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

**NIF Database**

**Uses from West Bengal**

**Toothache**
Paste prepared from roots along with three black pepper seeds is applied on the aching tooth
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Constipation**
Chewing of roots is useful
- Ambika Singh Sardar, Purulia, West Bengal

**Piles**
Whole plant paste is applied topically
- Satyen Chatterjee, Murshidabad, West Bengal

**Uses from other states**

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

**Asthma**
Dried branches are burnt into ash, which is taken orally
- Chandrasingh Chaudhary, Nandurbar, Maharashtra

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

**Fever**
Roots (5g) are ground with half black pepper into a fine powder, which is administered orally
- Rajkishor Prasad, Sheohar, Bihar

**Headache**
Tablets (of about 5g) are prepared from the pounded roots; one tablet is taken in the morning with water for three days
- Jagjit Bahadur, Sitapur, Uttar Pradesh

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

**Veterinary practice**

**Topical inflammation**
Plant paste is applied externally on topical inflammation
- Sheikh Hifazat Hussain, East Champaran, Bihar

**Uses in Classical Codified Literature**

Dried aerial parts are taken orally in case of diabetes; powder made from the dried plant is given orally to treat whooping cough; decoction of the plant is used as laxative; and decoction of the plant is applied externally on boils and pimples.

Product ‘Cystone’ 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* for curing laryngopharyngitis, bronchial asthma etc.
Uses of *Adhatoda vasica* (L.) Nees (Basok)

**NIF Database**

**Uses from West Bengal**

**Tonsilitis**
Decoction of the leaves of *adhatoda*, *tulsi* and rhizome of *ginger* is made. This is then used to gurgle.
- Shikha Samanta, Hooghly, West Bengal

**Asthma**
Dried leaves are burnt and the smoke is inhaled
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Cough/cold**
Decoction of leaves is administered orally till the ailment cures
- Priyanka Pramanik, Purulia, West Bengal

**Acidity**
Dried bark (8g) is boiled in 250ml of water till the solution becomes half. This solution is filtered and given orally 2-3 times a day
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Uses from other states**

**Tuberculosis**
Juice extracted from the leaves is taken orally along with honey
- Mahesh Bijarania, Nagor, Rajasthan

**Malaria**
Few leaves are boiled in water (250g), filtered and jaggery is added; this is then administered orally
- Mahesh Kumar Khangar Purohit, Sirohi, Rajasthan

**Constipation**
Decoction of leaves with honey is given orally to get relief
- Pradip Kumar, Bulandshahar, Uttar Pradesh

**Uses in Classical Codified Literature**

Decoction of the plant is taken orally to cure asthma⁷; leaves (500 g) decocted in 5 litres of water until a dark brown mass is obtained and two spoonful are taken with honey thrice a day for 2-4 days to get rid of fever⁸; rheumatic patients should warm the leaves and rub on the body⁹.

Product ‘Menstri Care’¹⁰ prepared from the plant is an effective medicine for women’s health concerns. ‘Diakof’⁴, a herbal medicine uses *Adhatoda* along with other plants for treating cough. Ten patents have been found on its medicinal applications mainly for cough¹¹ and asthma¹².
Uses of *Aegle marmelos* (L.) Corr. (Bel)

NIF Database

**Uses from West Bengal**

**General debility**
Regular intake of a fruit along with the gum is helpful
- Arun Ghosh, Bankura, West Bengal

**Stomach disorder**
Juice extracted from leaves is given orally along with little salt
- Surjit Singh Sardar, Purulia, West Bengal

**Dysentery**
Dried leaves are ground into a fine powder and a spoonful is administered orally adding salt
- Surjit Singh Sardar, Purulia, West Bengal

**Use from other states**

**Eye diseases**
Juice is extracted from the green leaves and two drops are put in the eye
- Kumari Nigar Pravin, Hazaribag, Jharkhand

**Nasal bleeding**
Leaves are ground into a paste, which is applied on the top of the nose
- Puran Chand, Kangra, Himachal Pradesh

**Diabetes**
150ml of the juice extracted from the pounded roots is administered orally
- Maibum Lolito Meitei, Bishempur, Manipur

**Jaundice**
Juice extracted from leaves or fruits is given orally
- Ngairangbam Santosh Singh, Imphal East, Manipur

**Menorrhagia**
Leaf paste is administered orally to control the disorder
- Rani B. Bhagat, Pune, Maharashtra

**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 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* 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 astrigent actions on the mucous membrane of the genital system also help control leucorrhea. ‘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* for curing diabetes, gastric ulcer etc.
Uses of Bombax ceiba L. (Shimul)

NIF Database

Uses from West Bengal

Pimples
Pounded bark is applied on pimples
- Priyanka Paramanik, Purulia, West Bengal

Blood dysentery
Dried gum is ground into a fine powder and half a spoon of the powder is given along with milk to drink twice a day till the ailment cures
- Susanta Kumar Manjhi, Birbhum, West Bengal

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 the 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

Gynecological disorder
Gum (5g) is ground, mixed with water and administered for 5 days
- Jugeshwar Ram, Hazaribag, Jharkhand

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 fever\(^{18}\), diabetics are given decoction of the heartwood\(^{19}\); and to reduce stomachache bark juice is administered\(^ {20}\).

Product ‘Acne-n-Pimple Cream’\(^ {21}\) is prepared from Bombax along with other plants to treat pimples and skin eruptions. ‘Evecare’\(^4\), 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 like for skincare\(^ {22}\), AIDS\(^ {23}\) etc.
Uses of *Butea monosperma* (Lamk.) Taub. (Palash)

**NIF Database**

**Uses from West Bengal**

**Poisonous bites**
Seed powder is mixed with latex of *Calotropis procera* (Ait.) R.Br. and is applied on the affected part.
- Priyanka Pramanik, Purulia, West Bengal

**Intestinal worms**
Dried leaves are ground into a fine powder and one spoonful of the same is administered orally along with water.
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Intestinal worms**
Gum of palash (5g) and black pepper seeds (7) are ground together and one spoonful of the powder is administered orally for 7 days.
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Dysentery**
Powdered resin is taken with milk.
- Ambika Singh Sardar, Purulia, West Bengal

**Gynecological disorder**
Seed powder (5g) is taken orally along with milk.
- Susanta Kumar Manjhi, Birbhum, West Bengal

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

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

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

**Uses from other states**

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

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

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

**Bark is used as poultice for pimples**, bark juice is given orally to get rid of intestinal worms**; and dried flower powder is administered orally as diuretic**.

‘Lukol’ has a stimulatory action on the endometrium and improves uterine circulation. ‘Hair Loss Cream’ improves tensile strength of hair and increases hair density. Ten patents were found for its medicinal uses for bone disorders**, skin care** etc.
Uses of *Ficus benghalensis* L. (Bot)

**NIF Database**

**Uses from West Bengal**

**Wound**
Leaves are burnt into ash and coconut oil is added to form a paste. This paste is topically applied.
- Priyanka Paramanik, Purulia, West Bengal

**Sprain**
Bark is ground and mixed with water to make a paste. Lukewarm paste is smeared on the site of the sprain.
- Arun Ghosh, Bankura, West Bengal

**Heel crack**
Latex is topically applied.
- Priyanka Pramanik, Purulia, West Bengal

**Uses from other states**

**Fever**
Decoction of bark along with little salt is administered orally.
- Sohanlal Chhipa, Jhalor, Rajasthan

**Whooping cough**
Bark is ground into a fine paste and one spoonful is taken orally.
- Priyanka Kumari, West Champaran, Bihar

**Stomachache**
Warmed leaves are tied on the stomach to get relief from pain.
- Gajanand Maharaj, Jaipur, Rajasthan

**Backache**
Latex mixed with mustard oil is massaged on the aching part.
- Chen Singh Charan, Nagor, Rajasthan

**Itching**
Crushed leaves (30-40) are soaked in water (4litres) overnight and boiled till the decoction remains 1 litre. Half a litre of mustard oil is added, the solution is mixed and filtered. This solution is applied topically.
- Randhir Kumar, Hazaribag, Jharkhand

**Uses in Classical Codified Literature**

Diabetics should take aerial roots’ paste mixed with salt after filtering once a day in the morning for 8 days, decoction of plant is applied externally on wounds and ulcers; latex is given orally to cure bronchitis.

‘Anti-Dandruff shampoo’ a product prepared from this plant in combination with other plants is used to keep hair healthy and dandruff free. Product ‘KLD Lotion’, a multitherbal ayurvedic preparation using *Ficus*, is effective in many skin ailments such as acne marks, pimples, burns - sunburns, nappy rash etc. ‘Litina’, a herbal toothpaste made from this plant along with other plants, is good for the gums and the teeth. Four patents have been found on medicinal applications of *Ficus* for antitumor medication, wound healing etc.
**Uses from West Bengal**

**Liver disorder**
Decoction of the bark is administered orally
- Priyanka Pramanik, Purulia, West Bengal

**Diarrhoea/dysentery**
Juice extracted from bark is administered orally
- Ambika Singh Sardar, Purulia, West Bengal

**Intestinal worms**
Juice from the pounded leaves is taken orally to kill worms
- Ambika Singh Sardar, Purulia, West Bengal

**Uses from other states**

**Fever**
Leaves (5g) along with those of *Picrorhiza kurroa* Royale ex. Benth. (5g) are boiled in 100ml of water till the decoction remains 10ml. This is then taken orally till the ailment cures
- Hariom Kumar, East Champaran, Bihar

**Bodyache**
Bark is ground in water; some quantity is taken orally and the rest is applied on the body
- Devaram, Sirohi, Rajasthan

**Malaria**
Equal amount of leaves of kurchi and *Cyperus rotundus* L. are ground into a fine powder. One spoonful is taken orally to combat the disease
- Chandan Kumar, East Champaran, Bihar

**Dysentery**
Paste is prepared from the bark. 10g of the paste is given along with a spoonful of honey
- Kundan Kumar, East Champaran, Bihar

**Kidney stone**
Juicy paste of the bark is mixed with sour ghee and is taken orally
- Robert L. Hnamte, Aizawl, Mizoram

**Skin disease**
Dried bark is powdered, mixed with ghee and honey, and is taken orally
- Robert L. Hnamte, Aizawl, Mizoram

**Uses in Classical Codified Literature**

Dried bark powder is given orally to cure stomachache; seeds are ground into a powder, a dose of 5-10g of the powder is given with water as an antidote and a paste of the seeds is also applied locally to relieve pain and swelling on poisonous bites.

‘Diarex vet’ is used for diarrhoea in cattle. ‘Kutajarista and Kutajavaleha’ are the most popular preparations used in diarrhoea, dysentery, colitis and bleeding problems. Thirteen patents have been found on its medicinal applications mainly for gastrointestinal disorders.
Uses of *Kalanchoe pinnata* (Lam.) Pers. (Patharkuchi)

**NIF Database**

**Uses from West Bengal**

**Eye pain**
Two drops of the juice extracted from the leaves are put in the eyes
- *Susanta Kumar Manjhi, Birbhum, West Bengal*

**Stomach disorder**
Two spoonful of the juice extracted from the leaves are given orally
- *Susanta Kumar Manjhi, Birbhum, West Bengal*

**Cuts & wounds**
Topical application of leaf paste helps in stopping bleeding
- *Arun Ghosh, Bankura, West Bengal*

**Pain**
Leaf paste is applied on the aching part
- *Priyanka Pramanik, Purulia, West Bengal*

**Uses from other states**

**Jaundice**
Juice of leaves along with black pepper powder is given till the ailment cures
- *Arunkumar Pandey, Fatehpur, Uttar Pradesh*

**Fever**
Juice of leaves along with black pepper powder is given orally
- *Arunkumar Pandey, Fatehpur, Uttar Pradesh*

**Diarrhoea**
Leaves (5-6) are ground along with some sugar candy and sap obtained is administered orally
- *Bikesh Kumar, Sitamarhi, Bihar*

**Uses in Classical Codified Literature**

Plant paste is applied on forehead to alleviate headache⁴⁰; leaf paste is applied externally to cure cuts and wounds⁴¹; fresh sap of plant is used for eye diseases⁴².

Product ‘Regenerating Day Cream’⁴³ a multiherbal medicine enhances skin’s tone and elasticity, helping to smooth wrinkles and fine lines. Five patents have been found on medicinal applications of *Kalanchoe* as an anti-obesity⁴⁴ medication.
Uses of *Nyctanthes arbor-tristis* L. (Shiuli)

**NIF Database**

**Uses from West Bengal**

**Cough/cold**
Two spoonful of the juice of leaves is administered orally along with honey or ginger juice
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Fever**
Juice of leaves is administered orally to cure fever
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Uses from other states**

**Hair fall**
Seeds are crushed in water and the paste is applied on hair scalp
- Rani B. Bhagat, Pune, Maharashtra

**Cough/cold**
Paste is prepared using three leaves and black pepper and is taken orally with water
- Ashok Kumar Yadav, East Champaran, Bihar

**Fever**
Leaves (6-7), along with ginger, are crushed to extract juice, which is given to drink thrice a day
- Rani B. Bhagat, Pune, Maharashtra

Two leaves of shiuli, neem, three black pepper and four leaves of tulsi are ground in half litre of water and boiled till half a cup of residue remains. This is cooled and given orally
- Arjun Singh, Bharatpur, Rajasthan

**Intestinal worms**
Oral intake of leaf juice kills the worms
- Rani B. Bhagat, Pune, Maharashtra

**Diabetes**
Decoction of the leaves is taken orally for 40 days
- Shama Pravin, Gopalganj, Bihar

**Wound**
Topical application of leaf paste gives relief
- Ranjeet Kumar, Sheohar, Bihar

**Pain**
Fresh leaf paste is applied on the fractured part to alleviate pain
- Ramsharan Dhruv, Dhamtari, Chhattisgarh

**Uses in Classical Codified Literature**

Dried fruits are used orally to get relief of cough; decoction of dried flowers is given with jaggery as an anti-fertility agent in females; and leaf juice is applied externally on ringworm and other skin diseases.

‘Lupin’ is a medicine used for pain and inflammation associated with musculoskeletal and joint disorders. Six patents have been found on its medicinal uses such as for treating Leishmaniasis and also for its natural property as a dye.
Uses of *Phyllanthus emblica* L. (Amlaki)

**NIF Database**

**Uses from West Bengal**

**Hair fall**
Fruit is ground and mixed with coconut oil. This is applied on the scalp.
- Surjit Singh Sardar, Purulia, West Bengal

**Abscess**
Fruit is ground into a fine paste and is applied on abscess.
- Ambika Singh Sardar, Purulia, West Bengal

**Diabetes**
Regular intake of fruit combats diabetes.
- Shiuli Mahato, Purulia, West Bengal

**Urinary disorder**
Juice extracted from unripe fruit is taken orally along with some sugar candy.
- Surjit Singh Sardar, Purulia, West Bengal

**Uses from other states**

**Diabetes**
Equal amounts of amla, *Terminalia chebula* Retz., *Terminalia bellirica* Roxb. are ground into a fine powder. Two spoonful of this powder are given orally.
- Pritam Chand, Kangra, Himachal Pradesh

**Diarrhoea**
Juice of amla, with an equal quantity of lemon juice, is administered orally.
- Bina Chaudhry, Kamrup, Assam

**Jaundice**
Equal amounts of amla fruit, ginger, black pepper and turmeric are ground into a fine powder. One tea-spoonful of this powder is given with honey.
- Nagarmal Bagaria, Nagor, Rajasthan

**Uses in Classical Codified Literature**

Bark and fruits are used in diarrhoea and dysentery[^50]; fresh juice of the fruit, mixed with pure cow’s butter and honey, is administered to cure obstinate hiccough[^50]; juice relieves pain in urine trouble[^50]; pulp (2-3g) is eaten with warm milk to get rid of headache[^51]; powder of seeds after mixing with ghee is applied on the head to stop nasal bleeding[^2]; fruits are taken orally to reduce acidity[^52]; and the decoction of the fruit is taken to increase blood count[^53].

*Phyllanthus* is one of the main ingredients of well known medicines ‘Triphala, Chavanprash and Amla hair oil’. Seventy-six patents have been found on its medicinal uses such as for diabetes[^54], liver disorders and immune deficiencies[^55].

[^50]: Bark and fruits are used in diarrhoea and dysentery.
[^51]: Fresh juice of the fruit, mixed with pure cow’s butter and honey, is administered to cure obstinate hiccough.
[^52]: Juice relieves pain in urine trouble.
[^53]: Pulp (2-3g) is eaten with warm milk to get rid of headache.
[^54]: Powder of seeds after mixing with ghee is applied on the head to stop nasal bleeding.
[^55]: Fruits are taken orally to reduce acidity.
[^56]: The decoction of the fruit is taken to increase blood count.
Uses of *Tinospora cordifolia* (Willd.) Miers ex Hk. f. & Th. (Gulancho)

**NIF Database**

**Uses from West Bengal**

**Fever**
Juice extracted from stem (10g) is mixed with little water. Warmed juice is taken orally twice a day for 8-10 days
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Jaundice**
Stem (8 inch long) is soaked in a cup of water and left overnight. The next morning the same water is given orally
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Diabetes**
Juice extracted from stem is administered orally in the morning on an empty stomach
- Subhjyoti Chatterjee, Burdwan, West Bengal

**Intestinal worms**
Oral intake of leaves juice kills worms
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Uses from other states**

**Migraine**
Stem of the plant (250g) is boiled in water along with green gram (250g) and sesame oil (250ml) till half of the decoction remains and then applied on the forehead
- Stedimon Arackal Paul, Port Blair, Andaman & Nicobar Island

**Asthma**
Juice is extracted from the leaves and two spoonful are administered orally with honey for 40-42 days
- Ramabandhu Mahajan, Jalgaon, Maharashtra

**Diabetes**
Fresh leaves (1-2) are taken on an empty stomach
- D. K. Phukan, Guwahati, Assam

**Piles**
Whole plant (50g) is boiled, dried and ground into a fine paste. Tablets are then prepared and one tablet is administered orally to the patient thrice a day for 3-5 days
- Pukhram Angouba Singh, Bishnupur, Manipur

**Uses in Classical Codified Literature**

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

*Tinospora* is a well known medicinal plant and used to cure a number of diseases in combination with other plants with brand names ‘Geriforte, Diabecon’ etc. More than hundred patents have been found on its medicinal applications such as an antiallergic, for cancer etc.
Uses of *Vitex negundo* L. (Nishinda)

**NIF Database**

**Uses from West Bengal**

**Oozing from ear**
Few drops (3-4) of warmed juice of leaves is put in the ear.
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Obesity**
A spoonful of the juice extracted from the leaves is taken orally everyday.
- Arun Ghosh, Bankura, West Bengal

**Diabetes**
Equal amounts of leaves of vitex, neem and *Catharanthus roseus* (L.) Don. are ground and tablets (5g) prepared from the powder. Two tablets are administered orally in the morning on an empty stomach.
- Susanta Kumar Manjhi, Birbhum, West Bengal

**Uses from other states**

**Rheumatism**
Lukewarm leaves are put on aching joints.
- Naganath Durga Chogule, Sholapur, Maharashtra

**Lumbago**
Juice extracted from fresh leaves is massaged on the affected area.
- Shreenand B. Dandekar & Meera Dandekar, Ratnagiri, Maharashtra

**Ear pain**
Leaves are boiled in mustard oil, oil is then filtered and used as an ear drop.
- Bhagat Ram, Kangra, Himachal Pradesh

**Muscular pain**
Leaves are smeared with mustard oil, lukewarmed and applied on the affected part.
- Savita Kumari, Gopalganj, Bihar

**Skin disease**
Small pieces of plant, mixed with cow’s urine, are applied on the affected skin.
- K. Lakshmana Shetty, South Karana, Karnataka

**Veterinary practice**

**Wound**
Leaf paste is applied topically on wound.
- Nageshwari Devi, Hazaribag, Jharkhand

**Uses in Classical Codified Literature**

Leaves are smouldered and the smoke is inhaled to get rid of cough; in case of diarrhoea flowers are used; and the extract of the plant is taken as a diuretic.

‘Muscle & joint rub’, is a highly effective medicine for backache, muscular sprain and joint pain. ‘Dental Cream’ is a specially formulated toothpaste that tightens and reduces swelling of gums, stops gum bleeding, prevents toothache, decay and controls bad breath. ‘Ahtarva Nirgundi Siddha Tail’ is useful in arthritis, joint pain, relieves oedema. Thirty-five patents were found on the medicinal applications like for rheumatic arthritis.
**PART II:** HERBAL PRACTICES & PRODUCTS

**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 Livestock 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.

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 and chronic mastitis. It was also validated in case of mastitis due to Staphylococcus aureus. The dose rate was found to be single intramammary 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.