

**HEMIONITIS CORDATA ROXB.EX HOOK & GREV- A FORGOTTEN SOURCE OF
VEDOKTA PRISHNIPARNI****Karnam Chandrashekhar**

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Medicines in Vedic period are generally procured from the botanical source. Their remarkable qualities are adored by hymns. Different names coined to the plants are used as the tools to identify the botanical source. Over a course of time, the botanical source of some drugs, are replaced intentionally or accidentally or logically based on the unavailability of the true source or advancement in the understanding the plant characters or a gap in knowledge transmission. This perhaps, has led to use of one botanical source in place of other. This replacement sometimes, not limited to a single source and the drug became controversial. Eventually different botanical source are being used for a same drug at different times in different parts in India. This holds true for a plant called *Prśniparṇī* - a most valued herb of Atharvaveda, revered for its various medicinal properties. Presently, various botanical sources are used as *Prśniparṇī* in India. Keen search is done through all the literature related to the plant *Prśniparṇī* in Ayurveda especially in Atharvaveda, Samhita, lexicons, review articles, dictionaries, the text related to the botanical source and world flora online(WFO) to find out the reasons for the use of different source and intricacy in understanding the synonyms of *Prśniparṇī*. The search has come up with various hidden facts about plant and revealed the different botanical source of *Prśniparṇī* used for different reasons. This review will help the researchers to look up to another important botanical source of *Prśniparṇī* that remained ignored for a long time.

Keywords: *Vedokta Prśniparṇī, Śvapuccha, Hemionitis cordata Roxb ex. Hook & Grev, Samhitokta Prśniparṇī*

INTRODUCTION

Plants have been the source of many medicines since the time of Veda. Ayurveda – an age old health care system primarily depends on the use of botanicals. The plants are described with both basionym and synonyms in the literature of Ayurveda. Identification of the medicinal plants was done with the help of these names only. Some of them, help to describe the morphological characters such as its habit, habitat, inflorescence, character of bark, type of root, flowering time, fruiting time, etc. This way of naming the plants has created, at times, the complexity in identifying a true source. Such is a case with a plant called *Prishniparni* in Ayurveda. At present, *Uraria picta* Desv is considered as the botanical source of *Prishniparni* by many Ayurveda therapists. But, the synonyms given to the plant during the period of *Samhita*(Compendium) and *Nighantu* (Lexicon) direct towards different plants other than *Uraria picta* Desv. For the reason, the basionym and some synonyms of *Prishniparni* can fit properly to the different species of *Uraria* genus as well. Tracing it back, the plant *Prishniparni*, is found to be a very important drug during Atharva veda. It is appreciated for its protective, anti-microbial, dermoprotective, and rejuvenating actions. It is called as *Kanva jambhani* to signify its protective action against a microbe that causes harm to the foetus [1]. It is also called as *Sahasvat* and *Sahamāna* and Kauśika sūtra described its use in skin disease [2]. The term *Prishniparnikā*(synonym of *Prishniparni*) is found

in Monier Williams’s dictionary whose source is mentioned as *Hemionitis cordifolia* Wall.ex Roxb or *Uraria lagopoides*(L).DC^[3]. In later times, the plant *Uraria picta* Desv is used in the name of *Prishniparni* for the treatment of *Raktārśa* (hemorrhoids), *Vātarakta*(Gout), *Jvara*(Fever), *Raktātisara* (Bloody diarrhoea), *Netraroga*(Eye disease) and *Asthi bhagna*(Fracture). Similarly, in certain places, *Uraria lagopoides*(L).DC is used as *Prishniparni*. But, *Hemionitis cordifolia* Wall.ex Roxb is ignored or forgotten for some unknown reasons. Some of the synonyms of *Prishniparni* matches well with *Hemionitis cordifolia* Wall.ex Roxb and the ethnobotanical claims also suggest its medicinal value.

An earnest attempt is made in this review to understand the reasons for the use of different source and to look up to *Hemionitis cordifolia* Wall.ex Roxb as a source of *Prishniparni* in Veda .

Methods:

A keen search is done through all the literature related to the plant *Prishniparni* in Ayurveda especially in Atharvaveda, *Samhita*(Compendium), Lexicons and the text related to the botanical source, *nighantu*, review articles, research articles and world flora online(WFO). All the information is collected and synthesized. Conclusion is drawn on the basis of conceptual background and the opinion of the authors of different books.

1. Important Synonyms of *Prishniparni* and their significance

Synonyms of <i>Prishniparni</i>	Significance
<i>Prthakparni</i>	Appear very special and distinct
<i>Kalaśi</i>	Increases shukra dhatu
<i>Citraparni</i>	Mottled leaf
<i>Śrgāla vinnā</i>	resembles tail of Jackel
<i>Lāngulī</i>	resembles tail of monkey
<i>Kroṣṭukapucchikā</i>	resembles tail of Jackel
<i>Dhāvani</i>	Expels toxins from the body
<i>Guhā</i>	Deeply rooted
<i>Sthirā</i>	Strong root
<i>Tanvī</i>	A small plant or slender plant
<i>Mekhalā</i>	Growing on mountain slope

<i>Klītanakī</i>	That which is traded/that which acts as aphrodisiac
<i>Parṇinī</i>	Different leaves
<i>Prṣṭīparṇī</i>	Distinct leaf
<i>Simhapucchī</i>	resembles tail of Lion
<i>Ahrīparṇī</i> (<i>Aṅghrīparṇī</i>)	Leaf appears to very close to ground
<i>Tilaparṇī</i>	Shining leaf
<i>Aṅghribalaparṇī</i>	Root is strong and fibrous
<i>Śrgālaparṇikā</i>	resembles the face of Jackel
<i>Citraparṇikā</i>	Mottled leaf
<i>Aṅghrīparṇī</i>	Leaf appears very close to the ground
<i>Upacitrā</i>	Leaf has mottling
<i>Śrgālī</i>	Looks like the face of jackel
<i>Śrgālavṛttā</i> (<i>Śrgāla vinnā</i>)	resembles tail of Jackel
<i>Mahāguhā</i>	Strong root system
<i>Dīrghaparṇī</i>	Long leaf
<i>Lāṅgalikā</i>	Looks like the tail of monkey
<i>Dīrghā</i>	Root goes deep in to soil
<i>Kroṣṭukapucchikā</i>	Looks like the tail of jackel
<i>Śvapucchā</i>	resembles tail of dog
<i>Snīgdhaparṇikā</i>	Shining leaf
<i>Ahiparṇī</i>	Leaf resembles snake's hood

Reasons for the use of different species of *Uraria* as the botanical source for *Prśniparṇī*

•Derivation of the basionym :

The most common reason for use of *Uraria picta* Desv is the the basionym. The Sanskrit term *Prśni* carries many meanings as to 'small' or 'soft' or 'mottled'^[4] that matches with the botanical source *Uraria picta* Desv

• Using the same synonym to refer to more than one plant:

The Synonym *Guhā* and *Sthirā* are used to refer *Śālaparṇī* and *Prśniparṇī*^[5] Hence, *Desmodium gangeticum*(L)DC is sometimes considered as the botanical source of *Prśniparṇī*

•Using the botanical source whose inflorescence matches with the synonyms:

Among the different synonyms given to the plant *Prśniparṇī*, *Kroṣṭuka puccikā*, *Śrgāla vinnā*, *Simhapuccī*, and *Śvapuccā* are coined by different lexicons to highlight the inflorescence. Based on this fact, a few species of *Uraria* such as *Uraria lagopoides*(L) DC, *Uraria crinita*(L)Desv.exDC and

Uraria hamosa (Roxb)Wall.ex W&A are considered as the botanical source of *Prśniparṇī*^[6].

•**Regional influence on the plant:** In southern India, *Desmodium gangeticum*(L)DC is used as *Prśniparṇī* because of the influence of local traditional practices and preaching^[7].

•**Accepting the folklore claim to identify the plant:** *Siyarpuchhiya* is the name used in Bihar to refer to *Uraria lagopoides*(L)DC. This regional name matches well with *Śrgālavinnā*. Hence, *Uraria lagopoides*(L) DC is considered as *Prśniparṇī*^[8]

Reasons for the use of *Alysicarpus longifolius* W and A Prodr as a source of *Prśniparṇī*:

•**Morphological similarity:** The variegated leaf of *Alysicarpus longifolius* W and A Prodr matches well with the meaning of basionym *Prśniparṇī*. Perhaps, this has driven us to use *Alysicarpus longifolius* W and A Prodr as *Prśniparṇī* in some parts of India^[9].

Reasons for considering *Hemionitis cordifolia* Wall.ex Roxb as a source of *Prśniparṇī* : *Prśniparṇī* described in Atharva veda, said to possess some remarkable qualities. The hymns are offered to the plant as if it is a goddess. It is appreciated for its protective, anti-microbial, dermoprotective, and

rejuvenating actions. Interestingly, Pr̥śniparnī is also mentioned in Śatapatha brahmaṇa whose source is considered as *Hemionitis cordifolia* Wall.exRoxb by translator^[10]. *Hemionitis cordifolia* Wall.ex Roxb grows from a rhizome covered with brownish narrow scales. The root system looks like the tail of lion (*Simhapucchikā*). The leaves (fronds) are dimorphic (*Pr̥thakparṇī*) and are less in number (*Pr̥śni*= alpa parṇa). The adaxial surface is green and the abaxial surface is greenish brown (*Pr̥thakparṇī*). The leaves are shining (*Snigdhaparṇī*). Some of the leaves are found on the surface of the land giving an appearance as if they are originated from root (*Aṅghriparnī*). The shape of the frond looks like the face of Jackal (*Śṛgālaparṇikā*). The development of sori under the surface of the frond also makes it distinct (*Pr̥ṣṭhiparṇī*). and the plant produces fiddle heads

that look similar to the curly tail of a dog (*Śvapucchā*) and the tail of a monkey (*Lāngulī*). It grows on slope of mountain (*Mekhalā*). Interestingly, it is also considered by some as a magic herb ^[11].

Hemionitis cordifolia Wall.exRoxb

It is a fern whose accepted botanical name is *Hemionitis cordata* Roxb.ex Hook & Grev belongs to Pteridaceae^[12]. Its other synonyms include *Hemionitis arifolia* (Burm) Moore, *Parahemionitis arifolia* Burm f, *Parahemionitis cordata* (Hook & Grev.) Fraser & Jenk. It is a terrestrial or lithophytic herb with erect or short creeping rhizome. Scales lanceolate, entire, darker in the middle. Fronds simple, stipe dark brown to black scaly at the base, polished; lamina cordate. Sori dark brown continuous along the veins.

2. Ethnobotanical claims on the plant in the name of Hemionitis cordifolia

Ethnobotanical claims	Reference
Anti diabetes and anti inflammation	Kalai chelvi et al 2017 ^[13]
Wound	M Kannan, T Senthil Kumar, MV Rao 2016 ^[14]

3. Ethnobotanical claims on the plant in the name of Hemionitis arifolia (Burm) Moore

Ethnobotanical claims	Reference
Anti diabetes	S.K.M Basha M. John Paul 2017 ^[15]
Skin disease	D.M.Rao et al 2006 ^[16]
Centipede bite and wound	Sachin Patil et al 2020 ^[17] , K. Thulasi Rao et al 2007 ^[18]
Wounds	J Ramalakshmana, T Rajesh Babu, D. Duryodhana, S.B Padal 2023 ^[19]
Hypertension and Wounds	Sethiaraj et al 2015 ^[20]
As digestive tonic	G. Jeevan Babu et al 2023 ^[21]
In Snake bite, Colic disease	R Mohankumar ^[22]
In Burns, Stomach disorder and Poisonous bites	Vijayashalini P, Abhirami 2018 ^[23]

4. Ethnobotanical claims on the plant in the name of Parahemionitis arifolia Burm f

Ethnobotanical claims	Reference
Used in aches, used as a vermifuge, used in burns and menstrual disorder, as anti fertility and anti flatulence agent, has anti bacterial property	Benjamin A & Manickam VS 2007 ^[24]

5. Ethnobotanical claims on the plant in the name of Parahemionitis cordata (Hook & Grev.) Fraser & Jenk

Ethnobotanical claims	Reference
Used in diabetes	Shweta Singh & Rita Singh 2012 ^[25]
In Dysmenorrhea	Dolan Das, Biplab patra 2021 ^[26]
Centipede bite and wound	Harita R Nair, Lizzy Mathew 2021 ^[27]

In Wounds, reduces the intense toxicity of snake bite	Abhijit kumar Dutta et al 2022 ^[28]
to control the hairfall	Suraj R Hosur 2020 ^[29]

6. Experimental study conducted on the plant under different botanical names

Source	Experimental studies	Reference
Hemionitis arifolia(Burm)Moore	Anti bacterial activity	Karmakar & Mukhyopadhyay 2011 ^[30]
Hemionitis arifolia(Burm)Moore	Anti diabetic activity	Ajitkumar Nair et al 2006 ^[31]
Parahemionitis cordata(Hook & Grev.)Fraser & Jenk	Anti bacterial activity	Thoji Thomas 2015, Rakkimuthu et al 2018 ^[32]
Hemionitis arifolia(Burm)Moore	Anti-inflammatory activity	Antomysomy et al 2017 ^[33]
Hemionitis arifolia(Burm)Moore	Anti oxidant activity	Priya et al 2021 ^[34]
Hemionitis arifolia(Burm)Moore	Anti cancer activity	Gayatri M 2019 ^[35]

CONCLUSION

On observing the data on *Hemionitis cordata* Roxb.ex Hook & Grev it is evident that it has a lot of medicinal potential and can be utilized in the therapeutics. If research on this plant is conducted to find its efficacy on the infection during pregnancy that affects health of the foetus, will definitely bring its other remarkable properties to light. This will help the researcheres to prove that the *Hemionitis cordata* Roxb.ex Hook & Grev is the source of *Prśniparnī* in veda and also clear the confusion on the related issues such as *Uraria picta* Desv as *Samhitokta Prśniparnī* and the nighantokta *Prśniparnī* viśeṣa as *Uraria lagopioides* (L) DC. This review, for sure, will give some new insights to the research aspirants.

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