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Chilhaka (Toothed Leaf Chilla): An Underexplored Plant

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ABSTRACT:

There are many plants on our planet which need a lot of study yet and one such plant is *Chilhaka* (Toothed leaf Chilla). The plant possess anti diabetic, anti- microbial and diuretic property. It is also used in diabetes, ring worm, ascites, ulcers, wound, snake bite, fever etc. Ethanolic extract showed anti-inflammatory activity in rats. *Chilhaka* suppresses the *vata* and *kapha doshas*, nourishes the *Dhatus* (the 7 *dhatu*s described in classical Ayurveda texts), is *Agneya*, and its fruit has properties of *Vish* (Poison) and thus is fatal for fish.

Keywords: *Chilhaka*, Anti-inflammatory activity, Diuretic property.

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INTRODUCTION:

Our planet is a treasure trove of plants and animals. Some plants and their uses have been identified and studied in thorough detail while many still in the queue to be explored and expand the horizon of medicinal plants. One such plant is *Chilhaka*, underexplored and waiting for its full potential to be discovered by humans. The plant possess anti diabetic, anti-microbial and diuretic property. It is used in diabetes, ring worm, ascites, ulcers, wound, snake bite, fever etc.¹

Chilhaka is a small deciduous tree or shrub growing up to 8 meters in length which contains pubescent or tomentose twigs.² The plant is native of India, Nepal, Pakistan, Srilanka. Leaves vary from simple, oblong to lanceolate [Image 1]. Flowers are velvety, greenish yellow,

regular and bisexual. Petals are absent while sepals are 5 in number³ [Image 2].

AIMS AND OBJECTIVES

1. To review the medicinal importance of the plant *Chilhaka*.
2. To get in- depth knowledge of the plant and to see various Nighantu's perspective on it.

MATERIAL AND METHODS

Information regarding the plant and its uses was collected from various *Nighantus*, articles published in various peer review journals. Information was also obtained from various websites.

DISCUSSION

Latin Name - *Casearia tomentosa* (Syn. *C. elliptica*)

Family –Salicaceae

Table No.1 Vernacular Names

Sanskrit	Chilhaka ⁴
Hindi	<i>chilla, chillar, chilhak, chilata</i>
Gujrati	<i>Munjhaad, munjaal⁵</i>
Marathi	<i>Modgi⁶, massi, cury lenj</i>
Nepalese	<i>Sano bethe⁷</i>
Tamil	<i>Katiccai⁸</i>
Telugu	<i>Chilaka-dududi⁹</i>
Common name	Downy-leaved false kamela

Scientific Classification of *Chilhaka*¹⁰

Table No.2 Scientific Classification

Kingdom	Plantae
Order	Malpighiales
Family	Salicaceae
Tribe	Samydeae
Genus	Casearia
Species	Tomentosa

Traditional Uses¹¹

1. Root-paste (with *kusum* oil): in leucoderma
2. Root-powder : as hallucinogen
3. Stem-bark (powder): to smoke in dropsy
4. Fresh leaf-paste (with lime): in ringworm
5. Root-bark decoction (with paste of long peppers) in diabetes, root bark is used in anemia.
6. Tribes of Bastar (Chattisgarh): Root-bark: as tonic in anemia.
7. Used for the treatment of Jaundice.

Modern medicinal Uses

1. Aerial parts (50% EtOH extract): antiviral, hypotensive and spasmolytic¹²
2. Antimicrobial activity and antioxidant potential.
3. Ethanolic (80%) extract of leaves showed anti-inflammatory activity in rats.¹³
4. Seed oil is rubbed in sprains.¹⁴
5. Various plant parts are used in Neuralgia.¹⁵
6. Urinary problem: *Nillisoti* (*Delbergia volubilis*), *Beli* (*Aegle marmelos*),

Ilangi (*Casearia tomentosa*) leaves (about 10-15) are warmed and the extract is removed. Drink half a cup twice a day, early morning on empty stomach and in evening after the meals.

7. Fruit Pulp – diuretic, purgative
8. Leaves – anti- inflammatory.
9. *Casearia tomentosa* is used to cure dropsy. Its fruit pulp should be given to the patient to eat and its ground bark should be coated on the patient. Its decoction should be used to take bath. Coating the ground bark of *Casearia tomentosa* is useful to cure ringworm, psoriasis and eczema.¹⁶

Toxicity

The genotoxic potentiality of the crude leaf extract of *Casearia tomentosa*, a medicinal preparation, has been evaluated in Swiss albino mice. The extract significantly induced the division – disruptive chromosomal changes in bone marrow cells as well as in primary spermatocytes; the latter also exhibited marked increase in synaptic disruptions.¹⁷

Phytoconstituents

- | | |
|-----------------|----------------------------|
| 1. Alkaloids | 6. Terpenoids |
| 2. Flavonoids | 7. Steroids |
| 3. Tannins | 8. Fat and oil |
| 4. Carbohydrate | 9. Saponin |
| 5. Glycosides | 10. Protein and amino acid |
| | 11. Phytosterol |
| | 12. Gums and mucilage |

Guna and Karma (properties and action) according to Ayurveda texts

*Chilhako vata nirhara shleshmaghno dhatupushtikrit.
Agnayovishvadyasya falam matsyanisudanam.*

(Bhavaprakash Nighantu Guduchyadi varga 133)¹⁸

Chilhaka suppresses the *vata* and *kapha doshas*, nourishes the *Dhatus* (the 7 *dhatu*s described in classical Ayurveda texts), *Agnaya*, and its fruit has properties of *Vish* (Poison) and thus is fatal for fish.

*Chilhako matsyanasi vishakteh faleschousnveerya katu shleshmvatapranut.
Pittakopi bhaved dahakari bhrisham shothroge bhishagbhi sada yujyate.*

(Priya Nighantu Sharadi varga 32)¹⁹

CONCLUSION

Studies suggest that *Casearia tomentosa* leaves are an excellent source of active principles that can prevent oxidative stress, development of diabetes mellitus and bacterial

infections. However these active principles need to be isolated, identified and characterized. A lot of study is still required to realize its full potential as medicinal plant to serve the healthcare need.

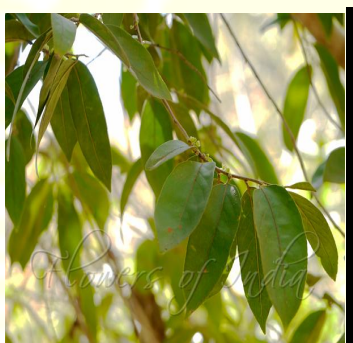


Image 1



Image 2

Images Courtesy : Flowers of India

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