



Research Article

ETHNO MEDICINAL KNOWLEDGE AND PRACTICES IN GANDHAMARDAN HILLS; AN IN-DEPTH SURVEY

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ABSTRACT

This document lists twenty plant species that have historically been utilized to treat a variety of illnesses and health problems by the most well-known ethnic tribe in the Gandhamardan hill region. Firsthand information gathered from key tribal communities in the Gandhamardan hill region of the Balangir districts of Odisha through a number of surveys and field trips. A result of the ethno-medical study is presented, including local names, botanical names, families, locations of collecting, and methods of administration. The article highlighted the distinctive variety of plants found in this hill range and the actions necessary to protect the endangered species.

INTRODUCTION

In terms of size and population, Odisha is the eighth and eleventh largest state in India, respectively, and is situated in the country's east. Third-largest Schedule tribal population in India is found in this state. Latitudes 17.780N and 22.730N and longitudes 81.37E and 87.53E are where Odisha is located. With 450 kilometres of coastline, the state covers 155,707km², or 4.87% of all of India. Diverse flora and wildlife can be found in its distinct woodland ecosystem. A tropical monsoon climate prevails in this region. With twenty-two permanent streams and a varied topography, the hill range provides the most hospitable habitat for the flourishing growth of medicinal plants. As stated in a 2012 report by the Forest Survey of India, Three quarters of the state of Odisha, or 48,903 km², are covered by wild forests. Dense forest (7,060 km²), medium dense forest (21,366 km²), open forest (20,477 km²), and scrub forest or scrubland (4,734 km²) are the four categories into which the forests are divided.^[1]

In the Odisha, Gandhamardan Hills, also known as Gandhamardan Parbat, is a hill situated between Balangir and Bargarh.

The medicinal plants on this hill are widely recognized. The fact that this hill was formerly the centre of Buddhist culture lends it additional historical significance. In Hindu mythology, this hill came from the Himalayas and was carried by Lord Hanuman in order to save Lakshman. During the Tretaya Yug, often known as the Silver Age, Hanuman was advised by Sushena, a skilled physician in the Vanara Sena that succeeded Ram, to bring Visalyakarani in order to revive Laxman. After failing to recognize the specific plant, Hanuman bore a massive Himalayan bulk on his shoulders. As they passed over and headed into Lanka, part of them descended. Gandhamardan is exclusive to that part. The famed Harishankar Temple is situated on the southern slope of this hill, between 78.2887°E and 30.411383°N, while the Nrusinghanath Temple is situated at the hill's northern side.

There is a great diversity of therapeutic plants found in the mountain ranges of Gandhamardan. There are 220 plant species of therapeutic use, according to the Botanical Survey of India. There are, however, more than 500 types of medicinal plants in this area, according to the locals. The buffer zones vegetation is most at risk. Several once-plentiful medicinal plant species, such *Clerodendron indicum*, *Rauvolfia serpentina*, and *Plumbago zeylanica*, are now rare.

Out of 220 species of medical and quasi-medical and commercially important plants, a research found 2,700 angiosperms and 125 species of significant medicinal plants. The inhabitants in the area have a strong belief in Ayurvedic doctors, and in

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many villages, the primary job of the residents is gathering herbs and selling them to other businesses. Khandijharan, Manbhang, Magurmal, and Cherengajhanj are a few of these settlements. In a research, M. Brahma and H.O. Saxena of the Regional Research Laboratory listed the therapeutic applications of over 200 species; of these, they determined that 77 had novel or "interesting" applications. The Gandhamardan hills are home to over 100 traditional healthcare practitioners due to the abundance of medicinal plants in the area. [2,3,4]

Study Site

MATERIAL AND METHODS

The Bolangir district's Gandhamardan Hill has been chosen as the research site for the current endeavour. The author met with a taxonomist and guide, and he set up many sessions with traditional healers and indigenous tribes to discuss the various plants found on Gandhamardan Hill. Using various medicinal plant floras, including Indian Medicinal Plants by Kirtikar & Basu, Wealth of India, and Flora of

Odisha by M. Brahma and H.O. Saxena, the team (author, guide, taxonomist, local tribes, and traditional healers) made multiple visits to Gandhamardan Hill. They identified and examined the various ethno medicinal plants used by the local traditional healers. The entire crew discovered over fifty ethno medicinal plants, many of which are utilized by the traditional healers in the area to treat common health issues. This article focuses on twenty ethnomedicinal plants that are often utilized for everyday medical requirements by the indigenous tribes, traditional healers, and general public.

Ethno medicinal plants of Gandhamardan Hill

The Gandhamardan hill region has a varied range of both medicinal and non-medicinal plants, which contribute to the area's green space. According to the study, the team has discovered over fifty ethnomedicinal plants, of which twenty are regularly utilized by the local people and tribes and have been chosen for this research work.

S.No	Local Name	Ayurvedic Name	Scientific Name & Family	Parts Use	Ethno medicinal Use
1.	Lahalangali	<i>Langali</i>	<i>Gloriosa superba</i> L. Colchicaceae	Root	<i>Vatarakta, Rasayan, Arsa</i> , fever, foot thorn, lice/ leeches
2.	Pinga	<i>Jyotismati</i>	<i>Celastrus paniculatus</i> Willd. Celastraceae	Seed	<i>Rasayana</i> , stomach ache, skin diseases, paralysis, tuberculosis, burning micturition, <i>Swetapradar</i> .
3.	Dhatuki	<i>Dhataki</i>	<i>Woodfordia fruticosa</i> (L.) Kurz. Lythraceae	Flower	<i>Atisara/Amatisara</i> , weakness, <i>Swetapradara & Raktapradara</i>
4.	Asoka	<i>Asoka</i>	<i>Saraca asoca</i> (Roxb.) Fabaceae	Bark	<i>Raktapradara & Swetapradara</i> , dysentery & diarrhea, diabetes, urinary tract disorders.
5.	Muturi	<i>Chopachini</i>	<i>Smilax macrophylla</i> Roxb., Smilacaceae	Root	Sinusitis headache, dysmenorrhoea, oral diseases, <i>Upadansha</i> , diarrhea, diabetes, skin illness
6.	Ankula	<i>Ankola</i>	<i>Alangium salvifolium</i> (L.f.), Cornaceae	Root bark & leaf	<i>Amavata/Sandhivata</i> , fever, common cold, <i>Atisara</i> , traumatic injuries and edema, mumps, <i>Sita pitta</i> , <i>Kosthakathinya/Arsha</i> , wound, headache and breathing disorders
7.	Sunari	<i>Aragwadha</i>	<i>Cassia fistula</i> L., Fabaceae	Fruit	Constipation, <i>Vataja Kasa</i> , skin diseases, sore throat, flatulence, urinary tract diseases, <i>Amavata</i> .
8.	Satabari	<i>Satabari</i>	<i>Asparagus racemosus</i> Willd., Asparagaceae	Root	<i>Raktapradara</i> , bleeding micturition, insufficient sperm in the semen, lactation, gout, abdominal pain, miscarriage
9.	Keu	<i>Kebuka</i>	<i>Cheliocostus speciosus</i> (J.Konig), Costaceae	Root	Back pain, impotence, <i>Kamala</i> , cough/breathing disorder
10.	Chintamoola	<i>Chitrak</i>	<i>Plumbago zeylanica</i> L., Plumbaginaceae	Root	Indigestion, <i>Arsha, Rasayana</i>

11.	Bhuin-kadamba	Mundi	<i>Sphaeranthus indicus</i> L., Asteraceae	Flower	Mastiskadourbalya, urinary problems, pain in stomach, respiratory disorders
12.	Mayurachulia	Gojihwa	<i>Elephantopus scaber</i> L. Asteraceae	Leaf	Balatisara, burning micturition
13.	Anantamoola	Sariba	<i>Hemidesmus indicus</i> (L.), Apocynaceae	Root	Skin disorder, fever, gynecological disorders and urinary tract infections, Mukhabrana (acne)
14.	Kanchana	Kanchanar	<i>Bauhinia variegata</i> (L.), Fabaceae	Bark, flower	Gandamala, rheumatoid arthritis, Raktarsha, boil (Batha), diabetic ulcer
15.	Pana-airi	Iswari	<i>Aristolochia indica</i> L., Aristolochiaceae	Root	Menstrual disorder, Sutikaroga, fever/headache, skin disorders, insect bite
16.	Badichang	Badichang	<i>Symphorema polyandrum</i> Wight., Verbenaceae	Root	Poisonous snake bite, scorpion Stinging, Arsha & Unmada
17.	Bhuinimba	Kalmegh	<i>Andrographis paniculata</i> Nees., Acanthaceae	Whole plant	Fever, liver diseases, skin conditions, worms
18.	Bhrungaraj	Bhrungaraj	<i>Sphagneticola calendulaceae</i> L., Asteraceae	Whole plant	Tonsil, Medaroga, skin conditions, hair growth and colouring, burn wound, little toddlers who cough
19.	Ankaranti	Kantakari	<i>Solanum surattense</i> , Solanaceae	Whole plant	Kasa, Amavata, scrotal oedema, Mutrakrishra, skin disorders, stop vomiting, headache & Kaphaja Roga
20.	Talamooli	Krushna Musali	<i>Curculigo orchioides</i> Gaerth., Hypoxidaceae	Root	Amlapitta, Rakta Pradara, urinary tract infections and menorrhagia, aphrodisiac property & broken bones

1. *Lahalangali* (*Gloriosa superba* L. Colchicaceae)

Gout or Vatarakta: For four or five days, a patient's swollen joints might benefit greatly from a frequent application of mashed ginger root and *Lahalangali* stem mixed with an equal amount of *Musabur* (available at *Ghritkumari Sukharas*).

Rasayana: Clean the stem of *Lahalangali*, chop it into pea-sized pieces, and take one piece in the morning on an empty stomach, your body will be robust and free of disease in a month.

Arsha: It will dry out in approximately 15 days if you apply the plant's stem paste on *Arsha* twice a day for a week.

Fever: Any fever, regardless of age, will subside in a day if the root of this plant is connected to the neck.

Lice/Leeches: Boil the plant's leaf juice in two liters of water and half a liter of castor oil. Once it dries, store it in a container and use it on your hair every 8 to 10 days to get rid of lice, leeches, and other insects.

Foot thorns: If a thorn is left on the foot, it will come out on its own the following morning if the plant's stem is warmed and applied while you sleep. [5]

2. *Pinga* (*Celastrus paniculatus* Willd. Celastraceae)

Rasayana: Eat the seeds one on the first day, two on the second, and so on until you reach 13. After that, drink water and swallow the seeds 13 times a day for two to three months, during which time your body gets healthier and your life expectancy rises.

Seasonal stomach ache: It may be treated by combining 5 leaves with 7 *Maricha* seeds in a teaspoon of water, which should be taken twice a day on an empty stomach for a month. This will also help with heartburn and diarrhea.

Diseases of the skin: Scabies and other infectious skin conditions can be treated in a few days by applying *Pinga* seed oil to the body on a daily basis.

Paralysis: In order to treat paralysis, it is extremely helpful to massage 4 drops of *Pinga* seed

oil into the paralyzed gland and to consume this oil twice a day for a few days.

Tuberculosis: Take half a teaspoon of powdered seeds or one teaspoon of crushed *Pinga* root twice a day on an empty stomach for three months.

Urine Burn: Give yourself a half-teaspoon of ground *Pinga* root three times a day on an empty stomach to relieve urine retention caused by summertime nerve system excitation.

Swetapradar: It is cured by taking one teaspoon of crushed *Pinga* root or sugarcane bark twice a day for a month, twice daily in the stomach. [6]

3. *Dhatuki (Woodfordia fruticosa (L.) Kurz. Lythraceae)*

For the treatment of *Atisara* and *Amatar*, combine 10 grams of *Dhatuki* flowers with 1 cup of curd and water.

Swetapradar/Raktapradar: This may be treated by consuming 10 grams of crushed *Dhatuki* flower with honey three times a day on an empty stomach.

Weakness-Weakness can be cured in a few days by soaking one handful of *Dhatuki* flowers in a glass of water for the whole night and then squeezing the juice out the following morning. [7]

4. *Asoka (Saraca asoca (Roxb.) Fabaceae)*

Raktapradara: 120 grams of dried Asoka bark are cooked in 1 cup milk and 4 cups water; a milky residue is remains, two doses should be taken in the morning and evening.

Shwetpradar: 120 grams of powdered Asoka bark and 120 grams of black til, cooked in one glass of milk and three glass of water till the milky residue is left behind. Take three times a day on an empty stomach for a few days.

Dysentery/Diarrhoea: Three times a day, 10 grams of Asoka flower diluted in water will help with dysentery.

Diabetes: One glass of water should be consumed with one handful each of soft *Ashoka* and mango leaves that have been cooked in three cups of water, filtered, and consumed for two months.

Urinary tract disorder: One spoonful of *Asoka* seeds is ground into a paste, which is then combined with one cup of water and consumed. [8]

5. *Muturi (Smilax macrophylla Roxb., Smilacaceae)*

Sinusitis Headache: Combine 100 grams of *Muturi* root with 50 grams of *Sunthi*, 10 grams of *Maricha*, and 1/2 teaspoon of this combination each day in the morning and evening on an empty stomach. This remedy will treat both ordinary headaches and headaches from sinusitis in one month.

Abdominal discomfort, cramping during menstruation and other symptoms are experienced

by women as a result of the body's increased rheumatism. Combine 50 grams of *Sunthi*, 50 grams of *Maricha*, and 100 grams of crushed *Muturi* root. Take half a teaspoon of this mixture twice a day on an empty stomach for three months to eliminate all of the aforementioned conditions.

Oral Diseases: Using *Muturi* stem as a toothpick on a regular basis for a few days solves issues with foul breath and bleeding, pus, etc. coming out of the mouth.

Upadansha (Syphilis): For the treatment of *Upadansha* (syphilis), 100 grams of powdered *Muturi* root combined with 50 grams of *Sunthi* should be taken once daily in the morning on an empty stomach.

Diarrhoea: To treat diarrhoea, mix 3 grams of ground *Muturi* root with 3 grams of *Jyotsmati* root and consume it three times a day on an empty stomach.

Diabetes: Soak 100 grams of ground *Maricha* and 100 grams of powdered *Muturi* root in water in a towel, and then dry them like pea pills. For three to six months, taking 2 meals a day on an empty stomach is really useful for diabetes. (Those on type 1 insulin cannot benefit from it.)

Skin illnesses: All bacterial infections-related skin illnesses, including ringworm and scabies, can be cured by combining *Muturi* root and *Pinga* bark with an equal amount of turmeric powder and applying the mixture to the body. [9]

6. *Ankula (Alangium salvifolium (L.f.), Cornaceae)*

Amavata/Sandhivata: It will benefit us if the leaf paste is administered as soon as discomfort arises. *Ankula* seed oil massage has comparable advantages as well.

Fever: The bark of the *Ankula* root is eaten in 4 *Rati* and combined with 4 *Maricha* to treat fevers of any kind.

Colds: Apply the bark's juice to your fingernails on wet days if you feel like your body is heavy from a cold.

Atisara: Three grams of the root bark are consumed with rice water and honey in *Atisara*.

Traumatic injuries and edema: Apply the warm *Ankula* leaf paste to any hurting, swollen area of the body, and it will heal rapidly.

Galisi (Mumps): *Ankula* bark paste is put to a child's swollen cheek when they have the Mumps.

Sita pitta: This illness can be cured by applying 10 grams of *Ankul* tree bark to the body prior to taking a bath.

Kosthakathanya/Arsha: The bark of the root is ground into a powder after drying, combined with same quantity of *Maricha* and makes a tablet like pea. Constipation will be relieved if this medication

is taken two tablets twice a day on an empty stomach.

Wound: *Ankula* seed oil immediately dries up when applied to the wound site.

Headache: *Ankul* oil, 20 drops in a glass of milk, can be ingested daily to treat headaches in a few days.

Breathing disorders: *Ankula* root is gathered to the size of a thumb and kept dry. In cases of breathing disorder may be managed by taking this root paste twice a day with lemon juice, two hours before meals. [10]

7. *Sunari (Cassia fistula L., Fabaceae)*

Constipation: For constipation, dry and crush the delicate *Sunari* tree leaves. Then, add *Saindhaba* lavana to the mixture. You will experience a clear bowel movement the next morning if you take 1 teaspoon of it in warm water before bed.

Vataja kasha: To treat dry cough, 20 grams of *Sunari* fruit pulp are soaked in a little water, properly sieved through a cloth, then 60 grams of sugar are added to the floor and taking internally.

Skin disease: All skin problems can be healed by crushing the *Sunari* tree's roots, bark, fruits, flowers, and leaves in equal amounts and combining them with water applied externally.

Sore throat: To treat tonsils, sore throats, etc., boil 20 grams of coriander in two glasses of water, drain, and add 10 grams of *Sunari* fruit extract.

Flatulence: To treat little children's flatulence, apply a paste made from *Sunari* fruit around the navel after a little water has been added.

Urinary tract disease: The treatment for urinary tract infection is consuming half a tablespoon of the powdered bark of the golden root twice a day.

Amavata: Roasting the tender *Sunari* tree leaves in ghee and eating them in the evening helps treat *Amavata*. [11]

8. *Satabari (Asparagus racemosus Willd., Asparagaceae)*

Rakta Pradar: 10gm of crushed dry root or 20ml of raw *Shatabari* root juice are mixed to a glass of milk and taken twice a day on an empty stomach for several days, the patient's body will eliminate ageing and menstruation. Bleeding in urine: For a month, bleeding from the urinary tract can be stopped by consuming 10gm of crushed *Satabari* root and 10gm of crushed *Gokhura* mixed with 1 cup of milk twice a day in the stomach.

Insufficient sperm in the semen: Take 10gm of *Satabari* root with one glass of milk, preferably twice a day. Used consistently for three months.

Summertime urinary burns: This condition can be treated by taking one teaspoon of powdered *Shatabari* root three times a day for two to three days on an empty stomach.

Lactation: 30ml of the raw *Shatabari* root juice are given twice a day along with cow's milk. This is used for roughly a week.

Gout: Burning sensation on the palm & foot, it helps to massage the juice of raw *Shatabari* root.

Pain in the abdomen: Taking a teaspoon of ground *Shatabari* root with a glass of cold water three times a day helps to cure abdominal pain.

Miscarriage: Take one full teaspoon twice a day of *Shatabari* root. The issue is resolved after taking daily in a glass of milk for three to four months. [12]

9. *Keu (Cheliocostus speciosus (J.Konig), Costaceae)*

Back pain can be relieved in eight to ten days by combining 50gm of *Keu kanda* rind, 25gm of ginger, 10gm of garlic, and 5gm of tamarind with salt, chilli powder, and mint leaves to produce a paste. This paste can be eaten twice a day with two spoonful of food.

Impotence: Take one glass of water and twenty gm of raw seeds; boil till half a cup; add one spoonful of honey; drink twice a day on an empty stomach.

Kamala: In a few days, the disease will be treated if the soil paste is applied to root, burned in a fire, the rind removed, and 30gm are consumed daily.

Cough/Breathing disorder: Take 10gm twice a day with food, ground up with salt as needed, and combine 5gm of *Keukanda*, 50gm of garlic, and 10gm of tamarind. In a few days, the illness will be cured. [13]

10. *Chintamoola (Plumbago zeylanica L., Plumbaginaceae)*

Indigestion: You can quickly get rid of it by taking a pinch of crushed *Chintamoola* root and sipping some water.

Arsha: After consuming the root twice day, 1gram of crushed root along with butter milk is really advantageous.

Rasayana: If you combine honey and crushed *Chintamoola* root to produce tablets like pea, take two pills two times daily on an empty stomach for a period of six months, then all ailments will be cured, your body will get stronger. [14]

11. *Bhuinkadamba (Sphaeranthus indicus L., Asteraceae)*

Mastiska Dourbalya- Routinely eat 5ml of leaf juice on an empty stomach mixed with 1 glass of water for a few days.

Urinary problems- If the body's water content decreases and the urine becomes sluggish, 10gm of its roots are dissolved in a bowl of water during the summer and taking for one month.

Pain in the stomach: 100gm of the plant's leaves and roots are combined with 5gm of salt and cooked until they become black. After meals, use half a teaspoon three times a day to relieve any stomach discomfort and flatulence.

Mundika Ghrita - Two liters of its juice and mix it with half a liter of cow ghee. For an extended period of time, taking one teaspoon of this *Ghrita* twice a day on an empty stomach will strengthen memory, treat a variety of skin conditions, and enhance vision.

Respiratory disorders- 5ml of *Vasanga* and *Bhuinkadamba* leaf juice are used to treat respiratory ailments. Additionally, it is highly advantageous to consume twice a day for an extended length of time on an empty stomach. [15]

12. Mayurachulia (*Elephantopus scaber* L., Asteraceae)

Balatisara- When kids are teething, a spoonful of the root juice does wonders for treating diarrhoea.

Burning micturition- 10gm of its root juice combined with *Misri*, can help treat urine infections caused by burning micturition and other urinary tract infections. [16]

13. Anantamoola (*Hemidesmus indicus* (L.), Apocynaceae)

Skin Conditions: Crush the *Anantamoola* root and take half a teaspoon every day for a few days to treat any skin conditions, including blood illnesses.

Fever: The best treatment for fever (*Pitta Jwara*) is half a teaspoon of crushed *Anantamoola* root given three times a day on an empty stomach.

Gynaecological disorders and urinary tract infections: *Antamoola* is helpful for these conditions when taken regularly.

Acne: Its root paste is beneficial for acne. [17]

14. Kanchan (*Bauhinia variegata* (L.), Fabaceae)

Gandamala: Boil 4 glasses of water with 40gm of *Kachan* bark, remaining 1 glass left-over. Add 1 teaspoon of honey and drink twice daily for forty consecutive days.

Rheumatoid Arthritis: Warm root bark paste applied to the knee joint helps reduce rheumatic swelling.

Raktarsha: It is helpful to wash the anus after mixing equal parts *Kachan*, *Bakula*, and *Jamun* bark in water.

Boil (Batha): If a tablespoon of rice with bark of the *Kachan* tree is warmed up and applied to the boil it will rapidly cause a mouth split.

Diabetic ulcer: Rinsing the bark of this tree with boiling water also helps a great deal with diabetic foot ulcers. [18]

15. Pana-airi (*Aristolochia indica* L., Aristolochiaceae)

Menstrual disorders: In women can be relieved by taking 2gm of powdered *Pana-airi* root in equal parts black piper, twice a day on an empty stomach for a few days.

Sutika Roga (Puerperal disorder): If a lady has given birth, 2gm of *Pana airi* root paste will eliminate all traces of contaminated blood and avoid *Sutika Roga*.

Fever/Headache: To treat malarial fever/headache, combine black piper and one equal amount of *Panaairi* root to form a pill. Take two of these pills, three times a day, on an empty stomach.

Skin Conditions: The *Panaairi* root or leaves combined with *Haridra* (turmeric) are applied topically to treat all skin conditions.

Venomous bug bites: Venomous insect bite wounds can be healed by applying the juice of *Pana airi* plants. [19]

16. Badichang (*Symphorema polyandrum* Wight., Verbenaceae)

To treat a patient with a poisonous snake bite, two *Badichang* seed and two *Tulsi* leaves are given.

Scorpion Stinging -One single *Badichang* seed make a paste and applied locally on the scorpion sting area will cure immediately.

Arsha: You can be cured if you routinely consume one *Badichang* seeds with seven black piper seeds every morning on an empty stomach for 21 days.

Unmada: When a patient is first diagnosed with *Kaphajunmada*, a single *Badichang* seeds and two *Tulsi* leaf are administered to the patient's nose; the patient heals in 7 days. [20]

17. Bhunimba (*Andrographis paniculata* Nees., Acanthaceae)

Fever: If you have frequent fevers, take 1 teaspoon of crushed *Bhuginimba* every morning on an empty stomach for a month.

Liver Diseases: Take 1 teaspoon twice day for a month, combining 20gm of *Saindhav lavan* with 100gm of *Bhuginimba* powder.

Skin Conditions: It is especially helpful when applied externally.

Worms: When administered consistently over a few days, the body's natural habitat for worm growth is removed. [21]

18. Bhrungaraj (*Sphagneticola calendulaceae* L., Asteraceae)

Take two months to consume tonsil leaf juice with jaggery.

Medaroga: The leaf juice is consumed over a period of time, more than a year.

Skin Conditions: Use the entire plant to form an external paste, or consume the juice internally.

Hair growth and colouring: *Bhringaraj* juice mixed with *Kasis* applied to the hair.

Burn wound: A paste made of *Bhringaraj*, *Madayantika* (*Mehndi*), and *Tulsi* leaf is applied to the burn site to relieve the burning feeling.

Little toddlers who cough should be given 1-2 drops of whole plant juice mixed with honey to help heal them. [22]

19. *Ankaranti (Kantakari) (Solanum surattense, Solanaceae)*

Kasa: Fresh Leaf juice of *Ankaranti* & *Vasanga* 10ml each mix with 2gm *Pippali* powder, take two times a day for two to three days. In case of small children, the flowers are fried with cow ghee and giving them for few days.

Kapha Roga: In case of excess deposition of phlegm in chest especially in sever foul smelling yellowish colour phlegm should be remove by giving 10ml *Kantakari* leaf juice with 2gm *Haritaki* powder three times a day.

Amavata: Take 10ml of whole plant juice and 2gm of black paper powder four times a day if you have severe joint discomfort.

Scrotal oedema- Reducing scrotal oedema take 20g of fresh root paste on an empty stomach in the morning for seven days,

Mutrakrishra (Agonistic Micturition): Consume the entire plant juice for a few days.

Skin disorders- External application of leaf paste is highly recommended.

Stop Vomiting: To stop excessive vomiting, use leaf juice and ginger juice internally.

Headache: Apply seed paste to the forehead if the headache is very strong. [23]

20. *Talamooli (Curculigo orchioides Gaerth., Hypoxidaceae)*

Amlapitta- Pulverised root Take one spoonful twice a day for a month after mixing 100gm of rock sugar (*Mishri*) with 100gm. Alternative: For improved results, try ingesting root paste on its own.

Rakta Pradara- Take one tea spoonful of *Talamooli* root powder, twice a day, on an empty stomach for a month.

Urinary tract infections and Menorrhagia- *Talamooli* root paste taken internally for six months to a year is recommended.

Aphrodisiac Property- It is employed in many aphrodisiac medicines for patients because of its aphrodisiac potential.

Broken bones- In order to treat various fractures, people who reside in the forest use *Talamooli* paste. [24]

CONCLUSION

An extensive collection of traditional knowledge and a wide variety of medicinal plants used by the local communities have been uncovered by the ethno medicinal study of Gandhamardan Hill. The results highlight the value of indigenous knowledge in healthcare and the necessity of safeguarding this legacy for next generations. Numerous plant species were found to be used in our study to cure a wide range of illnesses, indicating a profound comprehension of the therapeutic qualities of the surrounding flora. This expertise, which has been passed down through the years, shows promise for the discovery of new pharmacologically active chemicals and offers insightful information about the biodiversity of the area. Unfortunately, this priceless ecological and cultural legacy is under danger due to the growing loss of traditional knowledge brought on by modernisation, habitat destruction, and overharvesting. To ensure the sustainable use of these resources, conservation techniques that combine scientific research with traditional practices are desperately needed.

In addition, it is imperative that local people, scholars, and politicians work together to ensure that ethno medical knowledge is effectively preserved and used. Campaigns for awareness and education can encourage local people to maintain their customs while supporting the preservation of biodiversity.

In summary, Gandhamardan Hill's ethno medical practices provide a plethora of information that has enormous potential to advance modern medicine. To ensure that this knowledge is preserved and continues to be a living tradition that benefits both local communities and the global community, conservation efforts and ongoing study are vital.

Ethnomedicinal Plants using by Local Vaidya's



Langali
(*Gloriosa superba L.* Colchicaceae)



Jyotismati
(*Celastrus paniculatus Willd.* Celastraceae)



Dhataki
(*Woodfordia fruticosa(L.)Kurz.* Lythraceae)



Asoka
(*Saraca asoca (Roxb.)* Fabaceae)



Chopachini
(*Smilax macrophylla Roxb.,* Smilacaceae)



Ankola
(*Alangium salvifolium(L.f.)*, Cornaceae)



Aragwadha
(*Cassia fistula L.,* Fabaceae)



Satabari
(*Asparagus racemosusWilld.,* Asparagaceae)



Kebuka
(*Cheliocostus speciosus (J.Konig),* Costaceae)



Chitrak
(*Plumbago zeylanica L.,* Plumbaginaceae)



Mundi
(*Sphaeranthus indicus L.,* Asteraceae)



Gojihwa
(*Elephantopus scaber L.* Asteraceae)



Sariba
(*Hemidesmus indicus (L.),* Apocynaceae)



Kanchanar
(*Bauhinia variegata (L.),* Fabaceae)



Iswari
(*Aristolochia indica L.,* Aristolochiaceae)



Badichang
(*Symphorema polyandrum* Wight., Verbenaceae)



Kalmegh
(*Andrographis paniculata* Nees., Acanthaceae)



Bhrungaraj
(*Sphagneticola calendulaceae* L., Asteraceae)



Kantakari
(*Solanum surattense*, Solanaceae)



Krushna Musali
(*Curculigo orchioides* Gaerth., Hypoxidaceae)

Research Work done at Gandhamardan Hill
by Guide, Taxonomist, Local Vaidya & Research Scholar



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