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## REVIEW ON SNUHI (EUPHORBIA ANTIQUORUM LINN.) WITH SPECIAL REFERENCE TO AYURVEDIC NIGHANTUS

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#### **ABSTRACT**

In manuscripts known as Nighantu, a large variety of plants have been named and summarised along with their characteristics and applications. Along with their synonyms, these Nighantus mostly define the traits and behaviours of the plant. Numerous synonyms have been used to describe Snuhi's morphological distinguishing features and pharmacological activities. Snuhi, scientifically known as Euphorbia antiquorum Linn., is a well-known medicinal herb that is thought to provide a wide range of therapeutic benefits. You can find information about the drug Snuhi in many Nighantus, under various chapters. However, information on Snuhi, its characteristics, and behaviours is not readily available. The 26 nighantus available are the

source of the evidence for Snuhi, which is highlighted in the current paper. The investigation showed that around 73 synonyms were used to characterise Snuhi.

The defining characteristics for Snuhi include the plant's stem having a round look (Guda), being full of latex (Samantadugdha), having leaves that resemble sword blades (Asipatra), and having sharp twin spines (Vyaghranakha) (Euphorbia antiquorum Linn.).

It is said to have 12 chikitsa upayogi (helpful in treatment) qualities, including amahara (alleviating ama), virechana (promoting digestive fire), and deepana. Additionally, it has been discovered that Snuhi has been recommended for 25 clinical disorders, including Udara (abdominal sickness), Kustha (skin disease), Gulma (abdominal bulge), and Adhmana (flatulence with gurgling sound), among others. The results of this review could improve

documentary research and provide in-depth knowledge about Snuhi and its applications in Ayurvedic Nighantus (lexicons). Lexicon, Nighantu, Snuhi, Sudha, Upavisha, Dravyaguna, and Euphorbia antiquorum are some of the terms used.

#### INTRODUCTION

The term Nighantu is derived from the word nigama, which literally means that nigama is to bring out the concealed meaning of the terms denoting different synonyms of the vegetable kingdom. [1] Nighantu sheds light on the hidden meanings of the terms denoting various synonyms of the vegetable kingdom in Ayurvedic literature. [2] Initial Nighantus largely described Paryaya (synonyms), whereas later Nighantus described both synonyms and characteristics and actions. [3]

- Snuhi, also known as Euphorbia antiquorum Linn., is a member of the Euphorbiaceae family of plants.<sup>[4]</sup>
- It is a large glabrous fleshy erect shrub or small tree reaching 20 ft. or more and distributed in North West Himalaya, Peru, Burma, West Peninsula.<sup>[5]</sup>
- The name Snuhi derives from the milky white latex that the medication secretes, which is employed as a harsh purgative. [6]
- It is a well-known medication that is sold all over India under a variety of local names, including Hiju (Assam), Mansasij, Hildaona (Bengali), Yale kalli (Kannad), Ilaikalli (Tamil), etc.<sup>[7]</sup>
- Snuhi has been investigated for its phytochemical properties by numerous researchers, who discovered that it contains a variety of chemical constituents, including 12-Deoxy-4-hydroxyphorbol-13-dodecanoate-20-acetate, euphol, euphorbol hexacosanoate, n-hexacosanol, and 24-methylenecycloartenol isolated from bark; cycloartenol, 24-methylenecycloartenol.<sup>[8]</sup>
- Nighantus attributed Snuhi with numerous paryaya (synonyms), guna karmas (properties and actions), prayoga (indications), etc., but a single-handed exclusive information pertaining to delineations regarding Snuhi, its synonyms, properties, and its actions on a variety of ailments with particular reference to Nighantus (lexicons) is unavailable. Because of this, an effort has been taken in this article to gather thorough information

about many elements of the drug Snuhi from available Nighantus (lexicon). The Yashwant Ayurvedic College's Kodoli library has 26 Nighantus, and two online sources, Sushruta Nighantu (S.N.)<sup>[9]</sup> and Amarakosha (A.K.), Astanga Nighantu (A.N.), Astanga Nighantu (A.N.), Paryayaratnamala (P.R.), [12] Siddhasara mantra Nighantu (S.S.N.), [13] Madanadi Nighantu (M.D.N.), [14] Dhanavantari Nighantu (D.N.), [15] Shabdachandrika (S.C.), [16] Sodhala Nighantu (S.N.), Nighantushesha (N.S.), Abhidhana Ratnamala (A.R.), Abhidhana Ratnamala (A.R.), Shiddhamantra Nighantu (S.M.N.), [20] Madhava Dravyaguna (M.D.), [21] Hridayadeepaka Nighantu (H.D.N.), [22] Madanapala Nighantu (M.N.), [23] Kaiyadeva Nighantu(K.D.), [24] Sarasvati Nighantu (S.V.N.), [25] Bhavaprakasha Nighantu (B.N.), [26] Raja Nighantu (R.N.), [27] Shivkosha Nighantu (S.K.), [28] Rajavallabha Nighantu (R.V.N.), [29] Laghu Nighantu (L.N.), [30] Shaligrama Nighantu (S.L.N.), [31] Abhidhana Manajari (A.M.) [32] Priya Nighantu (P.N.)[33] and Nighantu Adarsha (N.A.)[34] have been examined by the authors chapter by chapter. The definitions of Snuhi, its synonyms, qualities, actions, and indications for treating various diseases have been meticulously compiled, and the information has been presented in a structured, exact tabular fashion. For the translation of traditional Ayurvedic terminologies for their most likely English equivalent terms, standard dictionaries were used. [35,36] Technical terms most likely English translations were noted when referring to AFI (Ayurvedic Formulary of India). [37]

#### Paryaya (Synonyms)

Traditional Ayurvedic terminology known as Paryaya (synonyms) has been used to characterise a single plant's morphological and pharmacological characteristics. These names may be found in writings such as the Nighantus (lexicon), Kosha (dictionary), and Samhitas (classical texts). [38] It has been noted that 71 synonyms have been used to illustrate the characteristics of Snuhi. (Table 1)

The plant, whose leaves are fashioned like a dog's tongue (Swajihvapatra) and looked like a blade of a sword (Asipatra), according to a critical study of synonyms attributed to Snuhi; The stem is shaped like a circle (Guda), the branch or stem tips resemble the claw of a lion because they are covered in thorns (Sihunda, Sehunda), the stem or branch has a nodular structure (Granthila), and it resembles a stick (Dandavrishaka); the stem or branch tips bear sharp twin spines that resemble the nail of a tiger (Vyaghranakha); (Samantadugdha, Snuka, Snuhi, Kshiri, Bahukshira). It has a strong purgative effect. Consequently, similar to how a diamond can remove the toughest material, this plant can remove the body's most challenging

dosha (Vajra, Vajradu, Vajravriksha). In order to dissolve enlarging glands, latex is utilised (Gandeera). Acts as ambrosia in latex (Sudha). Plant harms the eye (Netrari). All the pharmacological and botanical characteristics mentioned above are present in the plant Euphorbia antiquorum Linn., which belongs to the Euphiorbiaceae family.

#### **Synonyms attributed to Snuhi**

Apatra, [9] Asipatra, [18,23] Bahudugdha, [31,32] Bahudugdhika [16] Bahukshira [9,17] Bahusakha [27]  $Bahustrava^{[17,24]} \ Bhadra^{[27]} \ Dalakshirnya^{[25]} \ Dalasnuhi^{[19,25]} \ Dandavrikshaka^{[27,31]} \ Dhimi^{[32]}$  $Dirghanakha^{[28]} \quad Dugdhi^{[25]} \quad Dugdhavajri^{[32]} \quad Gandira^{[14,15,17,18,19,22,24,27,28,30,32]} \quad Granthila^{[11]}$  $Guda^{[10,11,12,14,15,16,17,18,22,24,25,26,28]}$ Kapatrascha<sup>[25]</sup> Gudanika<sup>[32]</sup> Gundakhva<sup>[27]</sup> Kshiri<sup>[27]</sup> Mahadruma<sup>[9]</sup> Kulisadruma<sup>[24]</sup> Kshirakandaka<sup>[27]</sup> Mahataru<sup>[23,32]</sup>  $Mahavriksha^{[9,11,12,13,14,15,17,18,19,22,24,25,27,31]}\\$ Mriduvirechani<sup>[25]</sup> Mudgapushpi<sup>[25]</sup> Muhukshirkascha<sup>[30]</sup> Nagadrura<sup>[16,31]</sup> Nagari<sup>[16]</sup> Netrari<sup>[27]</sup> Nihudiggo<sup>[15]</sup> Ninstrapatrika<sup>[24,30]</sup> Ninstrishapatraka<sup>[24,30]</sup> Patrasnuka<sup>[19,25]</sup> Nitvapatra<sup>[32]</sup> Sakhakantaka<sup>[27]</sup> Samantadugdha<sup>[10,11,14,15,16,17,18,19,23,24,25,26,27,31]</sup> Sehunda<sup>[23,24,26,27,30,33]</sup> Shivahirakavalake<sup>[28]</sup> Sinhunda<sup>[10,15,16,17,18,19,26,28,31]</sup> Sinhatunda<sup>[26]</sup> Sinhatika<sup>[32]</sup> Snuga-Gundra<sup>[32]</sup> Snuhi<sup>[9,10,11,12,13,14,15,16,17,18,19,20,23,24,25,26,27,31,32,33]</sup> Snuka<sup>[10,11,12,13,15,16,17,18,19,21,24,25,26,29]</sup>  $Sudha^{[11,12,14,16,17,18,19,21,24,25,26,27,28,29,31,32,33]}\\$ Snusha<sup>[16]</sup> Sudhadruha<sup>[30]</sup> Suvirechani<sup>[19]</sup>  $Swajihvapatra^{[11]} \ Swanjihva^{[19,25]} \ Tridhara^{[27]} \ Vataari^{[27]} \ Vajra^{[10,14,18,19,25,28,31]} \ Vajradruha^{[16]}$  $Vajradruma^{[26]} \quad Vajrakantaka^{[14,15,17,18,24,27,28]} \quad Vajrakotika^{[32]} \quad Vajraprokta^{[32]} \quad Vajrataru^{[30,32]} \quad Vajrakotika^{[32]} \quad Vajrakoti$ Vajri<sup>[11,23,24,27]</sup> Vairatunda<sup>[19,24]</sup> Vajravriksha<sup>[9,12,13,17,25,27,33]</sup> Veni<sup>[32]</sup> Vishani<sup>[9,32]</sup> Vishanikaha<sup>[17]</sup> Vyaghranakha<sup>[27]</sup> Yamalakantaka<sup>[9,32]</sup>

#### Important synonyms with their interpretation

Guda: Its stem is circular in appearance<sup>[10, 11, 12, 14, 15, 16, 17, 18, 22, 24, 25, 26,28]</sup>

 $Samantadugdha:\ All\ parts\ of\ the\ plant\ bear\ latex^{[10,\,11,\,14,\,15,\,16,\,17,\,18,\,19,\,23,\,24,\,25,\,26,27,\,31]}$ 

Sihunda, Sehunda: It's stem or branch tips will give the appearance of claw of lion as they bear thorns<sup>[23, 24, 26, 27, 30, 33]</sup>

Snuka: It secretes milky white latex. [10, 11, 12, 13, 15, 16, 17, 18, 19, 22, 25, 26, 27, 30]

Snuhi: Latex used as drastic purgative. [9,10,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,27,31,32,33]

Asipatra: Leaves blade shaped like blade of a sword. [18,23]

Kshiri: The plant contains profuse latex almost in all parts. [27]

Granthila: Stem is having nodular structure. [11]

Dandavrikshaka: Stem is stick-like. [27,31]

Bahu Kshira: The plant oozes profuse latex from almost all parts. [9,17]

Vyaghranakha: Plant with sharp twin spines, like that of nail of a tiger. [27]

Svajihvapatra: Leaves are having shape like that of a tongue of a dog. [11]

#### Based on pharmacological actions

Vajra, Vajradu, Vajravriksha: It acts as drastic purgative. [10,14,8,19,22,28,31]

Compared to diamond i.e., as diamond cuts through even the hardest material similarly this plant can eliminate the most difficult Dosha from the body. [16,9,12,13,17,25,27,33]

Gandira: Latex is used for dissolving enlarged glands. [14,15,17,18,19,22,24, 27,28,30,32]

Guda: Latex protects the body. [10,11,12,14,15,16,17,18,22,24,25,26,28]

Mahavriksha: Latex is used for cutting.

The plant also attains big height. [9,11,12,13,14,15,16,17,18,19,22,24,25,27,31]

Vajradruma: Latex is used for cutting. [26]

Sudha: The plant contains profuse latex almost in all parts. Latex acts as ambrosia. Plant causes injury to eye. [11,12,14,16,17,18,19,22,24,25,26,27,28, 29,31,32,33]

Netrari: Plant causes injury to eye. [27]

#### Classifications

Nighantus divided plants into different groups and sections based on their morphological, pharmacological, and medicinal characteristics. While reading through these classifications, the signature and simile are perceptible, attesting to the nighantus scientific methodology. Nighantushesa and Sarasavati Nighantu have classified medications according to morphology and cited Snuhi in vrikshakanda and kshupa varga, respectively. Another categorization system has named a section after one of the key plants present. Snuhi is referenced by Abhidhanaratnamala under the heading of "tiktaskandha dravya," and the other names are mentioned in various vargas, including "Vanausadhi varga," "Guduchyadi varga," "Vrikshadi varga," "Kaphavataghna varga," "Dvipada varga, "Abhayadi varg. The features, activities, and signs of Snuhi have been found to be described in nighantus under about 22 vargas (groups/sections).

Classification of Snuhi under different vargas (groups) in Nighantus based on various factors: Based on drug:

- 1. Guduchyadi Varga<sup>[15,17,26,31]</sup>
- 2. Abhyadi varga<sup>[23]</sup>
- 3. Shalmalyadi varga<sup>[27]</sup>

- 4. Nikumbhadi Varga<sup>[32]</sup>
- 5. Satpushpadi varga<sup>[33]</sup>
- 6. Amlakyadi varga<sup>[34]</sup>

#### **Based on guna (Characters)**

1. Gunasamgraha (Dvitiyabhaga)<sup>[14,22]</sup>

#### Based on rasa (Taste)

1. Tikta skandha.<sup>[19]</sup>

#### Based on dosha karm

1. Kaphavataghna varga.<sup>[20]</sup>

#### Based on karm (Action)

- 1. Shyamadi gana<sup>[9]</sup>
- 2. Muskakadi gana<sup>[9,11]</sup>

#### Based on parts used

1. Aousadhashrayapariksheda<sup>[29]</sup>

#### **Based on numbers**

- 1. Ekarthavarga<sup>[32]</sup>
- 2. Chaturthartha varga<sup>[32]</sup>
- 3. Anekartha varga<sup>[17]</sup>

#### **Based on habit**

- 1. Vriksha kanda<sup>[18]</sup>
- 2. Kshupa varga<sup>[25]</sup>
- 3. Vrikshadi Varga<sup>[16]</sup>

#### Based on use

- 1. Vana Aousadhi varga<sup>[10]</sup>
- 2. Oushadi varga<sup>[24]</sup>
- 3. Vividhoushadhi varga<sup>[16,18]</sup>

#### Miscellaneous

1. Dhatuupdhatu Rasauprasa Ratnaupratna Vishaupvishadi Varga<sup>[26]</sup>

Snuhi's Rasadipanchaka (Ayurvedic Pharmacodynamic properties) A drug's Rasa and Guna perform specific local and general actions, and its Vipaka and Veerya perform specific therapeutic actions. According to Acharya Charaka, some substances behave according to their Rasa (taste), other substances according to their qualities or post-digestive effects (Vipaka), still other substances according to their Veerya (potency), and still other substances according to their specific behaviour (Prabhava). [41] The fact that Snuhi is Katu, Tikta in Rasa with Teekshna, Guru, and Ushna gunas is highlighted in the majority of Nighantus.

#### Rasadipanchaka of snuhi as reported in various nighantus

- 1. Madanadi Nighantu-Katu Rasa Ushna Veerya KaphaVata Shamaka
- 2. Dhanvanatari nighantu -Tikta -Guru Guna Ushna Veerya -Katu Vipaka -KaphaVata Shamaka
- 3. Abhidhana Ratnamala Tikta
- 4. Sidhamantra KaphaVata Shamaka
- 5. Madanpala Nighantu- Katu-Teekshna Guna Guru - Katu Rasa
- 6. Kaiyadeva Nighantu Katu, Tikta (Kshira-Katu) -Teekshna, Guru Guna (Kshira-Snigdha, Laghu Guna) – Ushna Veerya (Kshira-Ushna Veerya) -Katu Vipaka KaphaVata Shamaka
- 7. Bhavaprakasha Nighantu Katu Rasa (Kshira-Katu Rasa) Guru Teekshna, Guna (Kshira-Snigdha, Laghu Guna) - Kshira-Ushna Veerya -Katu Vipaka - KaphaVata Shamaka
- 8. Raja Nighantu Ushna Veerya – Katu Vipaka – Pitta Vata Shamaka (Kshira – Vata Shamaka) - Kshira – Ushna Veerya, Patra – Ushna Veerya - Katu Vipaka -KaphaVata Shamaka (Patra - KaphaVata Shamaka)
- 9. Priya Nighantu KaphaVata Shamaka
- 10. Shaligrama Nighantu -Katu Rasa (Kshira – Katu; Patra – Tikta) - Teekshana, Guru Guna (Kshira - Snigdha, Lagu, Patra - Teekshana, Sara, Guru Guna) - Kshira-Ushna Veerya, Patra-Ushna Veerya - Katu Vipaka - KaphaVata Shamaka, Patra - KaphaVata Shamaka, Kshira – Vata Shamaka

Karma (Actions or indicators) (Actions or indications) Table 5 lists numerous attributes that have been ascribed to Snuhi by various sources. In the care of 25 different disease conditions, snuhi has been recommended. Pandu roga, Udara, Gulma, Kustha, Sotha, Anaha, Udavarta, Asmari, etc. all have references to snuhi. Snuhi has been recommended by Kaiyadeva Nighantu, Bhavaprakasha Nighantu, and Shaligrama Nighantu for the majority of ailments. In 253 formulations, Snuhi has been employed as an ingredient.

#### Ayurvedic Karmas (Pharmacodynamic) of Snuhi as described in Nighantus

#### Actions:

- 1. Virechana (Purgative)<sup>[19, 23, 24, 26, 31]</sup>
- 2. Deepana (Stimulate digestive fire)<sup>[23, 24, 26, 31]</sup>
- 3. Anilahara (Alleviating vata)<sup>[14, 15, 20, 23, 24, 26, 27, 31]</sup>
- 4. Soolahara (Relieving colic)<sup>[23, 24, 26, 31]</sup>
- 5. Amahara (Alleviating ama)<sup>[24]</sup>
- 6. Kaphahara (Alleviating kapha)<sup>[14,15,17,23,24,26,27,31]</sup>
- 7. Sothahara (Anti-inflammatory)<sup>[23,26,31]</sup>
- 8. Medahara (Alleviating meda)<sup>[24,26,31]</sup>
- 9. Vishahara (Alleviating poison)<sup>[14,15,17,23,24,26,27,31]</sup>
- 10. Pitta dahahara (Alleviating pitta-daha)<sup>[27]</sup>
- 11. Rasa siddhi karma<sup>[27]</sup>
- 12. Sara (Purgative)<sup>[17]</sup>

#### **Indications**

- 1. Gulma (Abdominal-lump)<sup>[9,15,21,23,24,26,27,30,31]</sup>
- 2. Visha (Poison)<sup>[9,15,24,27]</sup>
- 3. Anaha (Distension of abdomen)<sup>[9]</sup>
- 4. Udara (Disease of abdomen)<sup>[9,1415,21,24,26,27,29,30,31,33]</sup>
- 5. Udavarta (Upward movement of gases)<sup>[9]</sup>
- 6. Doosivisha<sup>[21,23,24,26,29,31]</sup>
- 7. Dusta Vrana (Non-healing ulcer)<sup>[15]</sup>
- 8. Asmari (Calculus)<sup>[15,21,23,24,26,31]</sup>
- 9. Vata Vishodhana (Purification of vata)<sup>[15]</sup>
- 10. Adhamana (Flatulence with gurgling sound) [15,21,23,24,26,27,30,31,33]
- 11. Kustha (Disease of skin)<sup>[21,23,24,26,27,29,31]</sup>
- 12. Prameha (Increased frequency and turbidity of urine) $^{[21,24,27,29,30]}$
- 13. Soola (Pain)<sup>[23,24,26,31]</sup>
- 14. Sopha (Oedema)<sup>[23,24,26,31]</sup>
- 15. Phila (Splenic-disease)<sup>[21,23,24,26,29,30,31]</sup>

- 16. Unmada (Psychosis)<sup>[23,24,26,31]</sup>
- 17. Pandu (Anaemia)<sup>[23,24,26,31]</sup>
- 18. Medaroga (Obesity)<sup>[24,26,31]</sup>
- 19. Vrana (Ulcer)<sup>[24,31]</sup>
- 20. Jwara (Fever)<sup>[24,26,31]</sup>
- 21. Dirgha Roga<sup>[24,26,31]</sup>
- 22. Moha (Delusion)<sup>[31]</sup>
- 23. Arsha (Piles)<sup>[24,26,31]</sup>
- 24. Purisha Sanga (Vibandha) (constipation)<sup>[33]</sup>
- 25. Vrischika visha<sup>[31]</sup>

#### **CONLUSION**

One of the powerful and beneficial medicines in the Ayurvedic medication arsenal is snuhi. Based on the synonyms shown in the nighantus (lexicons), it can be declared that the plant with a straight stem that is circular in appearance (Guda), full of latex (Samantadugdha), leaves that resemble sword blades (Asipatra), and with sharp twin spines (Vyaghranakha) can be used as a distinguishing feature for Snuhi (Euphorbia antiquorum Linn.). Snuhi's ayurvedic pharmacodynamics reveals that it has ushna, tikshna, and kaphavata samana properties. Additionally, this work reveals that Snuhi has been given credit for possessing 12 chikitsa upayogi (helpful in treatment) qualities, including Deepana (stimulating digestive fire), Virechana (purgative), Amahara (alleviating ama), and others. Snuhi has been recommended for 25 different clinical disorders, including Udara (abdominal sickness), kustha (skin disease), Gulma (abdominal bulge), and Adhmana (flatulence with gurgling sound), among others. As a result, this review could serve as a springboard for additional scientific inquiry into all the pharmacological characteristics of Snuhi as described in numerous nighantus (lexicons), and it could be considered document-based research for future investigations.

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