

## Ethnomedicinal plants of Asteraceae from Chitrakoot area of Satna District (M.P.)

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### Abstract

In this study 31 species of Asteraceae were found effective in curing some common human ailments in Chitrakoot area of Satna district (M.P.). Mode of application of these has been provided in most the cases.

**Key words:** Ethnomedicine, Asteraceae, Chitrakoot

Members of the family Asteraceae are mostly herbaceous and well represented throughout the area. The family as a whole occupies top ten position in the Flora of India, Gangetic Plain.<sup>4</sup> The plants are found on dryland, crop field, roadsides along railway tracts, moist and shady places and in open forest areas. The adaptability of its members to varied habitat conditions seems to be responsible for their wide distribution. Majority of the species barring a few which are planted for ornamental purposes, grow wild as weed. They are regarded as of no significant value and even considered as nuisance (*e.g. Parthenium sp.*). Our study and that of some others<sup>1,2,5,6</sup>, however shows that this notion is not always true and certain members possess great therapeutic value in curing various human ailments.

In view of the above facts a survey of Asteraceae of Chitrakoot area of Satna District (M.P.) was carried out. The plants of claimed medicinal value were identified and their medicinal properties recorded. In doing so much emphasis was given to contact the tribals of the area : Mawasi, Kol, and Gond besides knowledgeable people of the area were also consulted and the literature on this aspect was judiciously searched.

The Chitrakoot area is situated in the northern region of Satna district of M.P. It extends from 80° 52' to 80° 73' N latitude and 25° 10' to 25° 52' E longitude and cover an area of 1,584 square Km. The forest of the Chitrakoot predominantly consists of tropical dry mixed deciduous type. The climate is dry

and the maximum temperature goes up to 50.5°C in the month of May and minimum up to 5°C in the month of January. The chitrakoot area of Satna is surrounded on north, northwest and northeast by Chitrakoot district of Uttar Pradesh and west by Panna district of Madhya Pradesh.

The result is based on more than two years of study during which knowledge about plants and their efficacious properties in curing various common ailments were gathered. The collected plants were identified with the help of local Floras<sup>3,7,8,10</sup> as far as possible. The doubtful specimens were further verified and their identity confirmed at NBRI, Lucknow; Central Circle of BSI at Allahabad. Properly mounted specimens are deposited at the Herbarium Department of Botany, Shibli National College, Azamgarh.

***Ageratum conyzoides* Linn.,** Ajgandha, Herb.

Leaves are antipyretic and used in the form of decoction for gargle. An external application of paste made from the leaves with rhizome of *Zingiber officinale* and seeds of *Brassica campestris* is applied on skull of patients to bring down fever.; The leaf juice is applied externally on fresh cuts and bruises and is considered as an antidote to snake bite and stings of poisonous insects. It is also an effective remedy in the treatment of conjunctivitis.; The leaves and fruits are used to prevent bleeding.

***Artemisia vulgaris* auct. (Non Linn),** Herb.

Infusion of the whole plant is used in constipation.

***Bidens biternata* (Lour.) Merr. & Sherff.,** Laptua, Climber (Herb).

Root is considered as an antidote to snake venom.; The leaves immediately check bleeding from fresh cuts and bruises.

***Blumea mollis* (D. Don) Merr.,** Kukraundha, Herb.

Leaf juice is dropped into eye discharges and is also used to cure earache.; Paste of whole plant is used as an antiseptic.

***Blumea lacera* (Burm. F.) D.C. ,** Kakronda, Herb.

Tender leaves and shoots are used in bodyache. Leaves are used to control intestinal worms in human being and cattle. Decoction of leaves is used to cure malarial fever, also considered as haemostatic.; The crushed leaves are applied over piles and fissures to stop bleeding. Leaves possess anti-fungal properties and are very effective against *Aspergillus* species.

***Caesulia axillaris* Roxb. ,** Pani ki buti, Herb.

A paste of leaves is applied externally on burns for its cooling effects.

***Calendula officinalis* Linn.,** Zergul, Herb.

Juice of the leaves can be applied beneficially over warts. The paste of leaves is applied externally for rapid healing of wounds and is an excellent remedy for inflamed or ulcerated condition of skin.; The decoction of the plant is used in fresh cuts and injuries. It is also beneficial in the treatment of gastritis,

gastric or duodenal ulcer.; A poultice of the flower is said to be an excellent first aid for burns, and stings. It is also effective in piles.

***Centipeda minima* (Linn.) R. Br. & Aschers,** Nakchikni, Herb.

Leaves and seeds are snuffed in cold and extract is used to reduce nasal outgrowth in sinus.

***Chrysanthemum indicum* Linn.,** Guldaudi, Her.

Plant used in combination with black peeper in gonorrhoea.; Leaves used in migrain.; Flowers are stomachic.

***Cichorium intybus* Linn.,** Kasni, Herb.

Root is diuretic and is used in the form of decoction with root of *Foeniculum vulgare*. It is also considered anti-malarial.; The infusion of entire plant is said to cure all types of gastrointestinal ailments. The decoction of entire plant and that of *Euphorbia hirta* and leaves of *Solanum nigrum*, *Tephrosia purpurea* (Sarphonka) mixed with honey is used in the treatment of jaundice, stoppage of bile, and enlarged spleen.; *C. intybus* is a laxative and is used in the treatment of chronic constipation and in anaemia alongwith *Apium graveolens*. It is an effective blood tonic.; The juice of the leaves and that of *Solanum nigrum* mixed with a little honey is consumed in the treatment of sluggish liver.; The seed is anti-diabetic.

***Echinops echinatus* Roxb.,** Gukhru, Herb.

Root powder is applied on head to kill lice.; Plant is diuretic, nervine tonic and used

in dyspepsia, hysteria, ophthalmia and scrofula.

***Eclipta prostrata* (Linn.) Linn.,** Bhangraiya, Herb.

The juice of the entire plant mixed with honey is given to newly born babies suffering from catarrh and also in case of dysentery. The decoction of the plant is also administered in malarial fever.; The plant is useful in enlargement of liver and spleen and also in cirrhosis of liver and infective hepatitis. The decoction of leaves mixed with cinnamon (*Cinnamomum zeylanicum*) is useful for catarrhal jaundice accompanied with discharge of mucous from the mucous membrane of the intestine.; Paste of the plant mixed with sesame oil (*Sesamum indicum*) is applied externally over glandular swellings and elephantiasis.; A decoction of the leaves / juice of leaves is consumed in the treatment of uterine bleeding or uterine haemorrhages. The juice of the leaves is used beneficially for cleaning sores and wounds.

***Elephantopus scaber* Linn.,** Hathi-Chinghar, Gojihva, Herb.

Root is used in vomiting and in dental carries.; Plant is astringent and used as cardiac tonic.; Leaves are cooked in coconut oil (*Cocos nucifera*) and applied for ulcers and eczema.; Leaves and roots are anti-diarrhoeal anti-dysenteric.

***Emilia sonchifolia* (Linn.) DC.,** Hiran Khuri, Herb.

Root is antidiarrhoeal, chalagogue and tonic.; The decoction of plant in combination with honey is used as febrifuge and in bowel

complaints.; Leaf paste is applied on bruises.; Leaf juice is used in eye inflammations and night blindness.

***Grangea maderaspatana (Linn) Poir.***, Mastarn, Herb.

Root is used in malarial fever.; Leaves are anti-spasmodic, stomachic and the infusion is also given in hysteria and obstructed menses and in earache.; The decoction of the flower is used in malarial fever.

***Grangea pinnata Linn.***, Herb.

Flowers are used in malarial fever.

***Helianthus annuus Linn.***, Surajmukhi, Large Herb.

Leaves are applied to check bleeding.; Seeds are used in cold and cough, pulmonary disorders, bronchial asthma and externally applied in the form of paste on scorpion sting.

***Lactuca sativa L.***, Salad, Herb.

Whole plant is used in burns and painful ulcers.

***Launaea asplenifolia (Roxb.) Hook. f.***, Tikchana, Herb.

Root is given to feeding mothers to increase milk flow.

***Launaea fallax (Jaub & Spach) Ktze.***, Dudhlak, Herb.

Plant is antidote to snake venom and used to cure fever in children (applied on

forehead to low down temperature).

***Parthenium hysterophorus Linn.***, Congress grass/Gajar Ghas., A fast spreading weed

A decoction of the root mixed with honey is useful in dysentery.; A paste of the dried leaf prepared in alcohol is regarded beneficial when employed externally on skin rashes. But at the same time the pollen causes allergic conditions in many people.

***Sonchus oleraceus Linn.***, Dodak, Herb.

Root and leaf infusion is febrifuge and tonic.; Gum is hydrogogue and cathartic.; Leaf decoction prepared with the leaves of *Solanum nigrum* is successfully used for liver troubles.

***Sphaeranthus indicus Linn.***, Gulmundi, Herb.

The decoction of the root is used in the preparation of effective nervine tonic; also for treatment of rheumatism.; Root powder is used in stomachache.; A paste of the leaves is externally applied over ringworms.; The decoction of the flower heads mixed with honey is a reputed blood purifier as well as general tonic and is used in skin diseases.; One teaspoonful powder of the root and inflorescence mixed with goat milk is taken daily for about one month in case of impotency.

***Spilanthes acmella Murr.***, Akarkarha, Pipulka, Herb.

Young shoots / flower heads are used in toothache; Seeds are chewed for salivation as a chewing gum.

***Stevia rebaudiana* Hemst.**, Herb, known from cultivation.

Regarded as the medicinal plant of 21<sup>st</sup> century. Leaves contain a substance (noncarbohydrates) which is sweeter than sugar and is used by diabetic patients.

***Tagetes erecta* Linn.**, Genda, Herb.

Few drop of leaf juice is dropped into ear for relief of earache.; The leaf paste is applied externally for boils, carbuncles, on fresh cuts to stop bleedings and used to cure toothache.; Handful of flowers are dried and powdered. 3 gms of this powder is put in 100 ml of warm water and consumed in the morning in empty stomach. It cure skin ailments. The powder is also mixed with water and made into a paste which is used as bodywash to get cured from skin problem.

***Tridax procumbens* Linn.**, Kateri, Herb.

Aquous extract of whole plant is given in spermatorrhoea.; Plant paste with the jaggery is given to the patient once in a day for 7 days in the treatment of jaundice.; Luke warm plant paste mixed with castor oil is applied externally on the affected area in the treatment of wounds and to stop bleeding

***Vernonia anthelmintica* (Linn.) Willd.**, Kali Ziri, Herb.

Decoction of the whole plant is given in the treatment of fever.; Seeds are used in the treatment of fever and diabetes. For this purpose 5 gm. seeds are washed and soaked in ½ cup of water over night and in the following morning the filtrate along with the

soaked seeds is given to the patient. The hypoglycemic property of this plant had remained mostly unrecorded so far. This information is based on the personal observation of its effects on diabetic patients.

***Vernonia cinerea* Less.**, Sahdaiya, Herb.

The entire plant is used in the form of decoction to promote perspiration in fever.; The leaves are considered analgesic and antipyretic. A decoction of the leaves in combination with leaves of the *Ocimum sanctum* is said to be antiseptic.; The seeds are regarded anthelmintic and are also given to horses as a tonic.; One teaspoonful powder along with two black pepper fruit is given once a day for about four week in leucoderma.

***Vernonia patula* (Dryand) Merritt**, Herb.

Seeds used in skin diseases.

***Xanthium strumarium* Linn.**, Gokhru, Herb.

The leaves and fruits are boiled with a pinch of common salt and the extract is used for gargle in sore throat and toothache.; Plant decoction is given to patient twice a day in the treatment of leucorrhoea.; The extract of the flower is used beneficially in toothache.; The decoction of the fruit in combination with leaf decoction of *Psidium guajava* is given in the treatment of cold and cough.

During the course of this study, 31 species of the family occurring in the area were found to be very effective in curing and controlling various human ailments prevalent in this region. A few most valued plants in this regard are *Ageratum conyzoides*, *Blumea lacera*,

*Calendula officinalis*, *Cichorium intybus*, *Eclipta prostrata*, *Sphaeranthus indicus*, *Stevia reboudiana*, *Tridax procumbens*, *Vernonia anthelmintica*, *Vernonia cinerea*, *Xanthium strumarium*. The authentic identification of the botanical source and on the spot verification is of prime importance. Usually this aspect is not given due attention by the workers. Much emphasis should also be given to the *in-situ* conservation of these medicinal plants. Due to over exploitation, habitat modification and environmental stress, a perceptible change is sometimes noticed in the growth patterns and regeneration strategies of plants. According to Tandon *in-situ* conservation of medicinal plants is highly desired along with their habitats<sup>9</sup>. There is need to isolate the active ingredients of these herbs in pure form. It is hoped that the foregoing notes and records will be of help to the plant chemists and pharmacologists.

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