

PART II

HERBAL PRACTICES & PRODUCTS

This section contains details of herbal preparations used traditionally for various ailments and products based on such traditional knowledge.



Uses of *Achyranthes aspera* L. (Apamarga)

NIF Database

Uses from Jharkhand

Fever

Roots are tied around the neck
- *Ishidor Minjh, Gumla, Jharkhand**

Asthma

Whole plant (50-100g) is ground into a fine powder. 5g of this powder is taken with water till cured
- *Ahmed Hussain, Lohardaga, Jharkhand**

Poisonous bites

Roots (25g) are ground into a fine paste, and juice is extracted. The Juice is taken orally and the remaining paste is applied on the bite site
- *Jighha Oraon, Gumla, Jharkhand**

Abscess

Root paste is applied on the abscess
- *Ravi Oraon, Hazaribag, Jharkhand**

Uses from other states

Headache

Root paste is applied on the spot of the bite and also administered orally
- *Jagjit Bahadur, Sitapur, Uttar Pradesh***

Toothache

Teeth are brushed with freshly plucked roots
- *Bhagvat Prasad Yadav, Nawada, Bihar****

Itching

Powdered roots (5g) are taken orally with water twice a day for seven days
- *Indira Kumari, East Champaran, Bihar****

Uses in Classical Codified Literature

Dried aerial parts are taken orally in case of diabetes¹; a powder made from the dried plant is given orally to treat whooping cough²; decoction of the plant is used as laxative³; decoction of the plant is applied externally on boils and pimples³.

Product 'Cystone'⁴ is made from this plant, which inhibits calculogenesis by reducing stone-forming substances like oxalic acid, calcium hydroxyproline and prevents urinary tract infections. Thirty five patents have been found on the medicinal applications of *Achyranthes* like for curing laryngopharyngitis⁵, bronchial asthma⁶ etc.



Source: <http://www.impgc.com/images/PlantPictures/Achyranthes%20aspera.jpg>

Uses of *Aegle marmelos* (L.) Corr. (Bel)

NIF Database

Eye ailments

Two drops of juice extracted from the green leaves are put in the eye
- Kumari Nigar Pravin, Hazaribag, Jharkhand*

Sunstroke

Juice extracted from the fresh leaves is taken orally
- Vijaya Bharati, Hazaribag, Jharkhand*

Dysentery

One fruit is soaked in a litre of water, seeds are removed and juice is extracted from the pulp, sugar (20g) is added and the juice is administered orally
- Gamaliyal Hembrom, Hazaribag, Jharkhand*

Diabetes

Juice is extracted from fresh leaves (25g) and administered orally empty stomach
- Randhir Kumar, Hazaribag, Jharkhand*

Uses from other states

Fever

Leaves of bel and *Swertia chirayita* (Roxb. ex Flem) Karsten. (250 g) are boiled in a litre of water to obtain a decoction of 250 g. 100 g decoction is given to the patient twice a day for seven days
- Sindhoo Kumari, Gopalganj, Bihar***

Jaundice

Freshly plucked green leaves are soaked in a glass of water and taken empty stomach 2-3 times a day till cured
- Akhilesh Kumar Yadav, East Champaran, Bihar***

Intestinal worms

Juice extracted from the green leaves is taken orally
- Jagjeet Bahadur, Sitapur, Uttar Pradesh**

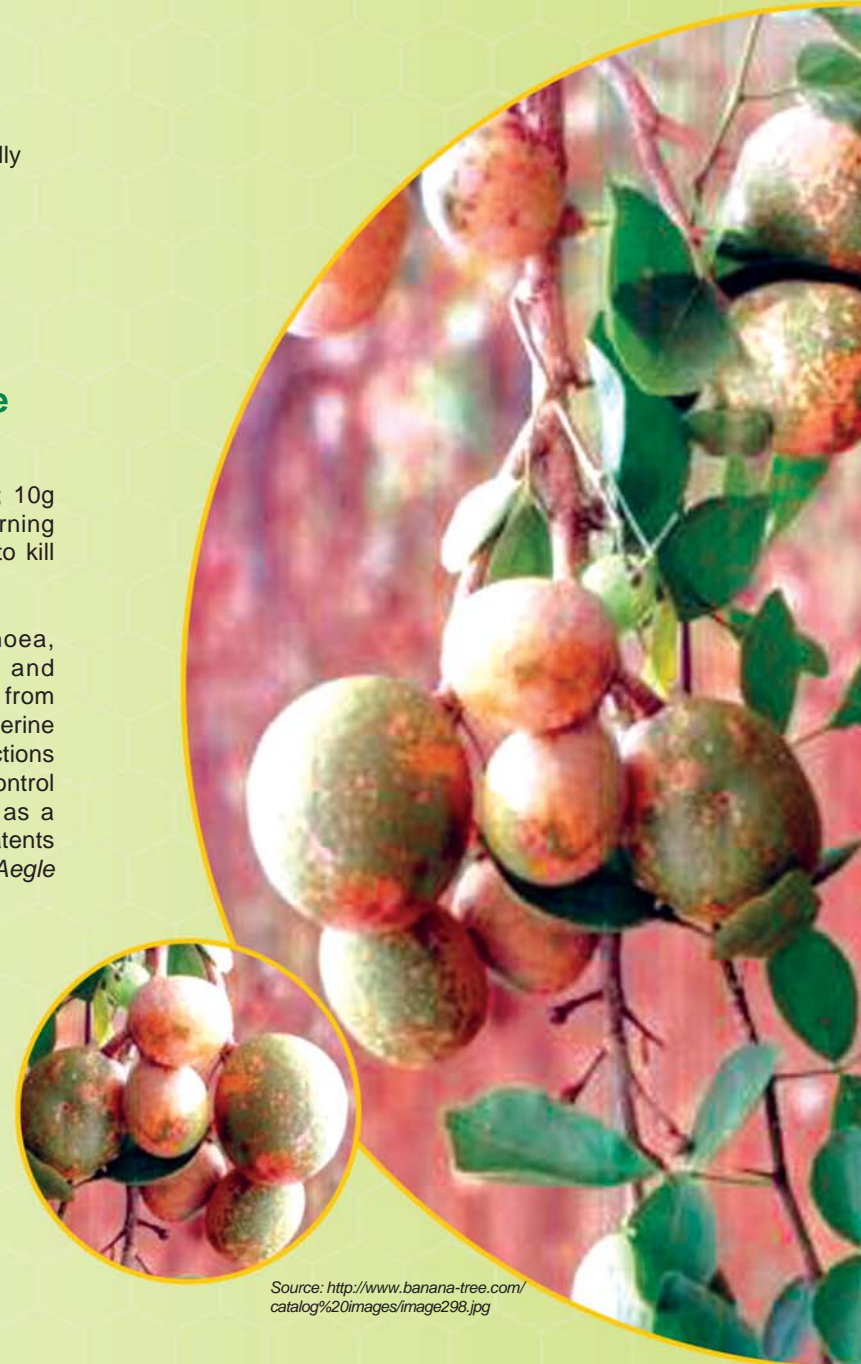
Diarrhoea

Pulp of the ripen fruit is taken
- Jagjeet Bahadur, Sitapur, Uttar Pradesh**

Uses in Classical Codified Literature

Burnt fruit pulp is applied on rheumatic arthritis²; 10g fruit pulp is given before sleep to overcome morning sickness⁷; fruit rind is applied externally on head to kill headlice⁸.

'Bael'⁴, prepared from *Aegle* is used in diarrhoea, dysentery and GI disorders. It has digestive and carminative properties. 'Lukol's⁴ is a tonic made from this plant along with other plants. This improves uterine circulation, and its antimicrobial and astringent actions on the mucous membrane of the genital system control leucorrhoea. 'Bilwa'⁹, a product of *Aegle* is used as a medicine to cure a number of diseases. Fifty three patents have been found on the medicinal applications of *Aegle* like for curing diabetes¹⁰, gastric ulcer¹¹etc.



Source: <http://www.banana-tree.com/catalog/%20images/image298.jpg>

Uses of *Alstonia scholaris* (L.) Br. (Chatawan)

NIF Database

Uses from Jharkhand

Headache

Juice extracted from bark (20g) is given orally
- *Prishila Tuddu, Hazaribag, Jharkhand**

Fever

Powdered bark (50g) is taken with water thrice a day
- *Kutuva Birhorni, Koderma, Jharkhand**

Stomachache

Juice extracted from bark (20g) is administered orally
- *Prishila Tuddu, Hazaribag, Jharkhand**

Joint pain

Bark paste is applied on aching joint
- *Prishila Tuddu, Hazaribag, Jharkhand**

Uses from other states

Asthma

Decoction of bark is given orally
- *Robert L. Hamte, Aizawl, Mizoram***

Gastric

Few leaves are ground with black pepper and taken orally before food
- *Indra Kanta Ojha, Sibsagar, Assam***

Wound

Paste of bark and leaves is applied on infectious wound
- *Robert L. Hamte, Aizawl, Mizoram***

Psoriasis

Seed oil is taken orally for 21 days
- *P. D. Walikar, Bagalkot, Karnataka***

Uses in Classical Codified Literature

Fresh bark is put in water to draw out the latex in it, which is taken orally in case of tuberculosis¹²; dried powder is administered orally to cure diarrhoea¹³; bark extract is given orally to get rid from intestinal worms¹⁴.

'Ayush-64 cap./tab.'¹⁵, prepared from this plant is effective as an antimalarial compound both for treatment and prophylaxis. Fifteen patents have been found on the medicinal applications like use as an antipyretic¹⁶.

Uses of *Argemone mexicana* L. (Satyanasi)

NIF Database

Uses from Jharkhand

Fever

One teaspoon root decoction is taken with a glass of water twice a day for 2 to 3 days

-- Gopal Mahato, Hazaribag, Jharkhand*

Itching

Seeds (50g) are ground, mixed in coconut oil and applied on the infected body part

- Prishila Tuddu, Hazaribag, Jharkhand*

Eczema

Whole plant (25g) is crushed along with black pepper (2 nos) and the paste is applied

- Suresh Thakur, Hazaribag, Jharkhand*

Poisonous bites

Juice extracted from roots is administered orally

- Jighha Oraon, Gumla, Jharkhand*

Uses from other states

Abscess/blisters

Juice extracted from the plant is applied on the affected part

- Chandra Kanvar, Sikar, Rajasthan****

Intestinal worms

½ inch root is taken along with water three times a day to remove hookworms

-Amar Singh, Kangra, Himachal Pradesh**

Urinary disorder

Latex (10ml) is taken orally along with milk

- Rani B. Bhagat, Pune, Maharashtra**

Itching

Juice extracted from the plant is applied on the affected part

- Rameshwari Devi, Sikar, Rajasthan****

Uses in Classical Codified Literature

Seeds powder is taken with water to reduce toothache¹⁷; decoction of the plant is given orally¹⁸; seed oil is useful in case of colic pain¹⁷; rheumatics should take seed powder to get relief¹⁷.

'Step syrup'¹⁹, prepared from the plant, is used to cure skin diseases and soft tissue infections. Ten patents were found regarding its various medicinal uses such as in psoriasis²⁰ and for headache²¹.



Uses of *Bombax ceiba* L. (Semal)

NIF Database

Uses from Jharkhand

Gynecological disorder

Gum (5g) is ground, mixed with water and administered for 5 days

- *Jugeshwar Ram, Hazaribag, Jharkhand**

Uses from other states

Pimples

Paste of thorns and milk is applied on the pimples for 7 days

- *Pravin Kumar Sharma, East Champaran, Bihar****

Wound

Fresh bark is ground, mixed with little water and applied on the infected part

- *Pravin Kumar Sharma, East Champaran, Bihar****

Diarrhoea

A spoonful of juice extracted from the leaves is given along with sugar candy for 4 days

- *Neha Kumari, East Champaran, Bihar****

Constipation

Bark powder (3g), coriander powder and jaggery are taken with water

- *Devaram, Sirohi, Rajasthan*****

Piles

Paste (10g) of the ground roots is taken with water for seven days

- *Antaryami Pradhan, Angul, Orissa***

General health

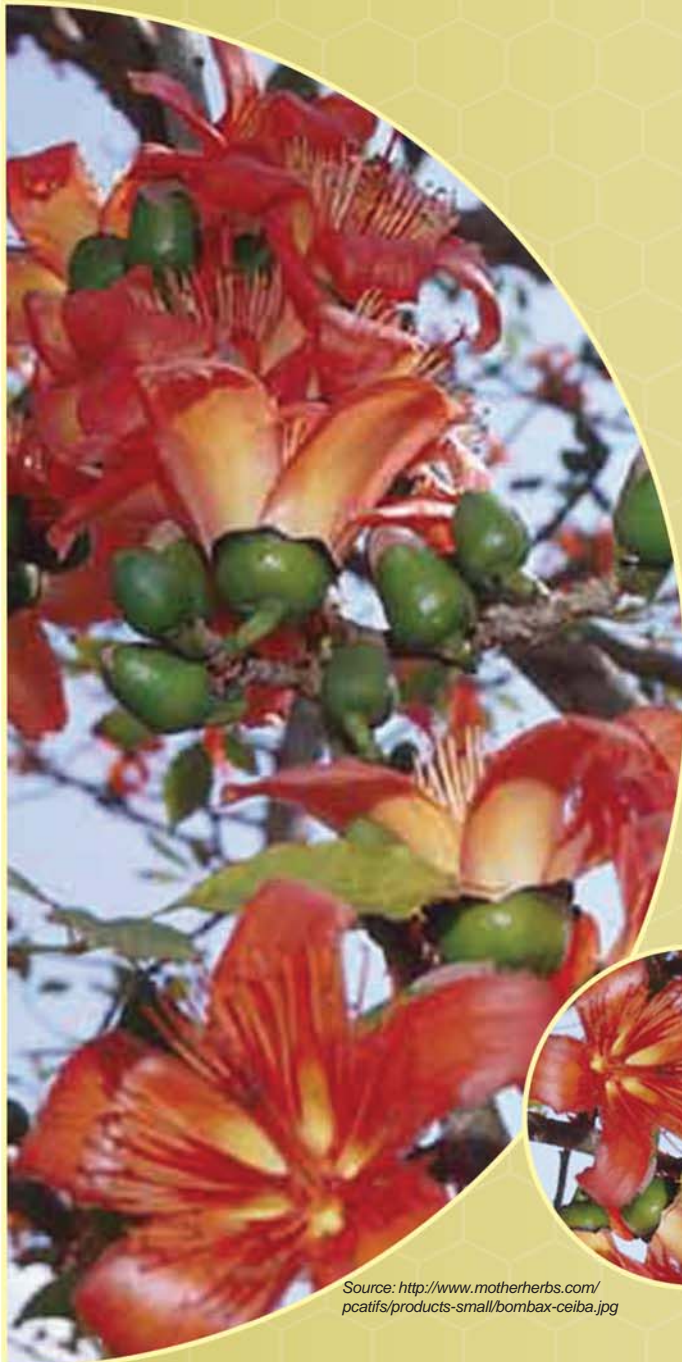
Few flowers are soaked in a glass of water overnight and taken next morning for giving a cooling effect to the body

- *Mukta Kumavat, Sikar, Rajasthan*****

Uses in Classical Codified Literature

Decoction of the bark is given orally to combat fever²²; diabetics are given decoction of the heartwood²³; to reduce stomachache bark juice is administered²⁴.

Product 'Acne-n-Pimple Cream'²⁵ is prepared from *Bombax* along with other plants to treat pimples and skin eruptions. 'Evecare'⁴, a multi herb product made out from this plant, has a regularizing influence on the menstrual cycle. Eight patents have been found on the medicinal application of *Bombax* like for skincare²⁶, AIDS²⁷ etc.



Source: <http://www.motherherbs.com/pcatifs/products-small/bombax-ceiba.jpg>

Uses of *Butea monosperma* (Lamk.) Taub. (Palash)

NIF Database

Uses from Jharkhand

Cuts & wounds

Juice extracted from bark is applied
- *Dinesh Bediya, Ranchi, Jharkhand**

Intestinal worms

Seeds (3-4 nos.) are ground in water and given orally
- *Sitaram Bediya, Hazaribag, Jharkhand**

Uses from other states

Toothache

Resin powder is filled in damaged gums
- *Bhomabhai Damor, Banaskantha, Gujarat***

Acidity

Resin (2g) is taken with cold water
- *Pritam Chand, Kangra, Himachal Pradesh***

Dysentery

Resin (25g) is administered orally
- *Thavriben Kateria, Banaskantha, Gujarat***

Joint pain

Powdered resin is taken with milk
- *Devaram, Sirohi, Rajasthan*****

Uses in Classical Codified Literature

Bark is used as poultice for pimples²⁸; bark juice is given orally to get rid of intestinal worms²⁹; dried flower powder is administered orally, which acts as diuretic¹⁷.

'Lukol⁴' has a stimulatory action on the endometrium and improves uterine circulation. 'Hair Loss Cream⁴' improves tensile strength of hair and increases hair density. Ten patents were found on its medicinal uses like for bone disorders³⁰, skin care³¹ etc.



Uses of *Celastrus paniculatus* Willd. (Malkangani)

NIF Database

Uses from Jharkhand

Tuberculosis

3 drops of oil are mixed in yolk of egg and administered
- Prishila Tadoo, Hazaribag, Jharkhand*

Uses from other states

Graying of hair

Oil is applied on the scalp
- Sharvan Singh, Kangra, Himachal Pradesh**

Gas/acidity

2-3 gm of powdered seeds is taken orally with water
- Devaram, Sirohi, Rajasthan****

Intestinal worms

Shade dried fruit is ground into a fine powder and sieved.
2-3 table spoons of the powder is taken orally in the morning and evening for 4-5 days
- Nimavat Gitaben J, Junagadh, Gujarat**

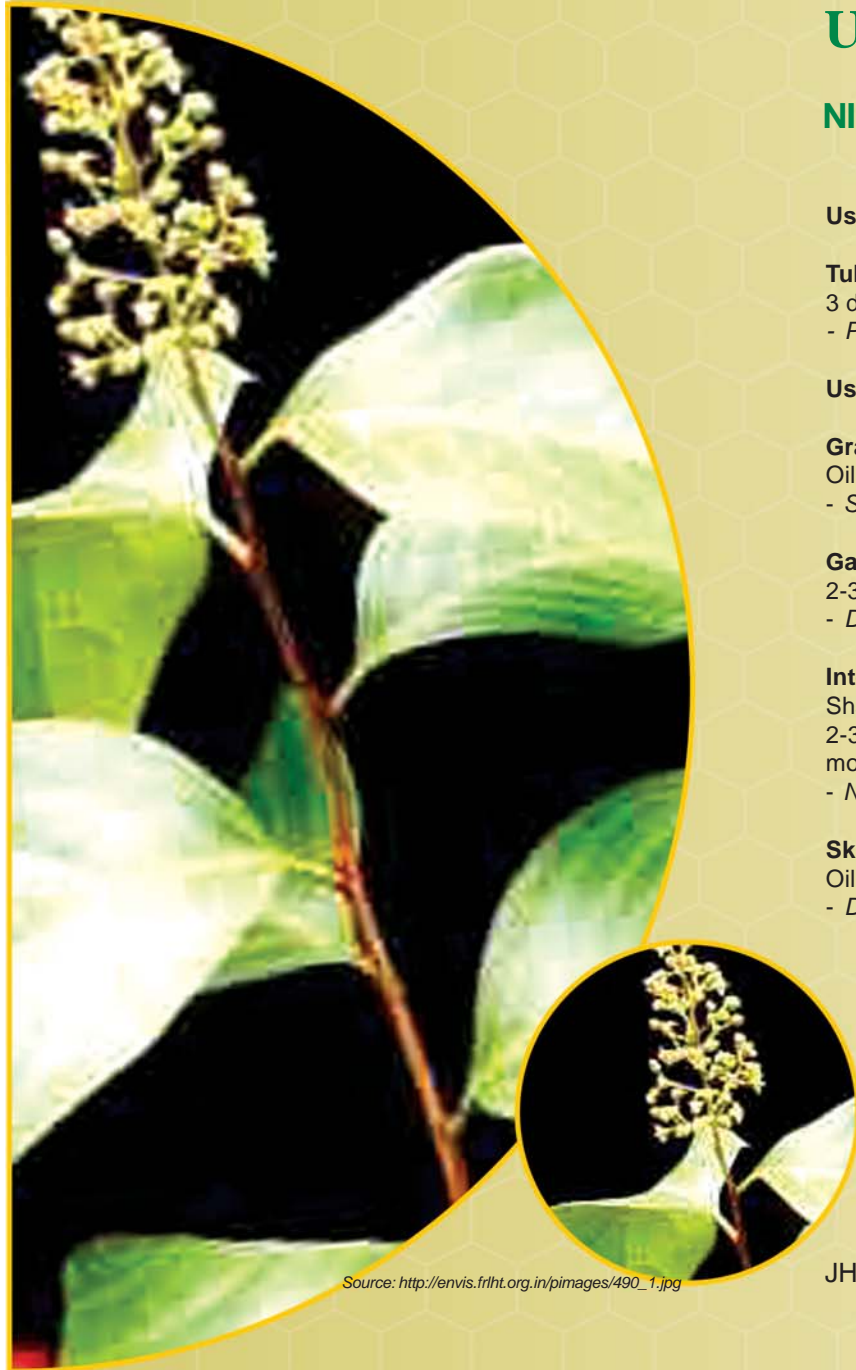
Skin disease

Oil is applied on the infected place
- Devaram, Sirohi, Rajasthan****

Uses in Classical Codified Literature

Fruit juice is used as cardiotoxic¹⁵; seeds are used as appetizer¹⁷; fruit paste mixed with warm mustard oil is applied externally³².

'Geriforte'⁴, an anti stress medicine facilitates respiratory functions, and assists cardiovascular functioning by improving circulation and reducing raised lipid levels. 'Anxocare'⁴, a memory enhancer promotes better receptivity and learning abilities. Three patents were found on its medicinal application like in the case of deficit-hyperactivity disorder³³.



Source: http://envis.frlht.org.in/pimages/490_1.jpg

Uses of *Centella asiatica* (L.) Urban (Brahmi)

NIF Database

Uses from Jharkhand

Jaundice

10g of the plant is ground, mixed with water, filtered and the extract is taken

- *Vifiya Oraon, Lohardaga, Jharkhand* *

Anorexia

Juice from leaves (25g) is extracted and administered orally

- *Gamaliyal Hembrom, Hazaribag, Jharkhand**

Skin disease

Plant is taken as a vegetable regularly

- *Bablu Bediya, Hazaribag, Jharkhand**

Uses from other states

Insomnia

Plant paste is taken along with food regularly

- *Khioram Barman, Borpeta, Assam***

Toothache

Equal proportion of brahmi leaves, onion and banana roots are ground to make a fine paste and applied on the aching part

- *Anil Gogoi, Sibsagar, Assam***

Dysentery

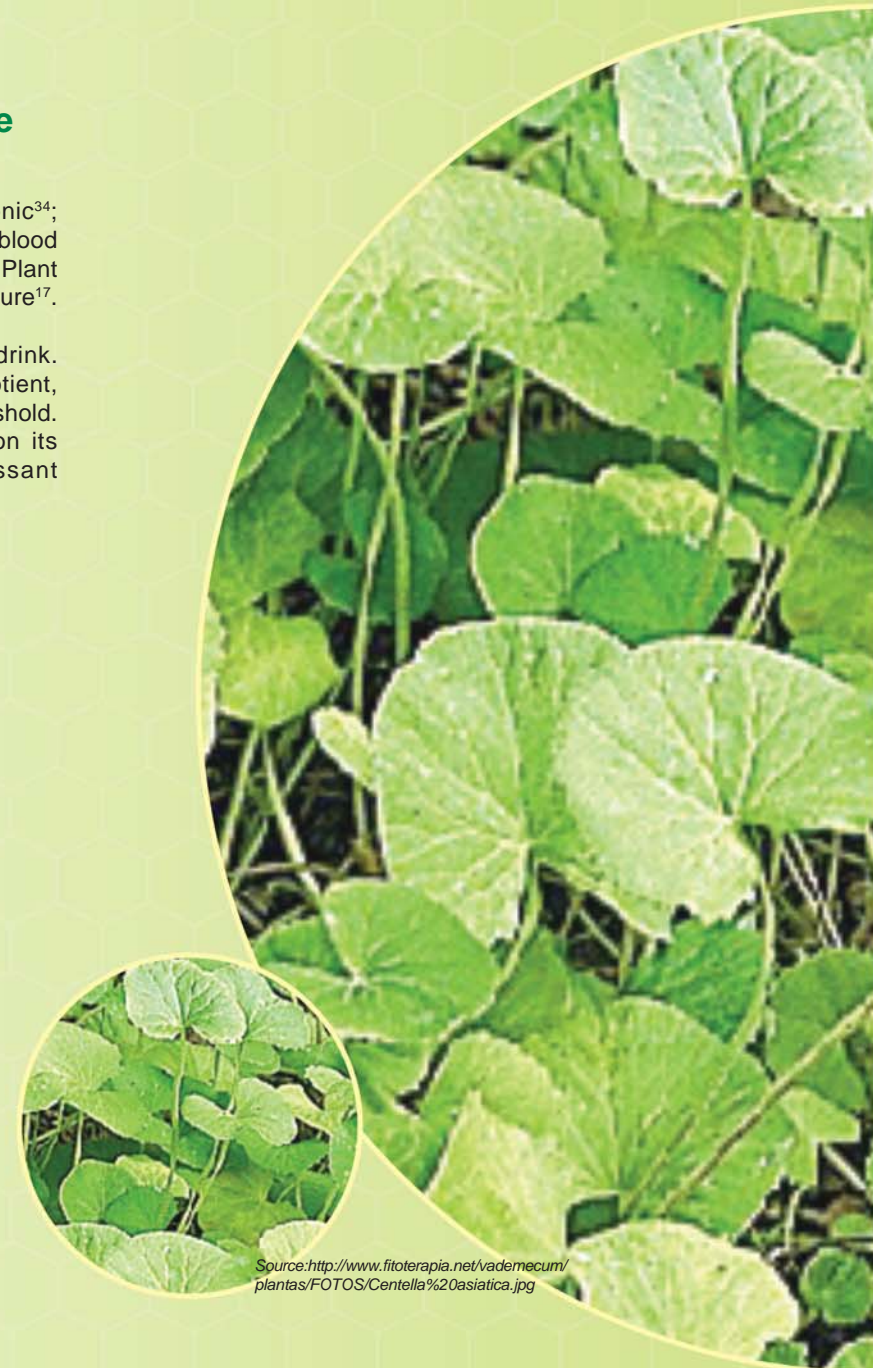
Paste of leaves along with black pepper is given orally

- *Dipali Borah, Sibsagar, Assam***

Uses in Classical Codified Literature

Fresh juice from aerial part is used as brain tonic³⁴; powder of aerial portion is taken to control high blood pressure³⁵; the whole plant is used as diuretic¹⁷; Plant paste is applied as a poultice in case of bone fracture¹⁷.

'Herbal Tea'³⁶ is mainly indicated as a health drink. 'Mentat'⁴ improves mental functions, mental quotient, memory span, concentration ability and stress threshold. More than three hundred patents were found on its medicinal applications mainly on anti-depressant activity³⁷.



Source: <http://www.fitoterapia.net/vademecum/plantas/FOTOS/Centella%20asiatica.jpg>

Uses of *Datura metel* L. (Dhatura)

NIF Database

Uses from Jharkhand

Asthma

A seed soaked in water is taken orally initially, gradually a seed is increased every week for five weeks
- Rani Farhat, Hazaribag, Jharkhand*

Stomachache

Warm leaves are put on the belly
- Anil Kumar Mahato, Hazaribag, Jharkhand*

Arthritis

Paste of the leaves is applied on the aching part
- Divakar Pathak, Lohardaga, Jharkhand*

Backache

Roots (20g) are boiled in mustard oil (250g), filtered and the oil is massaged
- Ramji Chink Badaik, Gumla, Jharkhand*

Uses from other states

Alopecia

Juice of the leaves is extracted, smeared on the head and left for 30 minutes
- Bansi Ghosal, West Midnapur, West Bengal**

Headache

Seeds are chewed and spat for instant relief
- Ganesh Das, Sirohi, Rajasthan****

Cough

Juice from the roasted leaves is extracted; two spoonful of the juice mixed with a spoon of ghee is taken
- Mohani Kumari, Lakhisaray, Bihar***

Eczeema

A fruit is roasted and ground to make a fine powder, sesame oil (250g) and milk is added to make a paste. The paste is applied on the infected part
- Vikas Kumar, Nawada, Bihar***

Diarrhoea

Seeds are ground in water, which is then filtered and administered orally
- Ajit Singh Rathod, Nagor, Rajasthan****

Uses in Classical Codified Literature

One fruit is filled with 10g *Piper longum* L. and burnt. 5g of this ash is given with honey, morning and evening, for 5 days to cure malaria³⁸; the thumb is kept inserted within the fruit to treat finger felon³⁹; root paste is applied externally on poisonous bites⁴⁰.

'Muscles & joint rub'⁴, is a highly effective medicine for backaches, muscular sprains and joint pains made from the plant. 'Unicough syrup'⁴¹ is used to cure bronchitis, cough/cold and asthma.



Source: www.jungleseeds.com/images/DaturaBS.jpg
& www.steve.gb.com/images/plants/datura_metel_%5Bflower%5D.jpg

Uses of *Leucas aspera* Spr. (Guma)

NIF Database

Uses from Jharkhand

Migraine

2 drops of the juice extracted from freshly plucked leaves is put in the nose

- Ramji Chink Badaik, Gumla, Jharkhand*

Uses from other states

Sinusitis

Juice of leaves is put in the nose

- Nayan Kalita, Kamrup, Assam**

Fever

Equal amount of flower of guma; leaves of *Azadirachta indica* A. Juss., *Ocimum sanctum* L.; roots of *Cyperus rotundus* L., *Solanum xanthocarpum* Schrad. & Wendl. and black pepper seeds are pounded and the juice is extracted. Two spoonful of the juice is taken orally

- Nushrat Jahan, Gopalganj, Bihar***

Stomachache

Curry made from the plant is taken

- Usha Rani, Darbhanga, Bihar***

Jaundice

Juice from pounded leaves is extracted and little quantity of goat urine is mixed; this is given twice a day for 4 days

- Shalini Shrivastava, Balia, Uttar Pradesh**

Eczema

Plant is burnt and some coconut oil is mixed with the ash. The paste is applied on the infected body part

- Gokul Singh, East Champaran, Bihar***

Uses in Classical Codified Literature

Dried plant powder is applied in case of scabies⁴²; the plant is used as an anthelmintic⁴³; a handful flower (5g) roasted in ghee is given once a day to cure cough⁴⁴.

'Herbal Steam Bath'⁴⁵ is used to clean dirt and bad odour in the body, stop burning sensation in eyes, prevent watery eyes, headache, nausea, migraine etc.

'Herbex Cough Syrup'³⁶ is very effective for all kinds of cough and cold, asthma, bronchitis, wheezing cold and upper respiratory tract infections.



Source: AWCCDS, Bihar

Uses of *Solanum nigrum* L. (Makoi)

NIF Database

Uses from Jharkhand

Nasal bleeding

Dry fruit (25g) is boiled in mustard oil (100g). The oil is filtered and applied on the forehead
- Sahim Ansari, Lohardaga, Jharkhand*

Uses from other states

Mouth ulcer

Leaves are chewed
- Shripal Singh, Bulandshahar, Uttar Pradesh**

Cough

Juice extracted from the roots is taken orally
- Priyanka Kumari, Gopalganj, Bihar***

Stomachache

Leaves of makoi (200g) is fried in mustard oil (20ml), salt is added and administered
- Sukhai Mali, Faridabad, Haryana**

Jaundice

Juice extracted from the roots is administered orally
- Suman Kumari, Gopalganj, Bihar***

Uses in Classical Codified Literature

Powdered fruit is given orally to reduce fever⁵¹; juice extracted from the whole plant is applied externally on the burnt part⁵²; poultice of the plant is placed on the aching joint³; fruits are ground and taken orally to cure diarrhoea⁵³.

'Herbolax'⁴ made from *Solanum* along with other plants is used as gentle laxative in case of constipation and for electrolyte balance. Ninety patents were found on its medicinal uses mainly on hepatitis^{54, 55}.



Herbal Formulations for Healthy Crops~

SRISTI SHASTRA

Arkhiben Vankar, Ranabhai Kamaliya, Banidan Gadhvi, Gemal Rana, Rajnikant Patel, Ahmadbhai Kadivala, Gujarat. This formulation flourishes the growth of the plant by increasing flowering as well as fruiting besides overall vegetative growth, without being harmful to nature as well as human being. It also controls sucking pests like white fly, heliothis, aphid etc.

SRISTI KRUSHAK

Popatbhai Rupabhai Jambucha, Gujarat

This formulation is an excellent remedy for leaf curl disease, which not only controls the disease but simultaneously increases the vigor of the plants by increasing its overall growth.

SRISTI SURAKSHA

Community Knowledge, Gujarat

This herbal formulation is a very efficient treatment for termite and acts as a vitaliser to the affected crops. To control termites the herbal formulation is mixed with sand and is spread in the field, some times it is released in field with the flow of irrigation water. In some cases it is also drenched in the affected part of the plant as well as sprayed on the vegetation to repel termites.

SRISTI PRAYAS

Community Knowledge, Gujarat

It is a highly effective formulation of herbal growth promoter, which also stops shedding of flowers as well as increases the overall growth of the plant. This formulation strengthens the plants internally and enables them to withstand in extreme weather conditions. Constant use of this formulation not only increases the yield but also reduces the toxic contents in our daily diet.

SRISTI SHAKTI

Community Knowledge, Gujarat

A herbal growth promoter, which helps in production of excellent quality organic food grain. Constant use of this formulation not only increases the yield but also reduces the toxic contamination in our food and environment.

~These formulations are based on traditional knowledge of farmers and developed by Sadbhav-SRISTI Sanshodhan Laboratory. This product is licensed to Matrix Biosciences Pvt. Ltd, Hyderabad, Andhra Pradesh. The benefits are shared with the knowledge providers, communities, nature, those who add value and other stakeholders in the knowledge and value chain.



Herbal Formulations for Livestocks and Poultry~



Coccicure

Sudakarbhai K. Gaudi & Jeevalbhai M. Gaudi, Dang, Gujarat

It is a unique herbal medication for prevention and curing of Coccidiosis (*Eimeria* sp infections) in Poultry. The primary function of the medication is to reduce the oocytes maturation and affects the life cycle of various *Eimeria* species.



Poulmax

Community knowledge, Valsad, Dang, Gujarat

It is a unique herbal medication for promoting poultry immunity. It cures symptoms like greenish diarrhoea, conjunctivitis, nasal sputum, drop in egg production and respiratory distress in poultry. About 30g/100 birds for 0-4 weeks & 60g/100 birds for 4-8 weeks may be administered for seven days in stress or for three days before & three days after expected stress.

Mastiherb

Ukhardiyabhai S. Raot, Dang, Gujarat

Mastiherb is a unique intramammary herbal medication for curing mastitis in animals. Clinical trials indicated efficacy of the medication over subclinical mastitis; clinical mastitis & chronic mastitis. It was also validated in case of mastitis due to *Staphylococcus aureus*. The dose rate was found to be single intra mammary infusion for minimum 3 days after adequate standardization.



~These formulations are based on traditional knowledge of farmers and developed by Sadbhav-SRISTI Sanshodhan Laboratory. This product is licensed to Matrix Biosciences Pvt. Ltd, Hyderabad, Andhra Pradesh. The benefits are shared with the knowledge providers, communities, nature, those who add value and other stakeholders in the knowledge and value chain.

