

PART II

HERBAL PRACTICES & PRODUCTS

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



Acacia nilotica (L.) Del. (Babul)

NIF Database

Uses from Haryana

Burn: Bark of the plant (1 kg) and mustard oil (250g) are boiled in water (5 lt) till 1/5th of the decoction remains. It is then applied on the affected human parts.

- Jagadish, Hissar, Haryana

Uses from other states

Mouth ulcer: Bark of the plant chewed for immediate relief

- Geeta Devi Kumavat, Jaipur, Rajasthan

Dental care: Boil the bark in water and the decoction used to gargle. This strengthens teeth and eliminates other dental problems

- Geeta Devi Kumavat, Jaipur, Rajasthan

Pneumonia: The bark (10 g) boiled in water (50 ml) till the decoction becomes half of the original volume. Sugar added and given to the patient to drink.

- Chen Singh Charan, Nagor, Rajasthan

Diarrhoea: Juice of the leaves extracted and administered orally

- Omkarmal G Maur, Nagor, Rajasthan

Urine problem: Equal amounts of bark and seeds ground into fine paste. One spoon of the paste given with water

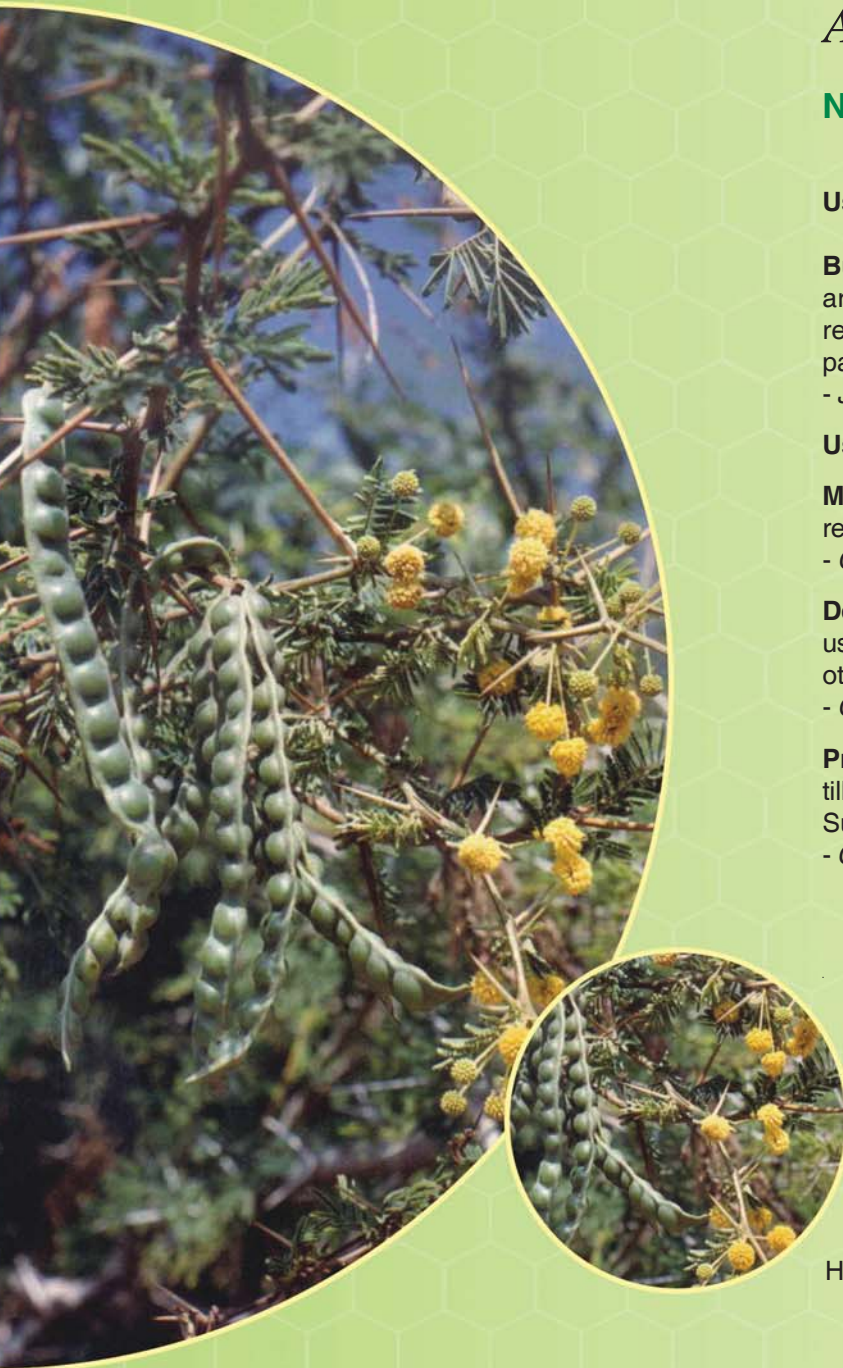
- Ganesh Das, Sirohi, Rajasthan

Source: SRISTI database

Uses in Classical Codified Literature

Paste made from fresh leaves applied on the forehead for headache¹, decoction of the bark gargled to give relief from sore throat²; decoction of the bark consumed to cure bronchitis³; dried bark powder taken orally with water for diabetes⁴.

Toothpaste is prepared from *Acacia* with the brand name 'Dental cream'⁵. Thirty patents were filed on its medicinal uses such as for dental plaque and gingivitis⁶.



***Boerhaavia diffusa* L. (Punarnava)**

NIF Database

Uses from Haryana

Stomach disorder: Shade dried leaves along with twig of the plant ground to make fine powder. One spoon of the powder taken with a pinch of rock salt and a spoon of butter

- *Rajendra Singh, Jind, Haryana*

Jaundice: Juice extracted from the roots (20g) given

- *Sukhai Mali, Faridabad, Haryana*

Uses from other states

Jaundice: Juice extracted from the plant given with honey and sugar candy

- *Monika Kumari, Sitamarhi, Bihar*

Headache: Leaves ground into fine paste and applied on the forehead

- *Sukumar Nath, North Tripura, Tripura*

Conjunctivitis: Decoction of the root (50g) given once a day

- *Ramnarayan Gameti, Udaipur, Rajasthan*

Kidney stone: Milk boiled with roots to be taken

- *Monika Kumari, Sitamarhi, Bihar*

Veterinary practice

Maggot wound: Prepare root paste with limestone and applied topically

- *Jeyapaul, Madurai, Tamil Nadu*

Uses in Classical Codified Literature

Juice extracted from the leaves given with milk to get relief from cataract⁷; decoction of the plant given orally for purify blood⁸; the plant extract used as diuretic⁹; decoction of the leaves applied externally in case of skin infections¹⁰.

'Liver-Kidney Care'¹¹ is made from this plant and works synergistically on the liver and kidney to heal and prevent infections in both systems. Fourteen patents have been filed on the medicinal uses of *Boerhaavia* for various diseases like liver disorders¹², hypertension¹³ etc.



Source: SRISTI database

Carica papaya L. (Papita)

NIF Database

Uses from Haryana

Toothache: Cotton dipped in the latex of the stem is kept on the aching tooth to get relief
- *Mangeram Jani, Hissar, Haryana*

Uses from other states

Headache: Seeds and garlic ground into a fine paste and applied on the forehead
- *Saiba Barman, Borpeta, Assam*

Jaundice: Curry made from the raw/unripe fruit taken orally
- *Sharda Devi Gangwal, Jaipur, Rajasthan*

Kidney stone: Roots (5g) ground into fine powder and taken with 50ml of water
- *Mukesh Kumawat, Jaipur, Rajasthan*

Ringworm: Milky latex applied topically
- *Mukesh Kumar, East Champaran, Bihar*

Veterinary practice

Appetizer: Fruit mixed with camphor and given to animal for 15 days
- *Ravi kumar, Chikmangalur, Karnataka*

Source: http://utenti.lycos.it/piantetropicali/Carica_papaya.jpg

Uses in Classical Codified Literature

Decoction of the flower used as cardi tonic¹⁴; bark powder applied externally on wounds³; decoction of the bark given orally to get rid from intestinal worms¹⁵; beverage of the fruit taken orally to cure diarrhea¹⁶.

Natural moisturisers and creams are prepared from *Carica* in combination with other plants¹⁷. Thirty patents have been filed on its medicinal uses such as antiallergic¹⁸ and prevention of cancer¹⁹.



Citrullus colocynthis (L.) Schr. (Tumba)

NIF Database

Uses from Haryana

Stomach disorder: Baked seeds eaten to combat the disease

- Jagadish, Hissar, Haryana

Joint pain: Powder of baked seeds taken with water

- Jagadish, Hissar, Haryana

Uses from other states

Earache: Equal amount of seeds of the plant and castor fried in mustard oil till the mixture turned black. The concoction is then filtered and used as ear drops

- Chaturbhuj Kumhar, Jaipur, Rajasthan

Cough: Small pieces of stem and bulb of onion fried in mustard oil, salt added and eaten

- Ganga Devi, Chandava, Jharkhand

Constipation: Roots chewed to get rid of constipation

- Chenaram Banjara, Nagor, Rajasthan

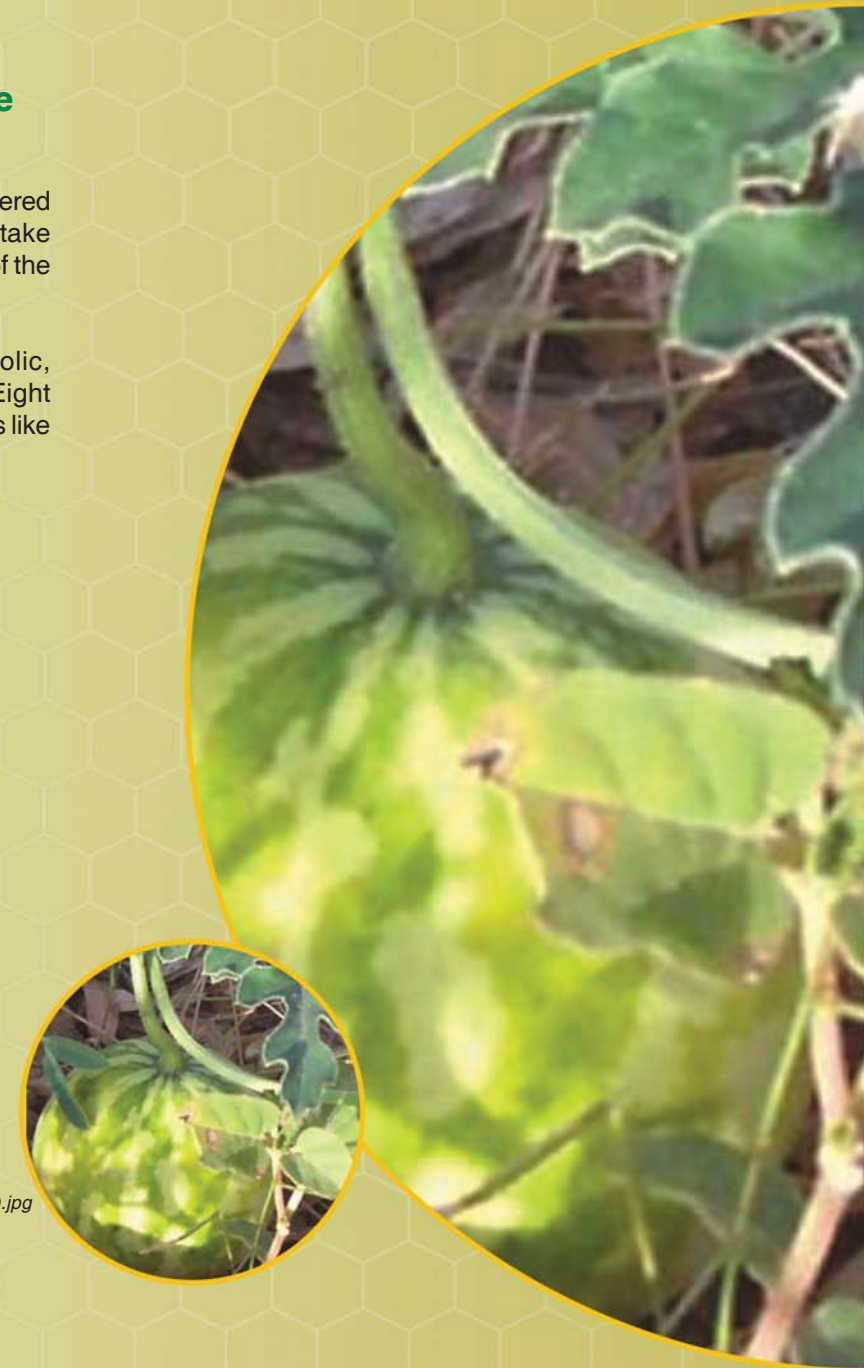
Piles: Powder of the fruit made with fenugreek, thymol and salt. A spoon of this powder taken

- Durga Jethiwal, Nagor, Rajasthan

Uses in Classical Codified Literature

Fruits pounded and used to cure the boils²⁰; powdered roots given orally to cure jaundice²; diabetics take dried fruit powder orally with water²¹; decoction of the fruit used as diuretic²².

Plant tincture is used in homeopathy for colic, abdominal pain and other gastric upsets²³. Eight patents have been filed on medicinal applications like for dental plaques and gingivitis⁶.



Source: [http://www.botanypictures.com/plantimages/citrullus%20colocynthis%2001%20\(koloquint\).jpg](http://www.botanypictures.com/plantimages/citrullus%20colocynthis%2001%20(koloquint).jpg)

Jatropha curcas L. (Ratanjyot)

NIF Database

Uses from Haryana

Eczema: *Jatropha* oil (60 g) and bee wax (30 g) heated at 60° celcius, then borax (1 g) added in water (10 ml), mixed together and stirred slowly on simmer flame. The resultant ointment applied on the infected area

- *Raghubir Agarwal, Hissar, Haryana*

Uses from other states

Agnail: Latex applied on the infected part

- *Atilik Baruah, Sibsagar, Assam*

Jaundice: Juices extracted from leaves and bark and mixed with jaggery. One tea-spoonful of this mixture to be given

- *Dimbeswar Gogoi, Sibsagar, Assam*

Thorn pain: Latex of the plant applied on the affected part

- *Madhav Shankar Rao Patil, Jalgaon, Maharashtra*

Skin disease: Paste made from leaves applied topically

- *Madhav Shankar Rao Patil, Jalgaon, Maharashtra*

Veterinary practice

Foot & mouth disease: Seeds ground with latex of *Calotropis gigantea* R.Br. and edible oil in small amount. Paste applied topically

- *Gandubhai, Dang, Gujarat*

Source: NIF Database

Uses in Classical Codified Literature

Bark powder taken orally with water to get cured from pyorrhoea²⁴; the leaves useful in ulcer²; young branches warmed in fire and tied on the aching joint²⁵; latex applied on the burnt part²⁶.

'*Jatropha* tincture'²⁷ is used as disinfectant, antiparasitic and anticoagulant. Thirteen patents have been filed mainly on medicinal uses such as cuts, burns and wounds²⁸



Phyllanthus emblica L. (Amla)

NIF Database

Uses from Haryana

Cough/cold: Powder prepared from fruits (4nos.) and *Glycyrrhiza glabra* L. (10g). 5g of this powder taken with a glass of water

- Ved Prakash, Faridabad, Haryana

General health: Seeds ground into fine powder and cooked with ghee and sugar and small ladoos prepared from it.

- Dharamveer, Yamunanagar, Haryana

Uses from other states

Diabetes: Dry fruits and seeds of *Syzygium cumini* (L.) Skeels are ground to make fine paste. Pellets are prepared from paste. This pellet is to be taken orally

- Prakash Kumar Mali, Sirohi, Rajasthan

Jaundice: Equal amounts of amla fruit, ginger, black pepper and turmeric ground into fine powder. One tea-spoonful of this powder given with honey

- Nagarmal Bagaria, Nagor, Rajasthan

Wounds: Pounded leaves applied on wounds

- Sevaram Bhaskar, Dhamtarai, Chattisgarh

Veterinary practice

Swelling of throat: Ground equal amount of fruits and bark of *Jasminum sambac* (L.) Ait. and give orally with water

-Ramdas, Dang, Gujarat

Uses in Classical Codified Literature

Pulp (2-3g) eaten with warm milk to get rid from headache²⁹; powder of cotyledons after mixing with ghee applied on the head to stop nasal bleeding²⁰; fruits taken orally to reduce acidity³⁰; decoction of the fruit taken to increase blood count³¹.

Phyllanthus is one of the main ingredients of well known medicine 'Triphala, Chavanprash and *Amla* hair oil' ⁵. Seventy six patents have been filed on its medicinal uses such as for diabetes³², liver disorders and immune deficiencies³³.



Source: <http://www.motherherbs.com/pcat-gifs/products-small/amla.jpeg>

Solanum nigrum L. (Makoi)

NIF Database

Uses from Haryana

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

Uses from other states

Nasal bleeding: Dry fruit (25g) boiled in mustard oil (100g), the oil filtered and applied on the forehead
- Sahim Ansari, Lohardaga, Jharkhand

Mouth ulcer: Leaves to be chewed
- Shripal Singh, Bulandshahar, Uttar Pradesh

Cough: Juice extracted from roots taken orally
- Priyanka Kumari, Gopalganj, Bihar

Jaundice: Administered juice extracted from the roots
- Suman Kumari, Gopalganj, Bihar

Uses in Classical Codified Literature

Powdered fruit given orally to reduce fever²⁵; juice extracted from the whole plant applied externally on the burnt part³⁴; poultice of the plant used for knee pain³⁵; fruits ground and taken orally to cure diarrhea²⁵.

'Herbolax'⁵ is made from *Solanum* along with other plants are used as gentle laxative, constipation and for electrolyte balance. Ninety patents have been filed on its medicinal uses mainly on hepatitis^{36, 37}.

Source: http://thebegavalley.org.au/uploads/tx_steverplantgallery/Solanum_nigrum_02_black%20nightshade.jpg

Strychnos nux-vomica L. (Kuchla)

NIF Database

Uses from Haryana

Diabetes: Dried plant powdered and one spoonful of the powder taken orally with water
- Patel Singh, Hissar, Haryana

Uses from other states

Eczema: Plant boiled in oil extracted from *Calophyllum inophyllum* L. and applied on the infected part
- P Gopalkrishnan Nair, Thiruvananthapuram, Kerala

Rheumatism: Juice extracted from the root bark. Vine of *Aristolochia indica* L. (10g) and mustard seeds (5g) is ground and added to 210ml of this juice. This mixture applied on the aching joints
- Murugesan, Tirunelveli, Tamil Nadu

Insect bites: Stem bark of the plant ground with the roots of *Pongamia pinnata* (L.) Pierre and ripened fruits of *Tamarindus indica* L. in equal amounts and made into a fine paste. Pellets prepared from this paste and one pellet taken daily
- Pongavanam. K, Dindigul, Tamil Nadu

Veterinary practice

Bloat: Triturated the tender leaves and fruits of bitter cucumber to extract juice, mixed with buttermilk and given orally
-Jevayaben, Dang, Gujarat

Uses in Classical Codified Literature

The roots used to cure fever³; dried seeds of the plant used for indigestion³⁸; the root bark ground with turmeric and applied externally on dropsy³; the stem bark roasted on fire, powdered and made into a paste with ghee and applied externally on cuts and wounds³⁹.

Nux-vomica is a common homeopathic remedy for indigestion, vomiting, diarrhea, cramps, constipation, colds, and headache⁴⁰. Twenty one patents have been filed on medicinal uses of *Strychnos* such as for joint pains⁴¹ and viral diseases⁴².



Source: http://www.horizonherbs.com/images/products/Strychnos_nux_vomica.jpg

Tinospora cordifolia (L.) Merr. (Giloy)

NIF Database

Uses from Haryana

Diabetes: Powder of the leaves (¼ spoon) taken regularly
- Patel Singh, Hissar, Haryana

Uses from other states

Migraine: Stem of the plant (250g) 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

Chronic fever: Whole plant (50g) and leaves of *Ocimum sanctum* L. (11 nos.) soaked overnight and pounded them together next morning and given to the patient with honey or sugar candy
- Jagjit Bahadur, Sitapur, Uttar Pradesh

Jaundice: Juice of the plant and radish extracted and given orally
- Jagjit Bahadur, Sitapur, Uttar Pradesh

Rheumatism: Plant (25g), dry ginger (5g) and sesame oil (5g) soaked in water overnight and the next morning filtered and administered
- Jagjit Bahadur, Sitapur, Uttar Pradesh

Veterinary practice

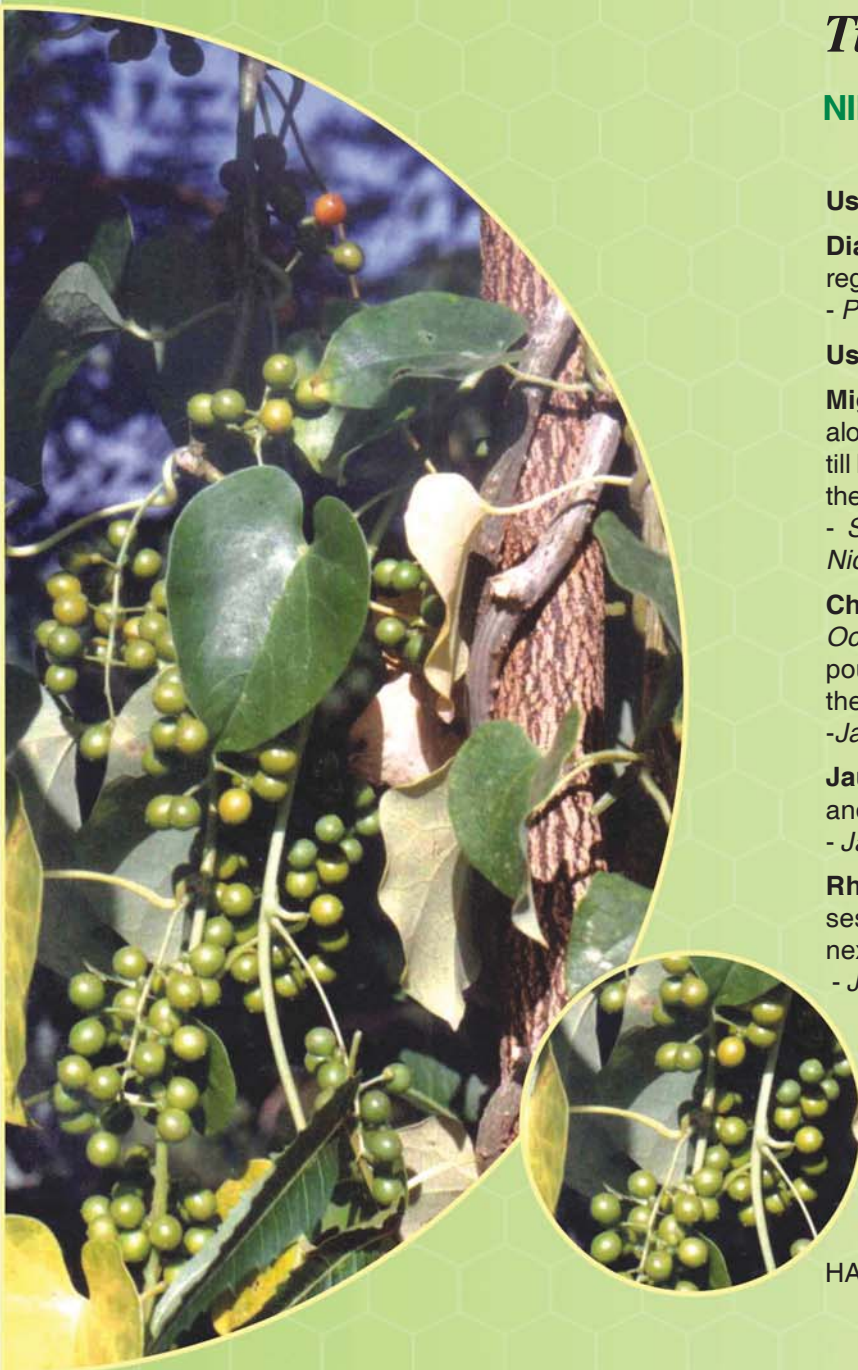
Anestrous: Plant along with bark of *Cassia fistula* L. and leaves of *Artocarpus heterophyllus* Lam. ground and given orally
- Honnegowda, Bengaluru rural, Karnataka

Source: SRISTI database

Uses in Classical Codified Literature

Powdered roots taken for mouth ulcer⁴³; powdered plant administered orally with honey to get relief from stomach disorder⁴⁴; the stem is bitter and used as anthelmintic²; decoction of the plant given orally to cure diarrhea⁴⁵.

Tinospora is a well known medicinal plant and used to cure a number of diseases in combination of other plants with brand names 'Geriforte, Diabecon⁵' etc. More than hundreds of the patents have been filed on its medicinal application such as for antiallergic⁴⁶, cancer⁴⁷ etc.



Vernonia cinerea (L.) Less. (Sahdevi)

NIF Database

Uses from Haryana

Vomiting/loose motion: The plant soaked in water, kept as such for sometime while stirring slowly. The mixture filtered and 1-2 tablespoons taken orally at an interval of 15-20 minutes for 5-6 times

- Chandiram, Bhiwani, Haryana

Uses from other states

Nervous disorder: Equal amounts of leaves of the plant and *Solanum torvum* Sw. ground and one spoon of the paste given

- Latuma Nagounder, Trichi, Tamil Nadu

Headache: The plant (10g) ground with equal amount of garlic and boiled in coconut oil (100ml) till 1/4th of the residue remains, subsequently filtered and camphor (10g) powder added. This oil then applied on the aching part

- Anvy Moly Tom, Wayanad, Kerala

Diabetes: Roots (10g) ground into a fine paste and given to the patient with sugar candy (10g)

- Pavan Mehra, Sikar, Rajasthan

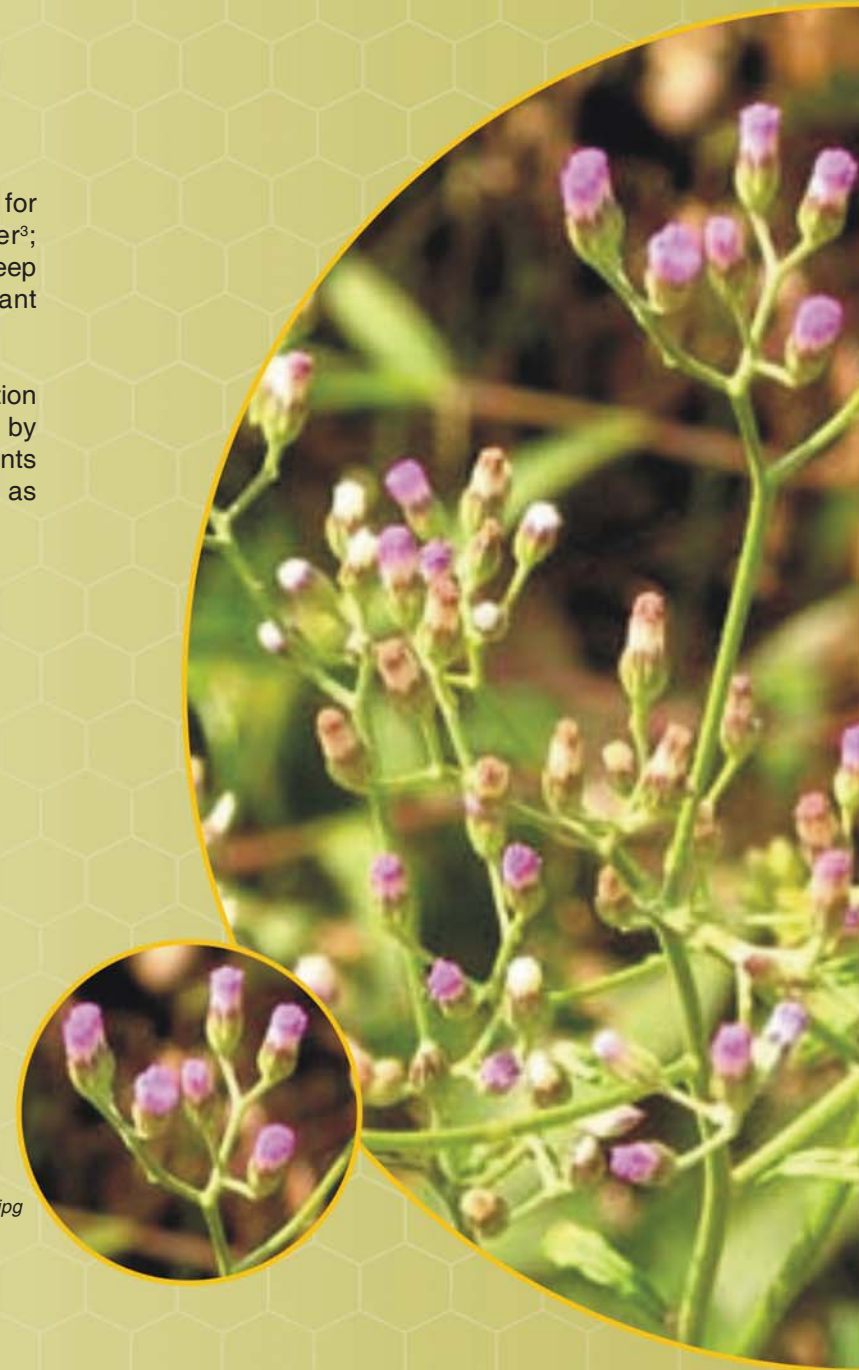
Psoriasis: Seeds (5g) eaten with warm water

- K.L.Lakshmana Shetty, South Kanara, Karnataka

Uses in Classical Codified Literature

Powder of dried flower consumed with hot water for conjunctivitis⁴⁸; the whole plant used for fever³; decoction of the dried aerial parts given orally to keep blood pressure normal⁴⁹; decoction of the plant administered orally to cure jaundice⁵⁰.

'Cystone'⁵ is prepared from *Vernonia* in combination of other plants, which inhibits calculogenesis by reducing stone-forming substances. Five patents have been filed on its various applications such as hair growth⁵¹.



Source: http://static.flickr.com/39/120816910_0037125877.jpg

Ziziphus mauritiana Lamk. (Bor)

NIF Database

Uses from Haryana

Hair Care: Fresh leaves (100-150g) boiled in one litre of water. The mixture cooled and used to wash hair. It is beneficial in hair loss, grey hair and helps strengthen the hair

- *Baba Anantanand, Hissar, Haryana*

Veterinary practice

Lactagogue: Dry leaves are ground and powder is given with cattle feed

- *Baba Anantanand, Hissar, Haryana*

Uses from other states

Acne: Paste prepared from the leaves applied

- *Ajay Kumar Jena, Balasore, Orissa*

Indigestion: The roots ground into a fine paste, one spoon of which taken orally

- *Madhusuda Munda, Keonjhar, Orissa*

Jaundice: Ground three terminal buds of the plant, *Psidium guajava* L. and *Punica granatum* L. each and three small tablets prepared. One tablet given to the patient thrice a day

- *Nirman Barman, Bongaigaon, Assam*

Rheumatism: The leaves and roots of the plant ground along with the roots of *Cassia auriculata* L.; the paste applied on the aching part

- *Jivanbhai Bhanjibhai Jagarana, Bhabnagar, Gujarat*

Source: SRISTI database

Uses in Classical Codified Literature

Pounded leaves applied on boils²⁴; powdered leaves taken to reduce blood sugar²⁰; decoction of the plant administered orally acts as diuretic⁵²; powder of dried fruit given orally with water to cure diarrhea⁵³.

'Dhanwantharam oil⁵⁴' is prepared from *Ziziphus* along with other plants used for rejuvenating body and skin care. More than ten patents have been filed on medicinal application mainly on cancer and tumorous growth⁵⁵.



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 control the disease but simultaneously increase 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 conditions of weather. 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 reduce 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.



Pultmax*

Community knowledge, Valsad, Dang, Gujarat

It is a unique herbal medication for promoting poultry immunity. It cures symptoms like greenish diarrhea, 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.*

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PART II : HERBAL PRACTICES & PRODUCTS

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PART II : HERBAL PRACTICES & PRODUCTS

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