana</i> (Pers.) Merrill	Karen	Apocynaceae	Latex is applied to decayed teeth to relieve toothache. It is used to treat chronic sores and ulcers, and it is applied to soften corns and calluses.
22	<i>Holoptelea integrifolia</i> (Roxb.) Planch	Kanaji	Ulmaceae	The tender twigs are used as tooth brushes and are believed to keep the breath and mouth clean and healthy.
23	<i>Alangium salvifolium</i> (L.f.) Wang.	Ankol	Alangiaceae	Root bark is used as a purgative and an anthelmintic. Useful in worms, colic, inflammations, and poisonous bites.
24	<i>Ocimum sanctum</i> L.	Tulasi	Lamiaceae	Fresh tulsi juice mixed with ginger and honey helps reduce coughs and colds. Tulsi decoction is very beneficial for fevers like dengue and malaria.
25	<i>Celastrus paniculatus</i> Willd.	Malkangani	Celastraceae	The seed oil is a brain tonic. It promotes intellect, sharpens memory, and helps with learning.
26	<i>Butea monosperma</i> (Lam.) Taub.	Khakharo	Fabaceae	Flowers boil in water, and it is used as a body coolant and for skin diseases.
27	<i>Pancreatium triflorum</i> Roxb.	Penckersium	Amaryllidaceae	Rhizome mixed with water is ingested to cure fatigue.
28	<i>Diospyros melanoxylon</i> Roxb.	Timbera	Fabaceae	The fruits have a cooling and astringent effect.
29	<i>Anogeissus latifolia</i> (Roxb.) Wall. exBedd.	Dhav	Combretaceae	Leaf juice is given in purulent discharges from the ear.
30	<i>Cenchrus ciliaris</i> L.	Dhaman	Poaceae	The plant is anodyne, diuretic, and emollient.
31	<i>Murraya koenigii</i> (L.) Spreng.	Mitho Limbado	Rutaceae	The green leaves are stated to be eaten raw for curing dysentery, and the infusion of the washed leaves stops vomiting.
32	<i>Azadirachta indica</i> A. Juss.	Limbado	Meliaceae	The bark used in the powder or fluid extract is used in cases of intermittent fevers, general debility, convalescence, and loss of appetite. In hot decoction, they form a valuable antiseptic and healing lotion.
33	<i>Boerhavia diffusa</i> L.	Satodi	Nyctaginaceae	It is a good expectorant, antispasmodic, and successful in treating asthma.
34	<i>Calotropis procera</i> (Ait.) R. Br.	Akado	Asclepiadaceae	Leaves used as used for joints and waist pain, malarial fever.

35	<i>Indigofera astragalina</i> DC.	Gali	Fabaceae	Root powder for pain in the chest.
36	<i>Santalum album</i> L.	Chandan	Santalaceae	The paste is also used as a remedy for prickly heat and to prevent excessive sweating during adverse environmental conditions.
37	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook. f. & Thoms.	Galo	Menispermaceae	Juice extracted from the stem is administered orally in the morning on an empty stomach to cure diarrhea.
38	<i>Tribulus terrestris</i> L.	Gokharu	Zygophyllaceae	The leaves of this medicinal plant are considered to possess stomachic properties.
39	<i>Aloe barbadensis</i> Mill.	Kunwarpathu	Lilaceae	Oral intake and tropical dressings of Aloe Vera encourage healing of any kind of wound on the skin, burn, or scald.
40	<i>Adhatoda vasica</i> (L.) Nees	Ardusi	Acanthaceae	Leaves (500g) are decocted in water (5 liters) until a dark brown mass is obtained, and two spoonfuls of honey are taken three times a day for 2-4 days to cure fever.
41	<i>Andrographis echinoides</i> (L.) Nees	Kariyatu	Acanthaceae	Plants are useful in general debility and dysentery remedies for the bowel complaints of children.
42	<i>Carissa congesta</i> Wt.	Karamda	Apocynaceae	The unripe fruit is bitter, sour, astringent, thermogenic, constipating, an appetizer, an antipyretic mucolytic, and useful in polydipsia, anorexia, diarrhea, and diseases of the brain, including intermittent fevers.
43	<i>Grewia flavescens</i> A. Juss.	Trobet, Trambat	Tiliaceae	The seeds are ground to powder with turmeric and rubbed all over the mother's body after childbirth to prevent rheumatic pain from exposure to damp winds.
44	<i>Argemone mexicana</i> L.	Darudi	Papaveraceae	The yellow juice of the plant is used as medicine for dropsy, jaundice, and cutaneous affections.
45	<i>Syzygium heyneanum</i> Wall. ex W. & A.	JalJamuni	Myrtaceae	A paste of bark is applied topically over the affected part of the skin to cure the wound.
46	<i>Terminalia chebula</i> Retz.	Harade	Combretaceae	It is good to increase appetite, digestive aid, liver stimulant, stomachic, and gastrointestinal prokinetic agent.
47	<i>Tylophora indica</i> (Burm. f.) Merrill	DamniVel	Asclepiadaceae	The leaf and root of this plant are widely used for treating jaundice.
48	<i>Vitex negundo</i> L.	Nagod	Verbenaceae	Leaves are used in aromatic baths and as insectifuges. A vapor bath prepared with the plant is used for the treatment of febrile, catarrhal, and rheumatic affections.
49	<i>Ailanthus excelsa</i> Roxb.	Arduso	Simaroubaceae	It is used as an astringent in diarrhea, dysentery, ear aches, and to cure skin diseases.
50	<i>Asparagus gonoclados</i> Baker	Satavri	Liliaceae	Root is mainly used in diebitis.
51	<i>Agave americana</i> L.	Ketki, Ramban	Agavaceae	Leaf pulp mixed with sugar is a popular remedy for gonorrhea.
52	<i>Cassia auriculata</i> L.	Aval	Caesalpiniaceae	Dried powder of flowers is mixed with goat milk and taken orally to prevent white discharge.
53	<i>Cissus quadrangularis</i> L.	Hadsankal	Vitaceae	The roots and stems are most useful for healing fractures of the bones.
54	<i>Piper longum</i> L.	Lindi pepper	<u>Piperaceae</u>	The unripe fruit is sweetish, cooling, and useful for biliousness.
55	<i>Peper mia pellucida</i> (L.)	Moli pepper	<u>Piperaceae</u>	Pansit-pansitan has been traditionally

	<b>H. B. &amp; K.</b>			used to treat fever, cough, common cold, headache, and arthritis.
56	<i>Bryophyllum pinnatum</i> <b>(Lamk.) Oken</b>	Panfuti	Crassulaceae	Leaves are used as an application to wounds, bruises, boils, and bites from venomous insects and kidney stones.

## REFERENCES

1. Cooke, T. (reprint), (1967): The Flora of the Presidency of Bombay, vols. I, II, and III. Botanical Survey of India, Calcutta,.
2. Hooker, J.D., (1997): The Flora of British India, Vol. I–VII. London.
3. Karthikeyan, S.,(2003): Flora of Maharashtra State, Dicotyledons vol. II, B.S.I. Western Circle Pune.
4. Patel, N.K., (2001): Studies of Angiospermic Plants with Relation to Phytosociology and Ethnobotanical Study of Danta Taluka, Banaskantha District, Ph.D. Thesis.
5. Naik, V.N.,(1998): Marathwadyatil Samanya Vanaushhadhi,(Marathi) Amrut Prakashan, Aurangabad.
6. Singh, N.P., (2000): Karthikeyan S. Flora of Maharashtra State, Dicotyledones, Vol. I. Botanical Survey of India, Calcutta.
7. Sharma, B.D., Karthikeyan, S., and Singh, N.P, (1996): Flora of Maharashtra State: Monocotyledones, Botanical Survey of India, Calcutta.
8. Shah, G. L.,(1978): Flora of Gujarat State, Parts I and II, Sardar Patel University, VallabhVidhyanagar.

## CITATION OF THIS ARTICLE

I. R. Parmar and N. K. Patel. Medicinal plants used in treatment of some common disease by local people from DantaTaluka. Bull. Env. Pharmacol. Life Sci., Vol 12 [7] June 2024: 58-62