This section contains details of herbal preparations used traditionally for various ailments and products based on such traditional knowledge.
Uses of *Abrus precatorius* L. (Ghughachi)

**NIF database**

**Use from Uttarakhand**

**Dog bite**
Mix half of the seed with curd and take it twice a day for two-three days
- *Indrasingh Rana, Udham Singh Nagar, Uttarakhand*

**Uses from other states**

**Backache**
Mix powdered seeds of the plant along with the powder of rhizome of *Acorus calamus* L., roots of *Asparagus racemosus* Willd., and leaves of *Vitex negundo* L., *Cannabis sativa* L. with honey. Make tablets and take one tablet twice a day for three to four weeks
- *Ami Chand, Kangra, Himachal Pradesh*

**Baldness**
Apply seed paste on the scalp along with honey
- *Mangilal Purohit, Churu, Rajasthan*

**Mouth ulcer**
Apply the green leaf juice topically
- *Chhitar Lal Gurjar, Sawai Madhopur, Rajasthan*

**Stomachache**
Take seeds (100g) with ghee or butter for relief
- *Kalpana, Trichy, Tamil Nadu*

**Knee pain**
Take seeds (6g) orally with milk for 14 days
- *Pavan Mehra, Sikar, Rajasthan*

**Uses from Classical Codified Literature**

Dried leaf and root powder is given orally in the case of eye complaint; decoction of the young leaves is given orally for cough; leaf powder is given orally in case of urine problems; and seed extract is used in sciatica.

It is one of the ingredients of ‘Tranquil’ medicine for relieving stress and anxiety. Ten patents have been found on the applications of *Abrus* mainly as a natural sweetener and oral contraceptive.
Uses of *Achyranthes aspera* L. (Latajeera)

**NIF Database**

**Use from Uttarakhand**

**Poisonous bite**
Take the fresh juice of the branch
- Hemlata Balutia, Nainital, Uttarakhand

**Asthma**
Grind the whole plant (50-100g) into a fine powder. Take 5g of this powder with water till the ailment gets cured
- Ahmed Hussain, Lohardaga, Jharkhand

**Poisonous bites**
Apply the root paste topically and also take it orally
- Jagjit Bahadur, Sitapur, Uttar Pradesh

**Abscess**
Apply the root paste topically
- Ravi Uraav, Hazaribag, Jharkhand

**Uses from other states**

**Toothache**
Brush the teeth with freshly plucked roots
- Bhagvat Prasad Yadav, Nawada, Bihar

**Itching**
Take the powdered roots (5g) orally with water twice a day for seven days
- Indira Kumari, East Champaran, Bihar

**Fever**
Grind roots (5g) with half black pepper into a fine powder. Take the powder orally
- Rajkishor Prasad, Sheohar, Bihar

**Hemorrhoids**
Take a spoonful of dried root powder on an empty stomach till the ailment gets cured
- Vishwanath Mahato, East Champaran, Bihar

**Veterinary practice**

**Topical inflammation**
Apply the plant paste topically
- Sheikh Hifazat Hussain, East Champaran, Bihar

**Headache**
Make tablets (of about 5g) from the root paste. Take one tablet daily in the morning with water for three days
- Jagjit Bahadur, Sitapur, Uttar Pradesh

**UTTARAKHAND INNOVATES**
Burnt fruit pulp is applied for rheumatic arthritis; 10g fruit pulp is given before sleep to overcome morning sickness; and fruit rind is applied externally on hair to kill headlice. ‘Bael’, prepared from Aegle marmelos (L.) Corr. is used in diarrhoea, dysentery and GI disorders. It has digestive and carminative properties. Lukol’s tonic is made from this plant along with other plants. It improves uterine circulation, and its antimicrobial and astringent actions on the mucous membrane of the genital system also help control leucorrhoea. ‘Bilwa’, 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 mainly for curing diabetes, gastric ulcer besides novel uses as herbal catalytic composition (US 6012417) for pollution control in automobiles.
Uses of *Bombax ceiba* L. (Semal)

**NIF Database**

**Use from Uttarakhand**

**Itching in animals**
Take the bark paste twice a day
- Umesh Rathore, Pithoragarh, Uttarakhand

**Uses from other states**

**Pimples**
Make a paste of thorn with milk. Apply on the pimples for seven days
- Pravin Kumar Sharma, East Champaran, Bihar

**Wound**
Apply the fresh bark paste topically
- Pravin Kumar Sharma, East Champaran, Bihar

**Diarrhoea**
Take a spoonful of leaf juice along with some sugar candy for four days
- Neha Kumari, East Champaran, Bihar

**Gynaecological disorder**
Take the gum powder (5g) with water for five days
- Jugeshwar Ram, Hazaribag, Jharkhand

**Constipation**
Take the bark powder (3g), coriander powder and jaggery with water
- Devaram, Sirohi, Rajasthan

**Piles**
Take the root paste (10g) with water for seven days
- Antaryami Pradhan, Angul, Orissa

**General health**
Few flowers are soaked in a glass of water overnight. Filter and take the water the next morning to give a coolant effect to the body
- Mukta Kumavat, Sikar, Rajasthan

**Uses in Classical Codified Literature**

Decoction of the bark is given orally to combat fever\(^\text{18}\) decoction of the heartwood is given for controlling diabetes\(^\text{19}\), and bark juice is administered to reduce stomachache\(^\text{20}\).

Product ‘Acne-n-Pimple Cream’\(^\text{21}\) is prepared from *Bombax* along with other plants to treat pimples and skin eruptions. ‘Evecare’\(^\text{10}\), a multi herb product made from this plant, has a regularizing influence on the menstrual cycle. Eight patents have been found on the medicinal applications of *Bombax* mainly for skincare\(^\text{22}\), AIDS\(^\text{23}\) etc.
Uses of *Calotropis procera* (Ait.) R. Br. (Akauva)

**NIF Database**

**Uses from Uttarakhand**

**Itching and irritation**
Warm the leaves smeared with mustard oil and make a bandage on the affected body part for two to three days
- Sukkhi Devi, Udham Singh Nagar, Uttarakhand

**Inflammation**
Apply the paste of fresh roots on affected body parts
- Sukkhi Devi, Udham Singh Nagar, Uttarakhand

**Migraine**
Heat the leaf and extract the juice. Put two-three drops in the nostril in the opposite side of the head having pain
- Indiravati Rana, Udham Singh Nagar, Uttarakhand

**Uses from other states**

**Stomach disorder**
Grind the leaves with turmeric and make tablets. Take one tablet orally till the ailment gets cured
- P. D. Walikar, Bagalkot, Karnataka

**Knee pain**
Take the leaf juice orally
- Jyothi Bhatta, Chikmagalur, Karnataka

**Earache**
Put the latex in the ear to cure the pain
- R. C. Chowdhary, Nagor, Rajasthan

**Stomachache**
Smear mustard oil on a leaf and warm. Apply it over the abdomen for immediate relief
- Chawda Chanduben Jawanj, Gandhinagar, Gujarat

**Arthritis**
Mix latex with turmeric powder, boil it with sesame oil and then apply this paste on the aching joint
- Sanjay Singh Uplana, Nagda, Madhya Pradesh

**Skin disease**
Apply the bark paste on the infected part
- Muralilal, Jaipur, Rajasthan

**Uses in Classical Codified Literature**

Plant extract is used as bronchodilator; flower buds of *Calotropis*, along with black pepper seeds and salt, are crushed to make pills the size of small peas. Two pills are taken twice daily for three days to cure malaria. Warmed leaves, smeared with oil, are applied on the aching part to alleviate rheumatic pain. ‘Muscle & Joint Rub’ is a highly effective ointment for backaches, muscular sprains and joint pains. ‘Arkavelahe’ made from this plant, is given to cure irritation of the stomach, nausea, vomiting, diarrhoea etc. Eight patents were found on the medicinal uses mainly for anti-tumor and antidotal activity and bronchial asthma.
Uses of *Carica papaya* L. (Papita)

**NIF Database**

**Uses from Uttarakhand**

**Kidney stone**
Take the fresh root paste for 21 days
*Umesh Rathore, Pithoragarh, Uttarakhand*

Take the root paste with water for 21 days
*Kalavati Devi, Udham Singh Nagar, Uttarakhand*

**Uses from other states**

**Cuts and wounds**
Apply the leaf paste topically
*Jongam Ngemu, Papum Pare, Arunachal Pradesh*

**Jaundice**
Take the root decoction thrice a day along with some other herbs
*Yanueg Jamoh Lego, East Siang, Arunachal Pradesh*

**Toothache**
Keep cotton dipped in the latex of the stem on the aching tooth
*Mangeram Jani, Hissar, Haryana*

**Intestinal worms**
Take fresh latex mixed with honey orally
*Prabhat Kumar Pandey, East Champaran, Bihar*

**Ringworm**
Apply the milky latex on the affected area
*Mukesh Kumar, East Champaran, Bihar*

**Jaundice**
Eat the curry of tender fruit
*Sharda Devi Gangwal, Jaipur, Rajasthan*

**Kidney stone**
Take the root juice orally
*Sandhya Suman, Sitamarhi, Bihar*

**Hydrocele**
Make a paste of latex and tender fruit. Give one teaspoon thrice a day till the ailment gets cured.
*Dimbeswar Gogoi, Sibsagar, Assam*

**Veterinary practice**

**Lactogouge**
Feed fruits daily to enhance milk production
*Manoj Kumar, Madhubani, Bihar*

**Uses in Classical Codified Literature**

Decoction of the flower is used as cardiotonic; bark powder is applied externally on wounds; decoction of the bark is given orally to get rid of intestinal worms; beverage of the fruit is taken orally to cure diarrhoea. Natural moisturizers and creams are prepared from Carica in combination with other plants. Thirty patents were found on its medicinal uses as an antiallergic and for prevention of cancer.

Source: [http://utenti.lycos.it/piantetropicali/Carica_papaya.jpg](http://utenti.lycos.it/piantetropicali/Carica_papaya.jpg)
PART II: HERBAL PRACTICES & PRODUCTS

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

NIF Database

**Use from Uttarakhand**

**Impotency**
Take leaf paste of *Centella* and *Tinospora cordifolia* (L.) Merr. daily in the morning
- Umesh Rathore, Pithoragarh, Uttarakhand

**Uses from other states**

**Malaria**
Take the decoction of the plant along with some other herbs thrice a day
- Smit Yanueg Jamoh Lego, East Siang, Arunachal Pradesh

**Toothache**
Make a paste of *brahmi* leaves, garlic cloves and banana roots. Apply topically and leave for one hour.
- Anil Gogoi, Sibasagar, Assam

**Sinusitis**
Grind leaves (10g) along with one black pepper and extract the juice. Put three drops into the nostrils. Continue the treatment for three days
- Batchu Murmur, Kokrajhar, Assam

**Dysentery**
Grind leaves (10) of *brahmi* and guava together to make a paste. Take this paste twice a day for ten days. In case of chronic dysentery, continue the treatment for 90 days
- Guna Ram Khanikar, Golaghat, Assam

Make a paste of leaves along with black pepper and take it orally
- Dipali Borah, Sibasagar, Assam

**Diarrhoea**
Take two spoonfuls of the whole plant juice with a pinch of salt orally twice a day for a week
- Sapam Deben, Bishnupur, Manipur

**Herbal tea for immunity**
Add some leaves while preparing tea. It helps to enhance immunity
- Jasmit Singh, Hamirpur, Himachal Pradesh

**Insomnia**
Include whole plant paste in daily diet
- Khiroram Barman, Borpeta, Assam

**Memory enhancer**
Take the leaf juice orally
- Savitri Devi, Kangra, Himachal Pradesh

**Skin diseases**
Apply the leaf paste topically over the affected part
- Savitri Devi, Kangra, Himachal Pradesh

**Memory enhancer**
Take the leaf juice orally
- Savitri Devi, Kangra, Himachal Pradesh

**Skin diseases**
Apply the leaf paste topically over the affected part
- Savitri Devi, Kangra, Himachal Pradesh

**Memory enhancer**
Take the leaf juice orally
- Savitri Devi, Kangra, Himachal Pradesh

**Skin diseases**
Apply the leaf paste topically over the affected part
- Savitri Devi, Kangra, Himachal Pradesh

**Uses in Classical Codified Literature**

Fresh juice of aerial part is used as brain tonic; powder of aerial parts helps to control high blood pressure; whole plant is diuretic; plant paste is applied as a poultice in case of bone fracture. “Herbal Tea” is mainly indicated as a health drink. ‘Mentat’ improves mental functions, mental quotient, memory span, and concentration ability and stress threshold. More than three hundred patents were found on its medicinal applications mainly as an anti-depressant.

Source: [http://www.fitoterapia.net/vademecumplantas/FOTOS/Centella%20asiatica.jpg](http://www.fitoterapia.net/vademecumplantas/FOTOS/Centella%20asiatica.jpg)

**UTTARAKHAND INNOVATES**
Uses of *Ficus racemosa* L. (Gular)

**NIF Database**

*Use from Uttarakhand*

**Nose bleeding**
Take the crushed fruits with an equal quantity of jaggery
- Deepak Balutia, Nainital, Uttarakhand

**Uses from other states**

**Mouth sores**
Apply the latex on sores
- Aarti Kumari, Gopalganj, Bihar

**Jaundice**
Mix two drops of the latex in a glass of water. Take it in the morning on an empty stomach for seven days
- Sheikh Javed & Sheikh Mohammad, Hingoli, Maharashtra

**Gynaecological disorder**
Take the leaf juice orally
- Satyanarayan Sain, Sikar, Rajasthan

**Poisonous bite**
Massage crushed tender leaves over the affected area
- Ganesh Madhukar Shanbhag, Sholapur, Maharashtra

**Uses in Classical & Codified literatures**

Dried bark is given orally to cure diarrhoea; diabetics should take the decoction of roots; dried root powder is administered orally to combat fever.

Product ‘Tricawin’ is prepared from this plant in combination with others herbs for the treatment of specific and non-specific leucorrhoea. ‘Diabet Guard Capsules’ is used to cure diabetes. Fifty patents have been found on its various medicinal applications such as to treat stomach ulcer.
Uses of *Kalanchoe pinnata* (Lam.) Pers. (Paththar chatta)

**NIF Database**

**Use from Uttarakhand**

**Kidney stone**  
Take the leaf juice for 10-15 days  
- Sukhki Devi, Udham Singh Nagar, Uttarakhand

**Uses from other states**

**Injury**  
Put warmed leaves on the affected body part  
- Onom T. Doming, East Siang, Arunachal Pradesh

**Eye pain**  
Put two drops of the leaf juice in the eyes  
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Stomach disorder**  
Take two spoonfuls of the leaf juice orally  
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Diarrhoea**  
Take the leaf juice orally along with some sugar  
- Bikesh Kumar, Sitamarhi, Bihar

**Cuts & wounds**  
Apply the leaf paste topically  
- Arun Ghosh, Bankura, West Bengal

**Pain**  
Apply the leaf paste topically  
- Priyanka Pramanik, Purulia, West Bengal

**Jaundice**  
Take the leaf juice along with black pepper orally  
- Arun Kumar Pandey, Fatehpur, Uttar Pradesh

**Kidney stone**  
Grind the leaves of the plant with a piece of turmeric and extract the juice. Add some jaggery and take the preparation for ten days.  
- Dimbeswar Gogoi, Sibasagar, Assam

Take leaf juice orally once a day for 25-30 days.  
- Guna Ram Khanikar, Golaghat, Assam

**Uses in Classical Codified Literature**

Plant paste is applied on forehead to alleviate headache⁴⁶; leaf paste is applied externally to cure cuts and wounds⁴⁷; fresh sap of plant is used for eye diseases⁴⁸. Product ‘Regenerating Day Cream’⁴⁹, a multitherbal medicine enhances skin’s tone and elasticity, helps to smooth wrinkles and fine lines. Five patents were found on the medicinal applications of *Kalanchoe* mainly as an antiobesity⁵⁰ medication.
Uses of *Solanum nigrum* L. (Makoi)

*NIF Database*

**Use from Uttarakhand**

*Inflammation*
Make a curry of *Solanum* and *Cuscuta reflexa* Roxb. Take it for two or three days
- Chhoti Devi, Udham Singh Nagar, Uttarakhand

**Uses from other states**

*Malaria*
Take the decoction of the plant along with some other herbs thrice a day
- Yanueg Jamoh Lego, East Siang, Arunachal Pradesh

*Nasal bleeding*
Boil dry fruit (25g) in mustard oil (100g) and filter. Apply the filtrate on the forehead
- Sahim Ansari, Lohardaga, Jharkhand

*Mouth ulcer*
Chew the leaves
- Shriyal Singh, Bulandshahar, Uttar Pradesh

*Cough*
Take the root juice orally
- Priyanka Kumari, Gopalganj, Bihar

Fry the leaves of makoi (200g) in mustard oil (20ml) and take it orally with a little salt
- Sukhai Mali, Faridabad, Haryana

*Jaundice*
Take the root juice orally
- Suman Kumari, Gopalganj, Bihar

*Stomachache*
Take the fried leaves of *Solanum*, neem and *Vitex negundo* L. orally twice a day
- Moirangthem Mani Devi, Imphal West, Manipur

**Uses in Classical Codified Literature**

Powdered fruit is given orally to reduce fever; juice extracted from the whole plant is applied externally on the burnt part; poultice of the plant is placed on the aching joint; fruits are ground and taken orally to cure diarrhoea.

*Herbolax* 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.

**Source:** http://thebegavalley.org.au/uploads/tx_steverplantgallery/Solanum_nigrum_02_black situationshade.jpg
Uses of *Tinospora cordifolia* (Willd.) Miers ex Hk. f. & Th. (Gurj)

**NIF Database**

**Use from Uttarakhand**

**Diabetes**
Soak handful of rice overnight in water. Take it the next morning after adding the powder of *Tinospora* leaves.
- *Deva Bharti, Bageshwar, Uttarakhand*

**Uses from other states**

**Typhoid**
Take the decoction or powder of the stem orally.
- *Yanueg Jamoh Lego, East Siang, Arunachal Pradesh*

**Asthma**
Take two spoonfuls of the leaf juice orally with honey for 40-42 days.
- *Ramabandhu Mahajan, Jalgaon, Maharashtra*

**Diabetes**
Take leaf powder (¼ spoon) regularly.
- *Patel Singh, Hisar, Haryana*

**Rheumatism**
Mix the plant (25g), dry ginger (5g) and sesame oil (5g), soak in water overnight. Take the filtered solution next morning.
- *Jagjit Bahadur, Sitapur, Uttar Pradesh*

**Piles**
Boil, dry and grind the whole plant (50g) into a fine paste. Make tablets and take one tablet thrice a day for 3-5 days.
- *Pukhram Angouba Singh, Bishnupur, Manipur*

**Veterinary practice**

**Anestrous**
Grind the plant, along with the bark of *Cassia fistula* L. and leaves of *Artocarpus heterophyllus* Lam., and take orally.
- *Honnegowda, Bengaluru rural, Karnataka*

**Uses in Classical Codified Literature**

Powdered roots are taken to cure mouth ulcer; powdered plant is administered orally with honey to get relief from stomach disorder; the stem is bitter and is used as anthelmintic; and decoction of the plant is given orally to cure diarrhoea.

*Tinospora* is a well known medicinal plant and is used to cure a number of diseases in combination with other plants with brand names ‘Geriforte, Diabecon’ etc. More than a hundred patents were found on its medicinal applications mainly as an antiallergic and for cancer.
Uses of *Ziziphus mauritiana* Lamk. (Bor)

**NIF Database**

**Use from Uttarakhand**

**Indigestion**
Mix the fruit pulp of *Ziziphus* with one year old vinegar and add some black salt to it. Take the formulation for fifteen days on an empty stomach.
- Jivan Nath Bichchunath, Udham Singh Nagar, Uttarakhand

**Uses from other states**

**Hair care**
Boil the fresh leaves (100-150g) in one litre of water. Wash the hair with cooled decoction.
- Baba Anantanand, Hissar, Haryana

**Acne**
Apply the leaf paste topically
- Ajay Kumar Jena, Balasore, Orissa

**Indigestion**
Take one spoonful of the root paste orally
- Madhusuda Munda, Keonjhar, Orissa

**Rheumatism**
Apply the leaf and root paste (along with the roots of *Cassia auriculata* L.) on the aching part
- Jivanbhai Bhanjibhai Jagarana, Bhabnagar, Gujarat

**Veterinary practice**

**Lactagouge**
Feed the cattle with dry leaf powder mixed in fodder
- Baba Anantanand, Hissar, Haryana

**Uses in Classical Codified Literature**

Pounded leaves are applied on boils; powdered leaves are taken to reduce blood sugar; decoction of the plant is administered orally as a diuretic, and powder of dried fruit is given orally with water to cure diarrhoea.

‘Dhanwantharam oil’ is prepared from *Ziziphus* along with other plants used for rejuvenating body and skin care. More than ten patents have been found on its medicinal applications mainly for treating cancer and tumorous growth.

---

Source: SRISTI database
**Herbal Formulations for Healthy Crops**

**SRISTI SHASTRA**
Arkhiben Vankar, Ranabhai Kamaliya, Banidan Gadhvi, Gemal Rana, Rajnikant Patel, Ahmadbhai Kadivala, Gujarat.
It flourishes the growth of the plant by increasing flowering as well as fruiting. Besides overall vegetative growth, it is not harmful to nature and human beings. It also controls sucking pests like white fly, heliothis, aphid etc.

**SRISTI KRUSHAK**
Popatbhai Rupabhai Jambucha, Gujarat
It is an excellent remedy for leaf curl disease. Besides controlling the disease it increases the vigor of the plants by increasing overall growth.

**SRISTI SURAKSHA**
Community Knowledge, Gujarat
It 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 spread in the field. Some times it is released in the field along with the flow of irrigation water. In some cases, it is also drenched in the affected part of the plant and sprayed on the vegetation to repel termites.

**SRISTI PRAYAS**
Community Knowledge, Gujarat
It is a highly effective formulation to act as a herbal growth promoter, which 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 extreme weather conditions. Constant use of this formulation increases the yield and reduces the toxic content 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.
PART II : HERBAL PRACTICES & PRODUCTS

Herbal Formulations for Livestocks and Poultry

Coccicure
Sudakarbhai K. Gauli & Jeevalbhai M. Gauli, 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.

Poultmax
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 and three days after expected stress.

Mastitherb
Ukhardiyabhai S. Raot, Dang, Gujarat

Mastitherb is a unique intramammary herbal medication for curing mastitis in animals. Clinical trials indicated efficacy of the medication over subclinical mastitis; clinical mastitis and 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 three days after adequate standardization.

---

*These formulations are based on traditional knowledge of farmers and developed by Sadbhav-SRISTI Sanshodhan Laboratory (www.sristi.org). These products are 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.