



Review Article

www.ijrap.net



A CRITICAL REVIEW ON SNUHI (*EUPHORBIA NERIIFOLIA* LINN.) WITH SPECIAL REFERENCE TO AYURVEDIC NIGHANTUS (LEXICONS)

Shashi Gupta^{1*}, Rabinarayan Acharya²

¹MD Scholar, Department of Dravyaguna, IPGT & RA, Gujarat Ayurved University, Jamnagar, India

²Professor, Department of Dravyaguna, IPGT & RA, Gujarat Ayurved University, Jamnagar, India

Received on: 12/06/17 Accepted on: 10/07/17

*Corresponding author

E-mail: shashi.gpt@gmail.com

DOI: 10.7897/2277-4343.083177

ABSTRACT

In Ayurvedic pharmacopoeia, mainly plant based preparations are prescribed for preservation of health and cure of diseases. Large number of plants have been identified and recapitulated with their properties and uses, in texts known as Nighantu. These Nighantus mostly describes the properties and actions of the plant along with their synonyms. Snuhi has been attributed with a number of synonyms depicting its morphological identifying characters and pharmacological actions. Snuhi botanically identified as *Euphorbia neriifolia* Linn. is a well-known medicinal plant, envisages to possess numerous medicinal properties. Informations pertaining to the drug Snuhi can be traced in various Nighantus, under different chapters. However, a single hand information regarding Snuhi, its properties and actions, is not available. Hence, the present paper highlights the gathered evidences of Snuhi from available 26 nighantus. The study reveals that, about 73 synonyms were attributed to Snuhi to describe its botanical and pharmacological characters. The stem of the plant is circular appearance (Guda), full of latex (Samantadugdha), leaves are shaped like blade of sword (Asipatra), with sharp twin spines (Vyaghranakha) are the identifying characteristic features for Snuhi (*Euphorbia neriifolia* Linn.). It is being attributed with 12 chikitsa upayogi (useful in treatment) properties like Deepana (stimulating digestive fire), Virechana (purgative), Amahara (alleviating ama) etc. It is also found that Snuhi has been indicated in 25 clinical conditions like Udara (disease of abdomen), Kustha (disease of skin), Gulma (abdominal lump), Adhmana (flatulence with gurgling sound) etc. Findings of this review may enrich to documentary research as well as act as detailed information about Snuhi and its usages in Ayurvedic Nighantus (lexicons).

Keywords: Dravyaguna, *Euphorbia neriifolia*, Lexicon, Nighantu, Snuhi, Sudha, Upavisha.

INTRODUCTION

In Ayurvedic literature, Nighantu throws light on the secret meanings of the terms denoting different synonyms of the vegetable kingdom.¹ 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.² In initial nighantus mostly Paryaya (synonyms) were described where as in latter nighantus both synonym and properties and actions were described.³ Snuhi, botanically identified as *Euphorbia neriifolia* Linn., belongs to family Euphorbiaceae⁴. 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.⁵ Etymological derivation of drug Snuhi reflects it secretes milky white latex which is used as drastic purgative.⁶ It is well known drug available throughout India with various vernacular names like Hiju (Assam), Mansasij, Hildaona (Bengali), Yale kalli (Kannad), Ilaikalli (Tamil) etc.⁷ Snuhi has been explored for its phytochemical characters by various researchers and found to possess number of chemical constituents like 12-Deoxy-4 β -hydroxyphorbol-13-dodecanoate-20-acetate, euphol, euphorbol hexacosanoate, n-hexacosanol and 24-methylenecycloartenol isolated from bark; cycloartenol, 24-methylenecycloartenol, ingenol triacetate, euphorbol, 12-deoxy euphorbol-13,20-diacetate, delphinidin-3,5-diglucoside and tulipanin-3,5-diglucoside from roots.⁸ Nighantus have attributed Snuhi with many 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 various ailments with special reference to Nighantus (lexicons) is

unavailable. Hence, in this article an attempt has been made to compile a comprehensive information on various aspects of classical drug Snuhi from available Nighantus (lexicon).

Twenty six Nighantus available in the library of Gujarat Ayurved University and online source of E-nighantu namely Saushruta Nighantu (S.N.)⁹; Amarakosha (A.K.)¹⁰; Astanga Nighantu (A.N.)¹¹; 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.)¹⁷; Nighantushesha (N.S.)¹⁸; Abhidhana Ratnamala (A.R.)¹⁹; 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 scrutinized chapter by chapter by the authors. The delineations pertaining to Snuhi, its synonyms, properties, actions, and indications on various diseased conditions have been compiled vividly and obtained informations are being presented in a precise tabular format in systematic manner. Standard dictionaries were referred for the interpretation of classical Ayurvedic terminologies for their probable English equivalent terms.^{35,36} The probable English equivalent of technical terminologies were noted referring AFI (Ayurvedic Formulary of India)³⁷.

Paryaya (Synonyms)

In Ayurveda, traditionally, various names known as Paryaya (synonyms) have been attributed to a single plant to describe its morphological as well as pharmacological characters and these can be traced in various texts known as Nighantus (lexicon), Kosha (dictionary) and Samhitas(classical texts).³⁸ It is observed that about 73 synonyms have been depicted to describe the properties of Snuhi.(Table 1) On critical analysis of synonyms attributed to Snuhi, it can be summarized that the plant, whose leaves are shaped like of dog's tongue (Swajihvapatra) and looked like a blade of a sword (Asipatra); Stem is circular in appearance (Guda), stem or branch tips give the appearance of claw of a lion as they bear thorns (Sihunda, Sehunda), is having

nodular (Granthila) structure, and looks stick-like (Dandavrihshaka); bears sharp twin spines like, nail of a tiger (Vyaghranakha); almost in all parts bears profuse latex (Samantadugdha, Snuka, Snuhi, Kshiri, Bahukshira). It acts as drastic purgative. Hence, compared to diamond, as diamond cuts the hardest material similarly this plant will eliminate the most difficult dosha from the body (Vajra, vajradu, Vajravriksha). Latex is used for dissolving enlarged glands (Gandeera). Latex acts as ambrosia (Sudha). Plant causes injury to eye (Netrari). All the above described botanical as well as pharmacological characters matches with the plant *Euphorbia nerifolia* Linn. of the family Euphorbiaceae. The detailed lists of interpretations of these synonyms of Snuhi have been enumerated in Table 2.

Table 1: Synonyms attributed to Snuhi

| Sr. No | Paryaya | References |
|--------|-------------------|--|
| 1. | Apatra | 9 |
| 2. | Asipatra | 18, 23 |
| 3. | Bahudugdha | 31 and 32 |
| 4. | Bahudugdhika | 16 |
| 5. | Bahukshira | 9 and 17 |
| 6. | Bahusakha | 27 |
| 7. | Bahustrava | 17and 24 |
| 8. | Bhadra | 27 |
| 9. | Dalakshirnya | 25 |
| 10. | Dalasnui | 19 and 25 |
| 11. | Dandavrikshaka | 27and 31 |
| 12. | Dhimi | 32 |
| 13. | Dirghanakha | 28 |
| 14. | Dugdhi | 25 |
| 15. | Dugdhavajri | 32 |
| 16. | Gandira | 14, 15, 17, 18, 19, 22, 24, 27, 28, 30 and 32 |
| 17. | Granthila | 11 |
| 18. | Guda | 10, 11, 12, 14, 15, 16, 17, 18, 22, 24, 25, 26 and 28 |
| 19. | Gudanika | 32 |
| 20. | Gundakhya | 27 |
| 21. | Kapatrascha | 25 |
| 22. | Kshirakandaka | 27 |
| 23. | Kshiri | 27 |
| 24. | Kulisadruma | 24 |
| 25. | Mahadruma | 9 |
| 26. | Mahataru | 23 and 32 |
| 27. | Mahavriksha | 9, 11, 12, 13, 14, 15, 17, 18, 19, 22, 24, 25, 27 and 31 |
| 28. | Mriduvirechani | 25 |
| 29. | Mudgapushpi | 25 |
| 30. | Muhukshirkascha | 30 |
| 31. | Nagadrura | 16 and 31 |
| 32. | Nagari | 16 |
| 33. | Netraari | 27 |
| 34. | Nihudiggo | 15 |
| 35. | Ninstrapatrika | 14, 15, 17, 25, 27and 28 |
| 36. | Ninstrishapatraka | 24 and 30 |
| 37. | Nityapatra | 32 |
| 38. | Patrasnuka | 19 and 25 |
| 39. | Sakhakantaka | 27 |
| 40. | Samantadugdha | 10, 11, 14, 15, 16, 17, 18, 19, 23, 24, 25, 26, 27 and 31 |
| 41. | Sehunda | 23, 24, 26, 27, 30 and 33 |
| 42. | Shivahirakavalake | 28 |
| 43. | Sinhatika | 32 |
| 44. | Sinhatunda | 26 |
| 45. | Sinhunda | 10, 15, 16, 17, 18, 19, 26, 28 and 31 |
| 46. | Snuga-Gundra | 32 |
| 47. | Snuhi | 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 32 and 33 |
| 48. | Snuka | 10, 11, 12, 13, 15, 16, 17, 18, 19, 21, 24, 25, 26 and 29 |
| 49. | Snusha | 16 |
| 50. | Sudha | 11, 12, 14, 16, 17, 18, 19, 21, 24, 25, 26, 27, 28, 29, 31, 32 and 33 |
| 51. | Sudhadruha | 30 |
| 52. | Suvirechani | 19 |
| 53. | Swajihvapatra | 11 |

| | | |
|-----|---------------|-------------------------------|
| 54. | Swanjihva | 19 and 25 |
| 55. | Tridhara | 27 |
| 56. | Vataari | 27 |
| 57. | Vajra | 10, 14, 18, 19, 25, 28 and 31 |
| 58. | Vajradruha | 16 |
| 59. | Vajradruma | 26 |
| 60. | Vajrakantaka | 14, 15, 17, 18, 24, 27 and 28 |
| 61. | Vajrakotika | 32 |
| 62. | Vajraprokta | 32 |
| 63. | Vajrataru | 30 and 32 |
| 64. | Vajratunda | 19 and 24 |
| 65. | Vajravriksha | 9, 12, 13, 17, 25, 27 and 33 |
| 66. | Vajri | 11, 23, 24 and 27 |
| 67. | Veni | 32 |
| 68. | Vishani | 9 and 32 |
| 69. | Vishanikaha | 17 |
| 70. | Vyaghranakha | 27 |
| 71. | Yamalakantaka | 9 and 32 |
| 72. | Yamalakesha | 32 |
| 73. | Yugmakantaka | 11 |

Table 2: Important synonyms with their interpretation

| Synonym of Snuhi | Nirukti and Interpretation ^{39,40} | References |
|--|---|---|
| Pharmacognostical characters | | |
| Guda | Its stem is circular in appearance. | 10, 11, 12, 14, 15, 16, 17, 18, 22, 24, 25, 26 and 28 |
| Samantadugdha | All parts of the plant bear latex. | 10, 11, 14, 15, 16, 17, 18, 19, 23, 24, 25, 26, 27 and 31 |
| Sihunda, Sehunda | It's stem or branch tips will give the appearance of claw of lion as they bear thorns. | 23, 24, 26, 27, 30 and 33 |
| A.)Snuka, B.) Snuhi | It secretes milky white latex. Latex used as drastic purgative. | A.) 10, 11, 12, 13, 15, 16, 17, 18, 19, 22, 25, 26, 27 and 30 B.) 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 31, 32 and 33 |
| Asipatra | Leaves blade shaped like blade of a sword. | 18 and 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 and 31 |
| BahuKshira | The plant oozes profuse latex from almost all parts. | 9 and 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 | | |
| A.) Vajra, B.)Vajradu, C.)Vajravriksha | It acts as drastic purgative. Compared to diamond i.e., as diamond cuts through even the hardest material similarly this plant can eliminate the most difficult Doshā from the body. | A. 10, 14, 18, 19, 22, 28 and 31 B.) 16 C.) 9, 12, 13, 17, 25, 27 and 33 |
| Gandira | Latex is used for dissolving enlarged glands. | 14, 15, 17, 18, 19, 22, 24, 27, 28, 30 and 32 |
| Guda | Latex protects the body. | 10, 11, 12, 14, 15, 16, 17, 18, 22, 24, 25, 26 and 28 |
| Mahavriksha | Latex is used for cutting. The plant also attains big height | 9, 11, 12, 13, 14,15, 17, 18, 19, 22, 24, 25, 27 and 31 |
| Vajradruma | Latex is used for cutting. | 26 |
| Sudha | The plant contains profuse latex almost in all parts. Latex acts as ambrosia. | 11, 12, 14, 16, 17, 18, 19, 22, 24, 25, 26, 27, 28, 29, 31, 32 and 33 |
| Other | | |
| Netrari | Plant causes injury to eye. | 27 |

Classifications

Plants have been classified into various groups / sections by nighantus basing on their morphological, pharmacological, and therapeutic properties. The signature and simile is perceived while going through these classifications certifying the scientific approach of nighantus behind this classification. Among these, in one system of the classification, the section has been named after one of its important plant present like Nighantushesa and Sarasavati nighantu has classified drugs according to

morphology and quoted Snuhi in vrikshakanda and kshupa varga respectively. Abhidhanaratnamala has mentioned Snuhi under tiktakandha dravya and rest have mentioned in different varga such as Vanasadi varga, Guduchyadi varga, Vrikshadi varga, Kaphavataghna varga, Dvipada varga, Abhayadi varga, Shalalmyadi varga etc. About 22 vargas (groups/ sections) are there under which the properties, actions and indications of Snuhi have been found to be described in nighantus. The details of classifications have been enumerated in Table 3.

Table 3: Classification of Snuhi under different vargas (groups) in nighantus (lexicons) based on various factors

| Sl. No. | Varga (Classifications/ groups/sections) | References |
|-----------------------------------|---|-------------------|
| Based on first drug | | |
| 1. | Guduchyadi Varga | 15, 17, 26 and 31 |
| 2. | Abhyadi varga | 23 |
| 3. | Shalmalyadi varga | 27 |
| 4. | Nikumbhadi Varga | 32 |
| 5. | Satpushpadi varga | 33 |
| 6. | Amlakyadi varga | 34 |
| Based on Dosha Karma | | |
| 7. | Kaphavataghna Varga | 20 |
| Based on Rasa (Taste) | | |
| 8. | Tikta Skandha | 19 |
| Based on Guna (characters) | | |
| 9. | Gunasangraha (dvitiyabhaga) | 14, 22 |
| Based on Karma (Actions) | | |
| 10. | Shyamadi Gana | 9 |
| 11. | Muskakadi Gana | 9, 11 |
| Based on Parts used | | |
| 12. | Aousadhashraya pariksheda | 29 |
| Based on Habit | | |
| 13. | Vriksha kanda | 18 |
| 14. | Kshupa varga | 25 |
| 15. | Vrikshadi Varga | 16 |
| Based on Numbers | | |
| 16. | Ekarthavarga | 32 |
| 17. | Chaturthartha Varga | 32 |
| 18. | Anekartha varga | 17 |
| Based on Use | | |
| 19. | Vana Aousadhi varga | 10 |
| 20. | Oushadi varga | 24 |
| 21. | Vividhoushadhi varga | 16 and 18 |
| Miscellaneous | | |
| 22. | Dhatuupdhata Rasauprasa Ratnaupratna Vishaupvishadi Varga | 26 |

Rasadipanchaka of Snuhi (Ayurvedic Pharmacodynamic properties)

A drug performs certain local and general actions by its Rasa and Guna, and certain specific therapeutic actions by its Vipaka and Veerya. Acharya Charaka states that some substances act in accordance with their Rasa (taste), others in accordance with

their qualities or post digestive effects (Vipaka), others in accordance with their Veerya (potency), and yet other or specific action (Prabhava).⁴¹ It is emphasized in most Nighantus that Snuhi is Katu, Tikta in Rasa with Teekshna, Guru, Ushna gunas. The details of Rasa panchaka attributed to Snuhi are presented in Table 4.

Table 4: Rasadipanchaka of Snuhi as reported in various Nighantus (lexicons)

| Nighantu | Rasa | Guna | Veerya | Vipaka | Doshagnata |
|------------------------|--|---|----------------------------------|----------------|-----------------------|
| Madanadi Nighantu | Katu | - | Ushna | - | KV↓ |
| Dhanvanatari nighantu | Tikta | Guru | Ushna | Katu | KV↓ |
| Abhidhana Ratnamala | Tikta | - | - | - | - |
| Sidhamantra | - | - | - | - | KV↓ |
| Madanpala Nighantu | Katu | Teekshna, Guru | - | Katu | - |
| Kaiyadeva Nighantu | Katu, Tikta Kshira-Katu | Teekshna, Guru Kshira-Snigdha, Laghu | Ushna Kshira-Ushna | Katu | KV↓ |
| Bhavaprakasha Nighantu | Katu Kshira-Katu | Teekshna, Guru Kshira-Snigdha, Laghu | Kshira-Ushna | Katu | KV↓ |
| Raja Nighantu | - | - | Ushna | Katu | PV↓ Kshira: V↓ |
| Shaligrama Nighantu | Katu Kshira-Katu Patra-Katu, Tikta | Teekshna, Guru Kshira-Snigdha, Laghu Patra-Teekshna Teekshna, Sara, Guru | - Kshira-Ushna Patra-Ushna | Katu Kshira | KV↓ - Patra-KV↓ |
| Priya Nighantu | - | - | - | - | KV↓ |

[KV ↓- KaphaVata shamaka, PV ↓- PittaVata shamaka, V ↓Vata shamaka'-' No information available]

Karma (Actions or indications)

Various properties attributed to Snuhi by various authors have been presented in Table 5. Snuhi has been indicated in the management of 25 different disease condition. Snuhi is indicated

in Pandu roga, Udara, Gulma, Kustha, Sotha, Anaha, Udavarta, Asmari etc. Kaiyadeva Nighantu, Bhavaprakasha Nighantu and Shaligrama Nighantu has indicated Snuhi in maximum diseases. Snuhi has been used as an ingredient in 253 formulations⁴².

Table 5: Ayurvedic Karmas (Pharmacodynamic) of Snuhi as described in Nighantus

| Sr. No. | Actions | References |
|--------------------|---|--|
| 1. | Virechana(purgative) | 19, 23, 24, 26 and 31 |
| 2. | Deepana(stimulate digestive fire) | 23, 24, 26 and 31 |
| 3. | Anilahara(alleviating vata) | 14, 15, 20, 23, 24, 26, 27 and 31 |
| 4. | Soolahara(relieving colic) | 23, 24, 26 and 31 |
| 5. | Amahara(alleviating ama) | 24 |
| 6. | Kaphahara(alleviating kapha) | 14, 15, 20, 24, 26 and 31 |
| 7. | Sothahara(anti-inflammatory) | 23, 24, 26 and 31 |
| 8. | Medahara(alleviating meda) | 24, 26 and 31 |
| 9. | Vishahara(alleviating poison) | 14, 15, 17, 23, 24, 26, 27 and 31 |
| 10. | Pitta dahahara(alleviating pitta-daha) | 27 |
| 11. | Rasa siddhi karma | 27 |
| 12. | Sara(Purgative) | 17 |
| Indications | | |
| 1. | Gulma(abdominal-lump) | 9, 15, 21, 23, 24, 26, 27, 30 and 31 |
| 2. | Visha(poison) | 9, 15, 24, and 27 |
| 3. | Anaha(distension of abdomen) | 9 |
| 4. | Udara(disease of abdomen) | 9, 14, 15, 21, 24, 26, 27, 29, 30, 31 and 33 |
| 5. | Udavarta(upward movement of gases) | 9 |
| 6. | Doosivisha | 21, 23, 24, 26, 29 and 31 |
| 7. | Dusta Vrana(non-healing ulcer) | 15 |
| 8. | Asmari(calculus) | 15, 21, 23, 24, 26 and 31 |
| 9. | Vata Vishodhana(purification of vata) | 15 |
| 10. | Adhamana(flatulence with gurgling sound) | 15, 21, 23, 24, 26, 27, 30, 31 and 33 |
| 11. | Kustha(disease of skin) | 21, 23, 24, 26, 27, 29 and 31 |
| 12. | Prameha(increased frequency and turbidity of urine) | 21, 24, 27, 29, 30 and 31 |
| 13. | Soola(pain) | 23, 24, 26 and 31 |
| 14. | Sopha(oedema) | 23, 24, 26 and 31 |
| 15. | Pliha(splenic-disease) | 21, 23, 24, 26, 29, 30 and 31 |
| 16. | Unmada(psychosis) | 23, 24, 26 and 31 |
| 17. | Pandu(anaemia) | 23, 24, 26 and 31 |
| 18. | Medaroga(obesity) | 24, 26 and 31 |
| 19. | Vrana(ulcer) | 24 and 31 |
| 20. | Jwara(fever) | 24, 26 and 31 |
| 21. | Dirgha Roga | 24, 26 and 31 |
| 22. | Moha(delusion) | 31 |
| 23. | Arsha(piles) | 24, 26 and 31 |
| 24. | Purisha Sanga(Vibandha)(constipation) | 33 |
| 25. | Vrischika visha | 31 |

CONCLUSION

Snuhi is one of the potent and useful drug in Ayurvedic pharmacopoeia. Based on the synonyms depicted in nighantus (lexicons), it can be proclaimed that the plant with straight stem being circular in appearance (Guda), full of latex (Samantadugdha), leaves are shaped like blade of sword (Asipatra), with sharp twin spines (Vyaghranakha) can be used as identifying characteristic features for Snuhi (*Euphorbia nerifolia* Linn.). Ayurvedic pharmacodynamics of Snuhi unveils that it possesses ushna, tikshna property, as well as kaphavata samana property. This work also reveals that Snuhi has been attributed with 12 chikitsa upayogi (useful in treatment) properties like Deepana (Stimulating digestive fire), Virechana (purgative), Amahara (alleviating ama) etc. Snuhi has been indicated in 25 clinical conditions like Udara (disease of abdomen), kustha (disease of skin), Gulma (abdominal lump), Adhmana (flatulence with gurgling sound) etc. Hence, this review may steer as a direction to further scientific research to explore all the pharmacological properties of Snuhi delineated in various Nighantus (lexicons) and may be referred as a document based research for further researches.

REFERENCES

- Shashtri JLN. Editor. Dravyaguna vijanana. Vol. 1. Chaukhamba Orientalia Varanasi; 2012; pp. 402.
- Narahari. Raja nighantu. Tripathi Indradev, editor. 5th edition, Mangalcharana, 01/09. Chowkhambha Krishnadas Academy, Varanasi; 2006; pp. 03.
- https://www.researchgate.net/publication/316684978_a_critical_review_on_danti_baliospermum_montanum_willd_with_special_reference_to_ayurvedic_nighantus_lexicons
- Sharma OP, Plant taxonomy, Tata Mc Graw-Hill education private limited, New Delhi; 1993, pp. 445
- Theodore Cooke, C.I.E., The Flora Of The Presidency Of Bombay, Vol. 2, Bishen Singh Mahendra Pal Singh 23-A, New Connaught place, Dehradun, India; 2006, pp. 564
- Diwedi BK. Editor. Dhanvanatari Nighantu, Guduchyadi Varga. Chaukhamba Krishnadas Academy, Varanasi; 2008, pp. 102.
- D.N. Guha Bakshi, P. Sen Sharma, D.C. Pal, A Lexicon of Medicinal Plants in India, Naya Prakash 206 Bidhan Sarani Calcutta, India; 2001, pp. 167.
- Rastogi & Mehrotra, Compend. Indian Med. Plants, Vol. 3, CDRI, Lucknow & Publications and information Directorate, New Delhi, 1991, pp. 285
- Amarsingh. Sausruta Nighantu. (E – nighantu). Muskakadigana gana. Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu>.)
- Amarsingha, Amarakosha. Brahmananda Tripathi. Duitiyakanda Vana-ousadhi varga, Editor. Commentary of 'Ratnaprabha'. Chaukhamba Surbharati Prakashan; Varanasi; 2008, pp. 77.

11. Vahata. Astanga Nighantu. Varunadi gana, (E – nighantu). Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
12. Madhavkara. Paryayaratnamala. (E – nighantu). Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
13. Ravigupta. Siddhasaramantra nighantu. (E – nighantu). Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
14. Chandranandana. Madanadi Nighantu. Gana Nighantu. (E – nighantu). Duitiya gana. Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
15. Diwedi BK. Editor. Dhanvanatari Nighantu, Guduchyadi Varga. Chaukhamba Krishnadas Academy, Varanasi; 2008, pp. 102.
16. Chakrapanidatta. Shabdachnadraka. (E – nighantu). Vrikshadivarga. Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
17. Shodhala. Shodhala Nighantu. Sharma Priyavat. Editor. Guduchyadi Varga, Oriental Institute Baroda; 1978, pp. 48.
18. Hemachandra Suri. Nighantushesha. (E – nighantu). Vriksha kanda. Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
19. Abhidanratnamala. Priyavat Sharma. Editor. Tikta Skandha Chaukhamba Oriental; Varanasi; 2008, pp. 4.
20. Keshava, Siddhamantra, (commentary of Bopadeva), (E – nighantu). Kaphavataghna Varga. Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
21. Madhava. Madhava Dravyaguna. Priyavat sharma. Editor. Vividhoushadhi varga, First edition, Chaukhamba Vidhyabhavan, Varanasi; 1973, pp. 54.
22. Bopadeva. Hridayadipaka Nighantu. Priyavat Sharma. Editor. Duipad Varga,. (Commentary of Bopadeva) Chaukhamba Amarbharti Prakashan, Varanasi; 1977, pp. 39
23. Nripa Madanpala. Madanpala Nighantu. Hariharprasad Tripathi. Editor. Abhyadi varga, Chaukhamba Krishnadas Academy; Varanasi; 2009, pp. 28
24. Kaiyadeva. Kaiyadeva Nighantu. Priyavata Sharma. Editor. Oushadhi Varga, Chaukhamba Orientalia, Varanasi; 2006, pp. 170
25. Jayatilak JP. Editor. Sarasvati Nighantu. Kshupa varga. Chaukhamba Sanskrit Pratisthan; Delhi; 2006, pp. 38
26. Bhavamishra. Bhavaprakasha Nighantu. Chuneekar KC. Editor. BhavaPrakasha Purva Khanda Mishra Prakaran Guduchyadi Varga. Chaukhamba Bharati Academy; Varanasi; 2013, pp. 294-296.
27. Narahari. Raja Nighantu, Tripathi Indradeva. Editor. Shalmalyadi varga. Chaukhamba Krishnadas Academy; Varanasi; 2010, pp. 241-242.
28. Shivdatta. Shivakosha, (E – nighantu). Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
29. Rajavallabha. Rajavallabha Nighantu. Ramprasad Vaidyopadhyaya. Editor. Oushadhashraya paricheda, Shiromani Narayan Das Pratisanskrita, 1983, pp.178
30. Vyakeshavaram. Laghu nighantu, e-nighantu Developed by NIIMH (National Institute of Indian Medical Heritage), Hyderabad for CCRAS (Central Council for Research in Ayurvedic Science) New Delhi: 2012. [Last accessed on 2016 July 03]. (Available from: <http://www.niimh.nic.in/ebooks/e-Nighantu.>)
31. Shaligram. Shaligrama Nighantu. Guduchyadi varga. Khemaraja Shrikrishnadas Prakashana, Mumbai; 2011, pp. 125.
32. Bhishagarya. Abhidhanamanjiri. Nikumbhadi Varga Mrudaitva Prakashita; 1952, pp. 35.
33. Priyavat Sharma. Editor. Priya Nighantu. Shatapushpadi Varga. Chaukhamba Surbharti Prakashan, Varanasi; 2004, pp. 87-88.
34. Bapalal Vaidya. Nighantu Adarsha. Vol-2, Amlakyadi varga., Chaukhambha Bharati Academy; 2013, pp. 421-427.
35. Apte, Vaman Shivaram. The student's English-Sanskrit dictionary, Biblio Bazaar; 2009.
36. William Monnier, A Sanskrit –English Dictionary, Oxford; 2007.
37. Anonymous. The Ayurvedic Formulary of India e-book Part 1. New Delhi: Govt. of India: Ministry of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003.
38. Acharya RN, nomenclature of medicinal plants through classical technical term paryaya (synonyms) – A review. New Delhi: Sabdayana Commission for Scientific and Technical Terminology, Ministry of Human Resource Development, Department of Higher Education, Govt. of India, 2011; pp. 121-126.
39. Sharma PV. Namarupavigyana, Chaukhamba visvabharati oriental publishers, Varanasi, 2015, pp. 193-194.
40. Shashtri JLN. Editor. Ayurvedokta Ousadha Niruktamala, Chaukhamba orientalia Varanasi, 2014, pp. 111. Charaka. Charaka Samhita. Pt. Rajeswara Datta Shastri, Editor. Sutrasthana 26, Chaukhambha Bharati Academy, Varanasi, 2011, pp. 515.
41. Charaka. Charaka Samhita. Pt. Rajeswara Datta Shastri, Editor. Sutrasthana 26, Chaukhambha Bharati Academy, Varanasi, 2011, pp. 515
42. https://www.researchgate.net/publication/318284492_Published_online_in_httpijam_co_in_45_Shashi_Gupta_et_al_Canvassing_the_External_Applications_of_Snuhi_A_Classical_Memoir

Cite this article as:

Shashi Gupta and Rabinarayan Acharya. A critical review on Snuhi (*Euphorbia nerifolia* Linn.) with special reference to Ayurvedic Nighantus (lexicons). Int. J. Res. Ayurveda Pharm. 2017; 8(Suppl 3): 98-103 <http://dx.doi.org/10.7897/2277-4343.083177>

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: IJRAP is solely owned by Moksha Publishing House - A non-profit publishing house, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJRAP cannot accept any responsibility or liability for the site content and articles published. The views expressed in articles by our contributing authors are not necessarily those of IJRAP editor or editorial board members.