



ORIGINAL RESEARCH PAPER

Ayurveda

A REVIEW ON TRADITIONAL MEDICINAL PLANT: CHITRAKA

KEY WORDS: Chitraka (Plumbago zeylanica Linn.), Ayurveda, Agni.

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ABSTRACT

India is having a rich history of Traditional system of medicine and Ayurveda is one among them. Ayurveda is world's most ancient medical science which is using medicinal plants consists of various medicinal and pharmacological use. Chitraka (Plumbago zeylanica Linn.) is one of the medicinal plant described since Samhita kala. Chitraka consists of many varieties and one of them is white flowered Chitraka (Plumbago zeylanica Linn.). Chitraka is a shrub and a perennial plant about 60- 120 cm high. It is also cultivated in gardens throughout India. Chitraka constitutes number of chemical constituents like Plumbagin, Zeylinone, Chitranone etc. Chitraka have Katu Rasa; Laghu, Ruksha, Tikshna Guna; Ushna Veerya; Katu Vipaka and Kaphavatasamaka Doshakarma. It is one among the major drugs which increases the Agni (Digestive fire). It is best for the treatment of Digestive system, Respiratory system, Guda roga and others. Chitraka root is used in the preparation of drug and also in the combination with many drugs. Some of the preparations are Chandraprabha vati, Abhayarishta etc. Chitraka also shows toxicity or adverse effect if taken internally in large doses. Plumbagin the main active chemical component of Chitraka is irritant. This review article will explore the multiple aspects of Traditional Medicinal Plant Chitraka.

INTRODUCTION:

Plumbago zeylanica, also known as Doctorbush, Ceylon leadwort or Wild leadwort, is a species of plumbago with a pantropical distribution. In Ayurveda, it is known as 'Chitraka'. It means spotted; it is also compared with the spotted appearance of leopard in terms of its sharpness and tearing nature. The genus of Chitraka plant is Plumbago which is obtained from a latin word plumbum. Plumbum means lead so plumbago means that cures lead palsy and zeylanica means of ceylon. Chitraka plant is known from the ancient times and it is described by many Ayurvedic Acharya's. Chitraka belongs to family Plumbaginaceae which consists of 10 genera and 280 species. The main purpose to review the Chitraka plant is to explore the multiple aspects of the Indian traditional medicinal plant in the usefulness of humans.

MATERIAL AND METHOD:

Binomial Name- Plumbago zeylanica Linn.
Family- Plumbaginaceae
Ayurveda Name - Chitraka

Literature Review :-

Classical Reference of Chitraka-

Classical Texts	Refrence
Bhavaprakash Nighantu	Haritakyadi varga, 70-71
Kaiyadev Nighantu	Osadhi varga, 1179-1181
Raja Nighantu	Pippalyadi varga, 45-46
Chakradutta	Plihayakrcikitsa, 38/34-37 Ksudra roga cikitsa, 55/89 Mutra ghata cikitsa, 33/19-25 Sula cikitsa, 26/59 Udara cikitsa, 31/60
Ashtanga Hradaya	Uttarasthan, 39/62; 39/63-65
Charaka Samhita	Cikitsasthan, 12/57, 12/58-59, 13/116-117, 10/11, 9/76, 18/114, 12/58-59
Sushruta Samhita	Cikitsasthan, 11/8, 44/26
Bhavaprakash	Grahanirogadhikara, 4/52-53 Vranasothadhikara, 47/93-97

Classical Categorization -

Classical Texts	Categorization of Chitraka
Charaka Samhita	Deepaniya, Bhedaniya, Triptighna, Shoolprashamana, Arshoghna, Lekhaniya, Katuuskandha

Sushruta Samhita	Pippalyadi, Mustadi, Varunadi, Amalakyadi, Mushkakadi, Aragvadhadi
Ashtang Hridaya	Pippalyadi, Mustadi, Varunadi, Aragvadhadi
Dhanvantari Nighantu	Shatpushpadi varga
Madanpal Nighantu	Sunthyadi varga
Kaiyadev Nighantu	Oushadi varga
Raj Nighantu	Pippalayadi varga
Bhavaprakash Nighantu	Haritakyadi varga

Botanical Description:

It is perennial, sub-scandant shrubs, 60-120 cm high. Leaves are alternate, ovate, acute, glabrous, entire with short stalk. Flowers are white, often branched, glandular, elongated spikes, inbractate. Capsules are oblong, pointed, contained in glandular, viscid, persistent calyx. Seed is oblong. Flowering and fruiting time- Winter season and onwards.

Distribution:

A perennial sub-scandant shrub, found wild in penninsular India and West Bengal and cultivated in gardens throughout India. It is also mainly found in the regions of Assam, Maharashtra, Andhra Pradesh, Madhya Pradesh, Uttar Pradesh.

Types of Chitraka:

- (1) Shweta Chitraka (Plumbago zeylanica Linn.) white flowered
- (2) Rakta Chitraka (Plumbago indica Linn.) red flowered
- (3) Pita Chitraka
- (4) Krsna Chitraka

Distinguishing characteristics of roots of P.zeylanica and P.indica:

Characteristics	P. zeylanica	P. indica
Colour	Light yellow when fresh Reddish brown when dry	Light brown when fresh Black when dry
Texture	Uniform and smooth	Rigid, uniformly cylindrical
Taste	Acrid and biting	Acrid and biting
Powder	Olive green	Yellowish green

Chemical Constituents of P.zeylanica-

Chitraka constitutes number of chemicals like plumbagin, 3-chloroplumbagin, 3,3'-biplumbagin, elliptinone, chitranone, zeylinone, isozeylinone, droserone, plumbagic acid,

plumbazeylanone, naphthelenone and isoshinanolone.

• Raspanchak (Ayurvedic properties of Chitraka-Pharmacodynamics):

Rasa	-	Katu
Guna	-	Laghu, Ruksha, Tikshna
Virya	-	Ushna
Vipaka	-	Katu
Doshakarma	-	Kaphavatasamaka, Pittavardhaka

• Rogagnata / Properties: Agnimandya, Ajirna, Arsha, Amavata, Grahani, Gudashotha, Jeerna, Jeernajwara, Kasa, Kushta, Makkalashoola, Nadidaurbalya, Prasutivikara, Pratishtyaya, Rajorodha, Shotha, Switra, Shleepada, Udarashoola, Vatavyadi, Vishmajwara, Yakridvikara.

• Karma / Action: Deepana, Pachana, Triptighna, Lekhana, Visphotajanana, Uttejaka, Madaka, Grahi, Kramighna, Pittasaraka, Shothhara, Kaphaghna, Kanthya, Raktapittaprakopaka, Garbhashayasankochaka, Garbhasravakara, Vajikarana, Jwaraghna, Swedajanana, Rasayana, Katupaustika.

• Part Used – Root, Root bark

• Dose - 1-2gms

• Important Formulations: Chitrakadi vati, Chitraka Haritaki, Chitrakadi lauha, Chitrakadi ghrita, Chitrakadi taila, Dashamoolarishta, Drakshasava, Lauhasava, Ashwagandharishta, Yakritaplihari lauha, Abhayarishta, Chandraprabha vati, Arogyavardhini vati etc.

• Therapeutic Uses:

[A.] External Use:

1) Skin Disease:

It is applied externally in skin diseases including leprotic lesion in the form of a paste with vinegar, milk or salt and water. Milky juice of Chitraka plant is applied in scabies and other unhealthy ulcers.

2.) Shotha (Inflammation):

Local application of Chitraka and Devadaru warm paste pounded with gomutra reduces swelling. (V.M 42/5)

3) Vrana Vidarana:

Chirbilva, Bhallataka, Danti, Chitraka, Karavira paste and excreta of Pigeon, heron and vulture is applied in tearing of wounds and abscesses. (S.S.U 37/10)

4) Shlipada (Filariasis):

Local application of Chitraka or Devadaru paste is beneficial in Shlipada. (C.D 42/5)

[B.] Internal Use of Chitraka:

- 1) Piles: Paste of Chitraka mixed with sunthi and sour gruel or gomutra or guda is applied in Arsha. Person who takes root of Chitraka or Musali or Krsna Chirbilva pounded with cow's urine, does not suffer from piles. (C.S.Ci. 14/76) (V.M 5/18)
- 2) Grahani and Udar Roga (Sprue): 1 tablespoon twice daily of Chitraka ghrita is beneficial. Chitrakadi gutika is also given in grahani and udar roga. (C.D 4/43) (C.S.Ci. 13/116)
- 3) Atisara (Diarrhoea): After taking Pippali with Madhu, person who drinks buttermilk pounded with Chitraka is freed from diarrhoea. (C.S.Ci. 19/113)
- 4) Pratishtyaya and Kasa (Cough and Cold): Chitrakadi leha (C.S.Ci 18/56-57) and Chitrakadi haritaki are very beneficial in the remedy of pratishtyaya and kasa. (V.M 60/26-28)
- 5) Medoroga (Obesity): Intake of Chitraka root powder with madhu followed by wholesome diet is useful in medoroga. (B.S Medoroga Ci. 22)
- 6) Prameha (Diabetes): Decoction of Chitraka is useful in Sukrameha. (S.S.Ci 11/9)
- 7) Pandu Roga (Anemia): Root powder of Bala and Chitraka

10 gm with warm water or seeds of Shigru mixed with equal salt should be taken. (S.S.U 44/26)

- 8) Kustha (Skin disease): Chitraka finely powder should be taken with gomutra daily for a month alleviates kustha. (S.S.Ci 9/39)
- 9) Swarabheda (Hoarseness of voice): Goat's ghee processed with Yavakshar, Ajmoda or Chitraka and Amalaka or Devdaru or Chitraka with madhu is beneficial. (S.S.U 53/11)
- 10) Shivitra (Vitiligo): Cow's urine mixed with Chitraka, Trikatu and Madhu should be kept in a jar of ghrita for a fortnight. Using this ghrita reduces white spots of Shivitra.
- 11) Rasayana : Chitraka Rasayana. (S.S.Ci. 28/3) (A.H.U 39/62-65)

• Toxicity / Adverse Effects: Chitraka also shows the toxicity or adverse effects. Plumbagin the main chemical constituent of Chitraka is powerful irritant. Sometimes, topical application of Chitraka root produces redness and blisters. If taken internally in large doses, it can cause colicky abdominal pain, redness and itching of skin, dilated pupils, hypotonia and death.

DISCUSSION:

Chitraka (*Plumbago zeylanica* Linn.) is continuously used since centuries in Ayurvedic. Medicine for the treatment of numerous diseases. It's all synonyms are related to 'Agni'. Chitraka have various properties like Antibacterial, Antiviral, Antiplasmodial, Anticonvulsant, Antioxidant, Antiarthritic, Anti-inflammatory etc. It contains various chemical constituents such as plumbagin, Chitrone, Zeylanone and many useful naphthaquinone as a multipurpose medicinal uses.

CONCLUSION:

This reviewed article has showed that Chitraka (*Plumbago zeylanica* Linn.) has numerous properties and actions which is used in Ayurveda since Samhita kala. Even Acharya Sharangdhar described it as the best Deepana, Pachana dravya. It is used in the treatment and management of various diseases like diabetes, hepatotoxic, metabolic, inflammation, skin disorders, piles etc. Chitraka (*Plumbago zeylanica* Linn.) is truly the traditional medicinal plant which have the long history of uses since the times of Ayurvedic Acharya's.

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