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MUSTAKA AND NAGARMUSTAKA IN AYURVEDA: A COMPREHENSIVE REVIEW

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ABSTRACT

Indian medicinal plants are the essence of Ayurveda and Ayurvedic treatments. The use of medicinal plants is the most common form of traditional medication, worldwide. Treatment of illness and maintenance of health using herbal medicines is the oldest and most popular form of Healthcare practice known to humanity that has been practised by all cultures in all ages throughout the history of civilization. Use of herbal medicines for therapeutic purpose is now well-established and widely acknowledged to be safe and effective. Many drugs commonly used today in the developing countries are of herbal origin. Mustaka and Nagarmustaka are the herbs which have been used widely in ayurvedic formulations mentioned in ancient texts of Ayurveda. Mustaka has been mentioned in Veda for its vashikaran property. In Samhitas and Chikitsa granth of Ayurveda, Mustaka has been mentioned as an ingredient of many important formulations for the treatment of various diseases. Nagarmustaka has been mentioned in different nighantus as a variety of Mustaka. Mustaka and Nagarmustaka, both has a wide range of medicinal and pharmacological applications and are very useful in various diseases like fever, diarrhoea, thirst, disorders of stomach, irritation of bowels, skin disorders, rheumatoid arthritis, wounds, jaundice, cough, worms etc. These herbs has been given special recognition in Ayurveda due to their multifaceted therapeutic benefits. This paper provide detail description of Mustaka and Nagarmustaka from Veda to Nighantus and their medicinal uses in various disorders.

Keywords: Mustaka, Nagarmustaka, Jvara, Atisara, Kustha.

INTRODUCTION

Mustaka and Nagarmustaka are traditionally used for various purposes and used as an antidiarrhoeal, antipyretic, anti-inflammatory, tranquillizing, diuretic, estrogenic, anthelmintic, smooth muscle relaxant etc. Mustaka is one of the oldest known medicinal plant used for treatment of dysmenorrhea and menstrual irregularities. Mustaka and Nagarmustaka are held in great esteem as a cure for disorders of stomach and irritations of bowels and both are also used as cooling, intellect promoting, nervine tonic and as an analgesic.

In different ayurvedic texts, Mustaka and Nagarmustaka are considered as a synonyms as well as varieties. But in Nighantus, Nagarmustaka has been mentioned separately as a variety of Mustaka. Mustaka is an Indian medicinal plant demonstrated to exert multiple health benefits. Mustaka is pungent, bitter and astringent in taste, cold in potency, absorbent, appetizer and digestant, mitigates kapha, pitta, rakta, thirst, fever, anorexia and worm infestation. This plant which grows naturally in tropical, subtropical, temperate regions is found throughout India but widely spead in north-east region. This is rhizomatous herbs with tubers. Leaves are dark green above and paler beneath with acuminate apex. Inflorescence, reddish brown in colour. Stems are noduse at the base, trigonous and 10-60cm. in height. The tubers are oval to spindle shaped, somewhat compressed and tapered at both the ends, spreading the root system. The tubers generally range from 1.-3.5cm. long & 0.5-2.5cm broad.

Like Mustaka, Nagarmustaka is a perennial herb which grows in aquatic and sub-aquatic region especially on banks of streams and rivers. Nagarmustaka is larger plant than the Mustaka, it is about 40-120cm. in height, branches are long and with three edges. Leaves are also larger and broader than the Mustaka. Inflorescence is pale coloured with reddish tinge. Rhizomes of Nagarmustaka are elongated, cylindrical in shape, larger than the Mustaka and about 5-20cm. long & 0.5-2cm broad. It is a plant found in Bengal, uttarpradesh, towards east and south.

Mustaka is commonly known as Motha and Nagarmustaka is commonly known as Nagarmotha. Mustaka and Nagarmustaka are belongs to Cyperaceae family. Various species of Cyperus genus are almost morphologically similar or their morphological differences are minute, as a result they are difficult to be distinguished during collection in the field.

Most commonly the drug Mustaka is identified and recognized as *Cyperus rotundus* Linn. which is generally used in current medical practice and Nagarmustaka can be considered as the other species of Cyperus like *Cyperus procerus* Rottb., *Cyperus scariosus* R.Br., *Cyperus esculentus* L. etc.

Mustaka and Nagarmustaka have been used in medicine for thousands of years and have tremendous value in Ayurveda[1-6].

MUSTAKA

Mustaka is classified in different ayurvedic texts as:

Classification

Charak Samhita: Lekhaniya, Triptighna, Kandughna, Stanayashodhana[7] Trishnanigrahana mahakashyaya
Sushruta Samhita: Vachadi Gana, Mustadi Gana, Katu Varga[8]
Astang Hridya: Kaphagna Gana, Mustadi Gana, Vachadi Gana, Tikata gana[9]
Dhanwantari Nighantu: Guduchyadi Varga[10]
Sodhala Nighantu: Guduchyadi Varga[11]
Madanpala Nigahntu: Abhyadi Varga[12]
Kaidev Nighantu: Aushadi Varga[13]
Bhavprakasha Nighantu: Karpuradi Varga[14]
Raj Nighantu: Pippalyadi Varga[15]
Shaligrama Nighantu: Karpuradi Varga[16]
Nighantu Adarsha: Mustadi Varga[17]
Priya Nighantu: Shatpushpadi Varga[18]
Mahaushada Nighantu: Chandanadi Varga[19]

Synonyms and their interpretations[20, 21]

Mustaka: Grows gregariously and tubers are in clusters.
Kacchottha: Mustaka grows in aquatic and sub-aquatic regions.
Gangeyi: Mustaka commonly grows near water resources, so very common on the banks of river Ganga.
Prachya: Grows commonly in North Eastern region of India.
Varidnamaka – Ambodha, Ghana, Varida etc.: Mustaka grows near water resources hence the synonyms related to water is also synonyms of Mustaka.
Kuruvinda: Commonly found in East of India in Places like Kuru.
Rajkaseruka: It is similar to Kaseru.
Krodeshta: It is liked by pigs.
Granthila: Tubers of Mustaka are nodular.
Sugandhi: The tubers are aromatic.

Synonyms according to different texts

The various synonyms of Mustaka as given in the Brihatrayi and Nighantus are metioned in Table 1.

Table 1: Synonyms of Mustaka in different Ayurvedic texts

S.no	Name	1	2	3	4	5	6	7	8	9	10	11	12
1.	Musta				+		+		+	+			
2.	Ambudhar				+								
3.	Megha				+		+						
4.	Ghana				+	+	+			+			
5.	Rajkaseruka				+	+			+	+			
6.	Bhadramusta				+	+	+						
7.	Vraha				+	+			+				
8.	Abda				+		+						
9.	Gangeya				+		+		+		+		
10.	Kuruvindaka				+	+			+	+			
11.	Jimuta				+		+						
12.	Vrishdhvankshi				+								
13.	Jalada				+								
14.	Balahaka				+								
15.	Must					+		+		+	+	+	+
16.	Varidhara					+							
17.	Mustaha					+							
18.	Meghakhaya					+						+	
19.	Pindamusta					+			+				
20.	vishadhvansi					+							
21.	Bhadra						+						
22.	Varida						+	+					
23.	Ambhoda						+			+			
24.	Nirada						+						
25.	Amra						+						
26.	Vrahi						+						
27.	Gunja						+						
28.	Granthi						+						
29.	Bhadrakasi						+						
30.	Kaseru						+						
31.	Krodeshta						+						
32.	Kuruvinda						+	+			+		
33.	Sugandhi						+						
34.	Granthila						+						
35.	Hima						+						
36.	Vanya						+						
37.	Rajkaseru						+						
38.	Kacchotha						+						
39.	Mustak							+			+	+	
40.	Varida nama							+			+		+
41.	Nagara								+				
42.	Bhadramustaka								+				
43.	Meghanama								+				
44.	Vrishabhaksha								+				
45.	Kroda								+				
46.	Gangeyi									+			
47.	Bhadramust									+			
48.	Vrahaad									+			

49.	Pithar									+			
50.	Pindamustaka									+			
51.	Purnakoshtha									+			
52.	Bhadrahansa									+			
53.	Prachya									+			
54.	Kalapadhra										+		
55.	Paripelava										+	+	
56.	Valeya											+	

Described (+)

Charak Samhita (C.S), Bhavprakasha Nighantu (Bh.N), Sushruta Samhita (Su.S), Sodhala Nighantu (S.N), Astanga Hridya (A.H), Kaiyadev Nighantu (K.N), Dhanwantari Nighantu (D.N), Mahaushada Nighantu (Mh.N), Madanpala Nighantu (M.N), Shaligrama Nighantu (Sh.N), Raj Nighantu (R.N), Priya Nighantu (P.N)

Varieties

In Nighantus, generally three kinds of Mustaka are mentioned viz. Mustaka, Nagrmustaka and Kaivartamustaka. Dhanwantari nighantu has mentioned about the two varieties of Mustaka i.e. Musta and Nagarmusta. Bhavmishra has mentioned about the three varieties of Mustaka i.e. Mustaka, Nagarmustaka and Kaivartamustaka. Raj nighantu has also mentioned the two varieties of Mustaka i.e. Musta and Nagarmusta. In Sodhal nighantu and Madanpala nighantu, Nagarmustaka is considered as synonym of Mustaka. Shaligram nighantu has mentioned four varieties of Mustaka i.e. Mustaka, Nagrmustaka, Bhadramustaka and Kaivartamustaka. Prof. Priyavrat Sharma in his Priyanighantu has mentioned about Musta only. There is no description of Nagarmusta in Priya Nighantu. According to Mahaushada nighantu, there are three varieties of Mustaka – Mustaka, Bhadramustaka and Kaivartamustaka. In this nighantu, Bhadramustaka is considered as synonym of Nagarmustaka[6].

Ayurvedic properties[22]

The important properties and uses of Mustaka are as follows:-

Rasa	Laghu, Ruksha
Guna	Tikta, Katu, Kashyaya
Virya	Sheet
Vipaka	Katu
Doshkarma	Kapha-Pitta shamaka
Dhatukarma	Rakta-shamaka
Malakarma	Stambhan

HISTORICAL BACKGROUND FROM VEDIC KALA TO NIGHANTUS

Vedic Kala[23]

The earliest known documentation of plant treatments in Indian literature is found in Vedas, the sacred literature of Hindus. About 300 plants are described here; "Mustaka" the drug taken for the study is one among them.

In Atharva Parishista, Musta is to be address for the purpose of Vashikarana property.

In Varaha Shroutrasutra, there is description about Phanta Kalpana of Musta.

Samhita Kala

Charak Samhita (1000 B.C. - 4thCent. A. D.)[7]

In the Charak Samhita, the plant Mustaka has been described under Lekhaniya, Triptighna, Kandughna, Stanayashodhana and Trishnanigrahana mahakashyaya. Mustaka is also described under the Agraya dravaya mentioned by Charaka only and considered to be best among Deepana, Pachana and Sangrahi dravaya. Phramacological properties of Mustaka have been thoroughly observed by Acharaya Charak. He has evaluated it for therapeutics uses in various diseases and included it as an ingredient of various preparations.

Table 2: Therapeutic indications of Mustaka in Charak Samhita

S.No	Preparation	Indications	Uses (Ext./Int.)	Ref. No
1.	Musta swrasa	Santarpanjanya vyadi	Int.	C.Su.23/12
2.	Agraya dravaya	Sangrahi, Dipan, Pachan	Int.	C.Su.25/40
3.	Brahma Rasayan	Rasayan karma	Int.	C.Ci.1-1/48
4.	Chyavan Prasa	Kasa, Shwasa,.	Int.	C.Ci.1-1/64
5.	Indrokt rasayana	Rasayan karma	Int.	C.Ci.1-4/14
6.	Shadanga Paniya	Pipasa, Jwara	Int.	C.Ci.3/145
7.	Trayamanadya ghrita	Gulma	Int.	C.Ci.5/119
8.	Kanakbindvarista	Kustha	Int.	C.Ci.7/77
9.	Siddharthaka snana	Kustha	Ext.	C.Ci.7/91
10.	Kanakakhsiri taila	Mandala Kustha	Ext.	C.Ci.7/113
11.	Tiktashatpala ghrita	Kustha	Int.	C.Ci.7/142
12.	Mahatiktaka ghrita	Kustha	Int.	C.Ci.7/144
13.	Kshara Gudika	Svayathu	Int.	C.Ci.12/43
14.	Sunishannaka Changeri Ghrita	Arsha	Int.	C.Ci.14/236
15.	Kiratadya Churna	Grahani roga	Int.	C.Ci.15/138
16.	Mulasava	Dipana, Raktapitta,	Int.	C.Ci.15/158
17.	Navayasa Churna	Pandu roga	Int.	C.Ci.16/70
18.	Mandurvataka	Pandu roga	Int.	C.Ci.16/73
19.	Punarnava mandura	Pandu roga	Int.	C.Ci.16/94
20.	Vyoshadya Ghrita	Pandu roga	Int.	C.Ci.16/119
21.	Shatiyadi churna	Tamak Svasa, Hikka	Int.	C.Ci.17/123
22.	Duhsparshadi leha	Vatika Kasa	Int.	C.Ci.18/51
23.	Jivantyadi leha	All five varieties of Kasa	Int.	C.Ci.18/176

Sushruta Samhita[8] **(1000 B.C. – 5th Cent. A.D.)**
In the Sushruta Samhita, Mustaka has been described under Vachadi Gana and Mustadi Gana and Katu Varga. Mustaka is prescribed for therapeutics use in following diseases and included it as ingredient of several formularies.

Table 3: Therapeutic indications of Mustaka in Sushruta Samhita

S.No	Preparation	Indications	Use (Int./Ext.)	Ref.No
1.	Trivrdastaka modaka	Pittaja vyadhi	Int.	S.Su.44/54
2.	Vardhamana pippali yoga	Vatarakta	Int.	S.Ci.5/12
3.	Mahatiktaka Ghrita	Kustha	Int.	S.Ci.9/8
4.	Tiktaka Ghrita	Kustha	Int.	S.Ci.9/9
5.	Navayasa loha	Shofa	Int.	S.Ci.12/11
6.	Mustadi raja yapana basti	Vatarakta, Prameha etc.	Int.	S.Ci.38/106
7.	Tarksya Agada	Taksaka Sarpa visha	Int.	S.Ka.5/65
8.	Maha sugandhi agada	Sarpa visha	Int.	S.Ka.6/19
9.	Panchgavya Ghrita	Vishama Jwara	Int.	S.U.39/241
10.	Kalyanaka Ghrita	Apasmara	Int.	S.U.62/22

Astang Hridyam[9] **(7th Cent. A.D.)**
In Astang Hridya, Mustaka has been described under Kaphagna Gana, Mustadi Gana, Vachadi Gana and Tikata gana. Mustaka is prescribed for therapeutics uses in following diseases.

Table 4: Therapeutic indications of Mustaka in Astang Hridyam

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Drakshadi phanta	Jvara	Int.	A.H.Ci.1/56
2.	Pippalyadi Ghrita	Jvara	Int.	A.H.Ci.1/90
3.	Kasamardadi Ghrita	Shosha, Jvara, Pliha roga, Kasa	Int.	A.H.Ci.3/162
4.	Jivantyadi Ghrita	Parshvaruka, Jvara, Kasa, Hikka Shvasa	Int.	A.H.Ci.4/43
5.	Trayamanadi Ghrita	Vidradhi	Int.	A.H.Ci.13/15
6.	Bala Taila	Vata Vyadhi	Int. & Ext.	A.H.Ci.21/76
7.	Siddha Basti	Vatarakta, Moha etc.	Int.	A.H.Ka.4/37
8.	Patoladi Ghrita	Shukra, Timira, Naktandhya,	Int.	A.H.U.13/8
9.	Kshara Taila	Karna Badhirya	Int.	A.H.U.18/28

Kashyap Samhita[24] **(600-1000AD)**
Kashayap Samhita, also called as **Vriddha Jivakiya-tantram**, is one of the ancient treatise deals mainly with the health aspects of children and pregnant women. Mustaka is mentioned in Kashyap Samhita in the following references:

Table 5: Therapeutic indications of Mustaka in Kashyap Samhita

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Katuka sarpi	Sannipata jvara, hridya roga, grahani dosha, vataja gulma, pliha roga etc.	Int.	K.S.Ka.8/141
2.	Phala taila	Udavarta, udar roga, gulma, krimi kostha, mutraghata	Int.	K.S.Khi.8/92
3.	Eranda basti	Kapha avrata Vata	Int.	K.S.Khi.8/100

Mustaka in Chikitsa Grantha

Harita Samhita[25] **(600-1000BC)**
This samhita was composed by Acharya Harita. He was contemporation to Acharya Agnivesh. This samhita is composed of six sthanas dealing with Annapana, Arista , Chikitsa, Kalpa, Sutra and Sharira having 103 Chapters.The description of Mustaka in this book as-

Table 6: Therapeutic indications of Mustaka in Harita Samhita

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Panchabhadra kwatha	Jwara	Int.	H.S.3/2/89
2.	Sunthyadi kwatha	Jwara	Int.	H.S.3/2/91
3.	Kutaja Putpaka	Atisara	Int.	H.S.3/3/29
4.	Kutjastak	Atisara	Int.	H.S.3/3/62
8.	Darkshadi pindi	Pittaja Grahani	Int.	H.S.3/3/105
5.	Hingavadi kwatha	Shoola	Int.	H.S.3/7/26
6.	Bilvadi kwatha	Shoola	Int.	H.S.3/7/33
7.	Brijamanduka vataka	Pandu	Int.	H.S.3/8/25
8.	Bhallataka avaleha	Gudaroga	Int.	H.S.3/11/80
9.	Katphaladi kwatha	Kasa	Int.	H.S.3/12/28
10.	Musta churna	Kasa	Int.	H.S.3/12/38

Chakradatta[26] (11th century A.D.)

Chikitsa grantha Cakradatta was written by Acharya Chakrapani Datta. It is the oldest treatise which contains a lot of Siddha yoga preparation for the treatment of various diseases. Mustaka has been used as ingredient of different medical preprations to treat various disorders. References of Mustka in Cakradatta are mentioned below –

Table 7: Therapeutic indications of Mustaka in Chakradatta

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Shadangpaniya	Jwara, Pipasa	Int.	C.D.1/19
2.	Navanga kashyaya	Vata-pittaja jvara	Int.	C.D.1/114
3.	Panchbhadra kashyaya	Vata-pittaja jvara	Int.	C.D.1/118
4.	Chaturbhadraka patha saptako	Jvara with predominance of kapha	Int.	C.D.1/124
5.	Mustadya astadashanga kwatha	Jvara	Int.	C.D.1/175
6.	Kutajastaka	Atisara	Int.	C.D.3/90
7.	Sribahushala guda	Arsha	Int.	C.D.5/78
8.	Guda bhallataka	Arsha	Int.	C.D.5/93
9.	Mandura-vajra vataka	Pandu roga	Int.	C.D.8/45
10.	Durvadya ghrita	Raktapitta	Int.	C.D.9/39
11.	Baladya ghrita	Yakshma roga	Int.	C.D.10/83
12.	Ashwagandha taila	Kostha vata, rakta-pradra	Int. & Ext.	C.D.22/144
13.	Saptashatika Prasarni taila	Kubja, pangu, vamana, vatarakta,	Int. & Ext.	C.D.22/221
14.	Maharaja-Prasarni taila	Vata vyadhi	Int. & Ext.	C.D.22/265,271
15.	Yograja guggulu	Amavata	Int.	C.D.25/28
16.	Brhat simhanada guggulu	Amavata	Int.	C.D.25/40
17.	Trayodashanga narikelakhanda	Shula	Int.	C.D.26/14
18.	Dhatrilauha	Shula	Int.	C.D.26/53
19.	Khandamlaka	Parinama shula	Int.	C.D.27/71
20.	Trayamanadya ghrita	Pittaja gulma	Int.	C.D.30/64
21.	Phalatrikadi kwatha	Prameha	Int.	C.D.35/18
22.	Vidangadya lauha	Prameha	Int.	C.D.36/6
23.	Navaka guggulu	Diseases caused by medas, kapha, ama and vata.	Int.	C.D.36/18
24.	Ksharadi gudika	Shotha	Int.	C.D.39/26
25.	Gauradya ghrita	Vrana-shotha	Int.	C.D.44/78
26.	Kumbhikadya taila	Nadi-vrana	Int.	C.D.45/17
27.	Saptavinshatika guggulu	Bhagandara	Int.	C.D.46/13
28.	Aragvadhadi shata churna pradeha	Kustha	Int. & Ext.	C.D.50/10
29.	Ekvinshatika guggulu	Kustha	Int.	C.D.50/86
30.	Patoladhanyakadi kwatha	Amlapitta	Int.	C.D.52/16
31.	Kshudhavati gudika	Amlapitta	Int.	C.D.52/40
32.	Gayatryadi lepa	Visarpa caused by kapha	Ext.	C.D.53/14
33.	Mustadi taila	Krimidanta	Int.	C.D.56/47
34.	Karkata ghrita	Krimidanta	Ext.	C.D.56/48
35.	Irimedadya taila	Mukha roga	Ext.	C.D.56/108
36.	Kshara taila	Karnashula	Int.	C.D.57/19
37.	Pushyanuga churna	Asragadara	Int.	C.D.61/16
38.	Balachaturbhadrika churna	Jvara, atisara, kasa, svasa, vami in children	Int.	C.D.64/23
39.	Bilvadi kshira	Grahani roga in children	Int.	C.D.64/45
40.	Darvyadi lepa	Netra roga in children	Ext.	C.D.64/63
41.	Kumar-kalyanaka ghrita	Balroga, dantotha roga, krimidanta	Int.	C.D.64/74
42.	Lakshadi taila	Jvara	Int.	C.D.64/81
43.	Shiva gudika	Rasayana	Int.	C.D.66/176
44.	Abhyadaya modaka	pandu roga, visha etc	Int.	C.D.71/10

Sharandhar Samhita[27] (13 Century A.D.)

Table 8: Therapeutic indications of Mustaka in Sharandhar Samhita

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Panchbhadra kwatha	Vata-pitta jvara	Int.	S.S.M.2/22
2.	Astadashanga kwatha	Sannipataja jvara	Int.	S.S.M.2/43
3.	Nagaradi kwatha	Jvara, atisara	Int.	S.S.M.2/63
4.	Dhanyapanchaka kwatha	Amashula	Int.	S.S.M.2/64
5.	Chaturbhadra kwatha	Ama yukta grahani	Int.	S.S.M.2/74
6.	Brihat Manjisthadi kwatha	Kustha	Int.	S.S.M.2/139
7.	Laghu Gangadhara churna	Pakva-atisara	Int.	S.S.M.6/48
8.	Brihat gangadhara churna	Pravahika	Int.	S.S.M.6/50
9.	Eladi churna	Chardi roga	Int.	S.S.M.6/146
10.	Bahushala guda	Arsha, gulma, vatodara	Int.	S.S.M.7/6
11.	Chandraprabha vati	Prameha, mutrakriccha	Int.	S.S.M.7/40
12.	Gokshuradi guggulu	Prameha, mutrakriccha	Int.	S.S.M.7/86
13.	Triphala modaka	Kustha, bhagandara etc.	Int.	S.S.M.7/90

14.	Kantakaryavleha	Kasa, svasa etc.	Int.	S.S.M.8/6
15.	Chyavanaprasha	Kshaya-kshina etc.	Int.	S.S.M.8/11
16.	Kutajastakadya avleha	Atisara, asragdara etc.	Int.	S.S.M.8/46
17.	Phala ghrita	Bandhya dosha	Int.	S.S.M.9/80
18.	Lakshadi taila	Vishama jvara	Ext.	S.S.M.9/95
19.	Marichadi taila	Kustha, vrana etc.	Ext.	S.S.M.9/150
20.	Irimedadhya taila	Mukha roga, danta roga	Ext.	S.S.M.9/165
21.	Kumarayasva	Prameha, udavarta etc.	Int.	S.S.M.10/21
22.	Lohasava	Pandu roga, gulma etc.	Int.	S.S.M.10/34
23.	Devdarvadhyarista	Prameha	Int.	S.S.M.10/54
24.	Dashmularista	Vata roga etc.	Int.	S.S.M.10/83
25.	Grahani kapata rasa	Atisara, grahani	Int.	S.S.M.12/249
26.	Grahani vajra kapata rasa	Grahani	Int.	S.S.M.12/256
27.	Kandarpa sundara rasa	Vajikarana	Int.	S.S.M.12/272

Bhela Samhita[28]

Table 9: Therapeutic indications of Mustaka in Bhela Samhita

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Mustadi churna	Ama dosha	Int.	B.S.Su.10/18
2.	Drakshadi churna	Kustha	Int.	B.S.Ci.6/57
3.	Shanbijadi churna	Apasmara	Int.	B.S.Ci.9/7
4.	Changeri ghrita	Arsha	Int.	B.S.Ci.16/43
5.	Baladi taila	Vata vyadhi	Int.	B.S.Ci.24/7
6.	Mayuradya niruha-basti	Pittaja Mutrakriccha	Int.	B.S.Si.8/57

Bhavprakasha Samhita[29] **(16th Century A.D.)**

Table 10: Therapeutic indications of Mustaka in Bhavprakasha Samhita

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Sudarshana churna	Javara	Int.	Bh.Ci.1/126
2.	Hiberadi kwatha	Jvara	Int.	Bh.Ci.1/349
3.	Amritashtaka kwatha	Pitta-kaphaja jvara	Int.	Bh.Ci.1/430
4.	Kutajadi kwatha	Rakta-atisara	Int.	Bh.Ci.2/52
5.	Chavyadi kwatha	Kapha atisara	Int.	Bh.Ci.2/77
6.	Bilva taila	Atisara	Int.	Bh.Ci.2/113
7.	Astadashanga taila	Pandu roga	Int.	Bh.Ci.8/55
8.	Brihat kushmanda avleha	Raktapitta	Int.	Bh.Ci.9/64
9.	Narikela khanda	Amlapitta	Int.	Bh.Ci.10/24
10.	Brihat narikela khanda	Amlapitta	Int.	Bh.Ci.10/30
11.	Maha-naracha rasa	Adhyamana, shula, anaha	Int.	Bh.Ci.24/97
12.	Sama-sharkara guggulu	Vatarakta	Int.	Bh.Ci.29/170
13.	Chandraprabha gutika	Shukra dosha, prameha.	Int.	Bh.Ci.29/193
14.	Triphala guggulu	Vatarakta	Int.	Bh.Ci.29/213
15.	Dvitiya simhanada guggulu	Amavata, sandhigatavata etc.	Int.	Bh.Ci.29/230
16.	Kumbhikadya taila	Shalayaja nadivrana	Int.	Bh.Ci.49/18
17.	Svayambhuva guggulu	Kustha, vatarakta	Int.	Bh.Ci.54/65
18.	Ekvinshatika guggulu	Kustha	Int.	Bh.Ci.54/69
19.	Amrita-bhallataka avleha	Kustha	Int.	Bh.Ci.54/79
20.	Maha-bhallataka avleha	Shivitra, udumbar, dadru, rishyajivaha, kaknaka	Int.	Bh.Ci.54/84
21.	Laghu-marichadi taila	Kustha, Kandu, pama, sidhama, vicharchika	Int. & Ext.	Bh.Ci.54/107
22.	Maha-marichadaya taila	Kustha	Ext.	Bh.Ci.54/113
23.	Adaraka khanda	Shit-pitta, udarda	Int.	Bh.Ci.55/17
24.	Kumari taila	Shiro-roga	Ext.	Bh.Ci.62/43
25.	Chandraprabha varti	Timira, pishtaka etc.	Ext.	Bh.Ci.63/228
26.	Mustakadi svarasa	Kasa in children	Int.	Bh.Ci.71/160

Yogratnakar[30] **(17th century A.D.)**

This is an important and so much useful text in Chikitsa granth. This treatise is divided in two parts i.e. Purvardha and Uttarardha. In yogratnakar, Musta is described under the Abhava varga. Here, Haritaki is adviced in abhava of Musta and Ativisha.

Table 11: Therapeutic indications of Mustaka in Yogratnakar

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
Yogratnakar Purvardha				
1.	Ashwagandadhi taila	Jvara	Ext.	Jvara- 236
2.	Chandanbalalakshadi taila	Jvara	Ext.	Jvara- 238
3.	Chatuhmurti rasa	Grahani	Int.	Grahani- 289
4.	Grahanikapata rasa	Grahani, atisara	Int.	Grahani- 290
5.	Hansamandur	Pandu roga	Int.	Pandu- 346

6.	Shiva gutika	Rajyakshma	Int.	Rajyakshma- 374
7.	Suryaprabha gutika	Rajyakshma	Int.	Rajyakshma- 377
8.	Lakshmivilas taila	Rajyakshma	Ext.	Rajyakshma- 381
9.	Khandava churna	Aruchi, ajirna	Int.	Arochaka- 443
10.	Jambavadi yoga	Chardi	Int.	Chardi- 451
11.	Eladi churna	Chardi	Int.	Chardi- 452
12.	Rajmartandata gutika	Trishna	Int.	Trishna- 463
13.	Chandrakala rasa	Daha roga	Int.	Daha- 484
14.	Yograj guggulu	Vata vyadhi	Int.	Vata vyadhi- 529
Yogratnakar Utarardha				
15.	Khandapippali yoga	Shula	Int.	Shula- 10
16.	Chandrakala rasa	Mutrakriccha	Int.	Mutrakriccha- 59
17.	Chandraprabha guti	Prameha	Int.	Prameha-87
18.	Navaka guggulu	Medo roga, kaphaja roga, amavataja roga	Int.	Medo roga- 99
19.	Saptavinshatika guggulu	Vrana, nadi vrana	Int.	Sadyo vrana-184
20.	Triphala modaka	Kustha	Int.	Kustha- 222
21.	Khandapippali avleha	Amlapitta	Int.	Amlapitta- 241
22.	Rasamrita	Amlapitta	Int.	Amlapitta- 243
23.	Gayatrayadi lepa	Kaphaja visarpa	Ext.	Visarpa- 248
24.	Hingvadi kshar taila	Karna roga, badhirya	Int.	Karna roga-315
25.	Hingvadi taila	Nasa roga	Int.	Nasa roga- 329
26.	Bhimseni karpura	Netra roga	Int.	Netra roga- 394
27.	Pushyanuga churna	Yoni roga, pradara roga	Int.	Stri roga- 399
28.	Amritbhallataka	Vajikaraka	Int.	Vajikarana -483
29.	Vangeshvara rasa	Bahumutra, mutrakriccha,	Int.	Vajikarana- 494

Bhaishajya Ratnawali[31] (18 century A.D.)

Table 12: Therapeutic indications of Mustaka in Bhaishajya Ratnawali

S.No	Preparation	Indications	Use (Ext./Int.)	Ref. No.
1.	Mustadi kwatha	Jvara	Int.	B.R.5/67
2.	Sudarshana churna	Jvara	Int.	B.R.5/436
3.	Jvarabhairava churna	Jvara	Int.	B.R.5/446
4.	Jvaranagarmayur churna	Sheet jvara, jirna jvara	Int.	B.R.5/461
5.	Sarvajvarankush vati	Vataja, pittaja, kaphaja, sannipataja Jvara	Int.	B.R.5/924
6.	Amritarista	Jvara	Int.	B.R.5/1241
7.	Mritsanjivani sura	Sannipataja jvara	Int.	B.R.5/1250
8.	Karpura rasa	Jvaratisara, atisara	Int.	B.R.7/161
9.	Ahiphenasava	Atisara	Int.	B.R.7/174
10.	Chaturbhadra kwatha	Grahani	Int.	B.R.8/12
11.	Grahanishardul rasa	Grahani	Int.	B.R.8/98
12.	Markandya churna	Grahani	Int.	B.R.8/114
13.	Agnikumar modaka	Grahani	Int.	B.R.8/226
14.	Grahanigajendra vatika	Grahani	Int.	B.R.8/274
15.	Piyushvalli rasa	Grahani	Int.	B.R.8/335
16.	Chandraprabha vati	Arsha	Int.	B.R.9/222
17.	Swayamagni rasa	Ajirna	Int.	B.R.10/147
18.	Karpurasava	Visuchika	Int.	B.R.10/296
19.	Haridrakhanda	Krimi roga	Int.	B.R.11/53
20.	Kumkumadi ghrita	Rajyakshma	Int.	B.R.14/278
21.	Vijaybhairav rasa	Kasa, shvasa	Int.	B.R.15/80
22.	Shashiprabha vati	Kasa	Int.	B.R.15/162
23.	Ashwagandharista	Murcha	Int.	B.R.21/17
24.	Shrikhandasava	Panatayaya	Int.	B.R.22/29
25.	Shiva taila	Unmada	Int.	B.R.24/97
26.	Nakuladya ghrita	Vata vikar especially apasmara, unmada, pakshaghata etc.	Int.	B.R.26/218
27.	Shrigopal taila	Vata vyadhi	Int./Ext.	B.R.26/286
28.	Himsagar taila	Vata vyadhi	Int./Ext.	B.R.26/487
29.	Vyadhishardul guggulu	Amavata	Int.	B.R.29/170
30.	Pramehakulantaka rasa	Pramrha, mutrakriccha	Int.	B.R.37/76
31.	Vedavidhya vati	Prameha	Int.	B.R.37/81
32.	Sarivadyasava	Prameha pidika	Int.	B.R.38/22
33.	Sudhanidhi	Shotha	Int.	B.R.42/105
34.	Agnimukh mandur	Shotha	Int.	B.R.42/109
35.	Rasaabhra mandur	Shotha	Int.	B.R.42/127
36.	Bilva taila	Amlapitta	Int.	B.R.56/146
37.	Dashansanskar churna	Danta roga	Int.	B.R.61/91
38.	Jatyadi taila	Mukha roga	Int.	B.R.61/141

39.	Rudra taila	Siroroga	Ext.	B.R.65/125
40.	Pradarari rasa	Pradara roga	Int.	B.R.66/58
41.	Vishvavallabha ghrita	Stri roga especially pradara roga	Int.	B.R.66/98
42.	Ashokarista	Asragadara	Int.	B.R.66/112
43.	Shishukalpadrum ghrita	Bandhya roga	Int.	B.R.67/95
44.	Sudhakar taila	Yonivyapada roga	Int.	B.R.67/112
45.	Saubhagyashunthi -1, 2	Sutika nroga	Int.	B.R.69/25, 29
46.	Sutikavallabha rasa	Sutika roga	Int.	B.R.69/90
47.	Sutikadashmula taila	Sutika roga	Int.	B.R.69/120
48.	Khandabhraka	Vyasthapaka, kasa, svasa	Int.	B.R.74/149
49.	Mahakameshwar modaka	Vajikaraka	Int.	B.R.74/178

Mustaka in Kosha Granthas

Amarakosha[32] **(5th Century AD)**
In this book Mustaka is mentioned in dwitya kand in Vanaushadhi Varga. Here four synonyms of Motha is mentioned as – Kurubinda, Meghanam, Musta and Mustaka.

Shabda Kalpradrum[33] **(20th Century AD)**
This Kosha was written by Raja Radhakant Dev. In this treatise Mustaka belong to masculine common gender. In this Kosha Mustaka is described worth all synonyms and properties mentioned byBhava Prakash, Raj Nighantu for it.

Nighantu

Saushruta Nighantu[34] **(5th Century A.D.)**
The writer of this Nighantu is not precisely clear but some scholars believed that it is written by Acharya Sushrutu in 5th century A.D. Here Musta is mentioned in "Mustadi gana". The drugs mentioned in this gana have vata-kaphanashak guna and having pachana, stanyasodhana and yonidoshanashak properties.

Astanga Nighantu[34] **(8th Century A.D.)**
It is said to be oldest Nighantu written by Vahata and considered to be an appendix of Ashtanga Hridya. It deals Musta while commenting on drugs of "Mustadi Gana" along with other drugs like Katuka, Kustha, Vacha, Bhallataka, Patha etc. Synonyms and Guna- Karma of Musta is not mentioned in this treatise.

Madanadi Nighantu[34] **(10th Century A.D.)**
This book was written by Shri Chandranandan in 10th century A.D. In this book Musta is mentioned under the "Shadavinsha Gana". Here two varities of Musta are mentioned i.e.
1) Musta
2) Bhadramusta
The synonyms of Musta are Ambudhara, Megha, Ghana, Rajkaseruka, and the synonyms of Bhadramusta are Gangaeya and Kurubindak. Mustaka contains Katu, Tikta and Kashaya Rasas and acts as Grahi and Pachana and having piita kapha shamak properties .It is useful in Trishna, Daha, Jvara and Atisara.

Dhanwantari Nighantu[10] **(10th -13th Century A.D.)**
Mustaka is described under "Guduchyadi varga" in Dhanwantari nighantu and given 14 synonyms. These are Ambudharo, Megho, Ghana, Rajkaseruka, Bhadramusta, Varaha, Abda, Gangeya, Kuruvindak, Jimuth, Vrishdwankshi, Jalada and Jalavaha.According to Dhanwantari nighantu, mustaka is tikta, kashayaya in rasa, sheet in virya, shleshma-raktajita, pitta-jvaraghana, atisaraghana, trishna-krimi vinashani.

Sodhala Nighantu[11] **(12th Century A.D.)**
In Sodhala Nighantu, Mustaka is mentioned under "Guduchyadi varga" and about 12 synonyms are mentioned in it. He gave the synonyms of Musta as- Nagar, Bhadramusta, Meghanama, Gangeya, Kuruvindak, Vrishbhacho, Varaha, Krodo , Rajkasheruk.

Madanpala Nighantu[12] **(14th Century A.D.)**
In Madanpala Nighantu, Mustaka is mentioned under "Abhyadi varga" and about 13 synonyms are mentioned in this nighantu. This was written by Acharya Madan Vinod. Musta contains Katu, Tikta and Kashaya Rasa, Sheeta Virya and acts as Grahi, Deepana, Pachana and Kapha pitta shamak. It is useful in Trishna, Raktapitta and Jwara chikitsa.

Kaiyadev Nighantu[13] **(14th Century A.D.)**
In Kaidev Nighantu, Mustaka is described under "Aushadhi varga" and author has given 14 synonyms for mustaka and these are - Musta, Ambhoda, Ghana, Gangayi, Kuruvindak, Bhadramusta, Varaha, Abda, Pithar, Pindamustaka, Purnakostha, Bhadrahansa, Prachya, Rajkaseruka. It act as grahi, dipana and pachana dravaya. It is useful in Jvara, aruchi, krimi roga.

Bhavaprakasha Nighantu[14] **(16th Century A.D.)**
In Bhavaprakasha Nighantu, Mustaka is included under "Karpuradi varga" and described the two varieties of Mustaka. Mustaka is katu, tikta, kashyaya in taste, acts as grahi, deepana, pachana, kapha-pittahara and raktahara. It is beneficial in trishna, Jvara, aruchi and krimiroga.

Raj Nighantu[15] **(15th Century A.D.)**
In Raj Nighantu, Mustaka is mentioned under "Pippalayadi varga" and author has given 25 synonyms according to its morphological description, habitat and gunakarma. These are Musta, Bhadra,Varida,Ambhoda,Megha, Jimuta, Abda, Nirada, Abhra, Ghana, Gangeyi, Bhadramusta, Varahi, Gunja, Granthi, Bhadrakasi, Kaseru, Krodesta, Kuruvindakhya, Sughandhi, Granthila, Hima, Vanya, Rajkaseruka and Kachotha. Musta is kashayaya, tikta in rasa, sheet in virya. It act as pachan, sangrahani and having kaphashamak properties. It is beneficial in pittaja jvara.

Shaligrama Nighantu[16] **(19th Century A.D.)**
This is called as Brihat Nighantu Ratnakar. This Nighantu was narrated by Shaligram Vaishya. In Shaligrama Nighantu, Mustaka is described under "Karpuradi varga".

Nighantu Adarsh[17] **(20th Century A.D.)**
It was written by Bapalal Ganapati Vaidya. He has placed the drug Mustaka in "Mustadi Varga". He has mentioned 4 varities of Mustaka i.e.
1. Musta
2. Nagarmustaka,Nagarmotha
3. Bhadramustaka, Bhadramotha
4. Kutanatta,Jalamusta,Kaivartamusta,Kevatimusta

One more variety is also mentioned i.e. Kaseruka. Its tubers are liked by pigs. Charaka mentioned the kaseruka in madhur and kashaya skandha.

Priya Nighantu[18] **(20th Century A.D.)**
It is written by Acharya P. V. Sharma in 20th century A. D. In this Nighantu he classified Mustaka in "Shatpusphadi Varga". The synonym of Mustaka is related with clouds and he mentioned that it grows best in rainy seasons and found mostly in watery areas. Musta contain Katu,Tikta Rasa and acts as Grahi, Deepana Aampachana properties. It is useful in Jwara, Daha, Aamdosha, Aruchi and Grahni chikitsa.

Mahaushadha Nighantu[19] **(1971)**
In this book Musta has been placed in "Chandanadi Varga" and given the following synonyms- Varida, Kuruvindak, Kalapadhra, Gangeya and Paripleva. In this nighantu, two varities of Mustaka is described here: Mustaka and Bhadramustaka. According to this nighantu, bhadramustaka is a synonym of nagarmustaka.

Pharmacological Activities
Mustaka is Deepaniya, Pachaniya, Grahi, Lekaniya, Trishnanigrahana, Krimighna, Jvaraghna, Kaphagna, Stanayajanana, Stanayashodhana, Raktaprasadana, Shothahara, Medhya, Nadibalya, Mootrala, Garbhashayasankochaka, Balya, Vishaghna and useful in the treatment of Agnimandya, Ajeerna, Jvara, Atisara, Krimi roga, Aruchi, Trishna, Raktavikara, Tvakavikara, Kasa, Shvasa, Apasmara, Sangrahani, Sutika roga, Stanayavikara, Daurbalya, Netra roga, Mootrakricchchhra etc[1].

NAGARMUSTAKA

In brihattrayi, there is no description of Nagarmustaka. Description of Nagarmustaka is found in different nighantus.

Ayurvedic Properties
The properties of Nagarmustak are same as Mustaka and these are -

Rasa	Laghu, Ruksha
Guna	Tikta, Katu, Kashyaya
Virya	Sheet
Vipaka	Katu
Doshkarma	Kapha-Pitta shamaka
Dhatukarma	Rakta-shamaka
Malakarma	Stambhan[22]

Nagarmustaka in Koshagrantha

Amarkosha[32] **(5th Century AD)**
In this book Nagaraustaka is mentioned in dwitya kand in "Vanaushadhi Varga". Here two synonyms of Nagarmotha is mentioned as – Bhadramustaka and Gundra[19].

Nagarmustaka in Nighantus
Description of Nagramustaka are found in following nighantus –

Dhanwantari Nighantu[10] **(10-13th Century AD)**
Nagarmustaka is described under "Guduchyadi" varga in Dhanwantari nighantu. According to dhanwantari nighantu, it is a variety of Mustaka growing in river sides. It is also known as Pindmusta. Nagarmustaka is tikta, kashayaya in rasa, sheet in virya, shleshma-raktajita, pitta-jvaraghana, atisaraghana, trishna-krimi vinashani, same as Mustaka[24].

Sodhala Nighantu[11] **(12th Century A.D.)**
In Sodhala Nighantu, Nagarmustaka is mentioned as synonym of Mustaka[25].

Madanpala Nighantu[12] **(14th Century A.D.)**
In Madanpala Nighantu, Mustaka and Nagarmustaka are considered as synonyms[26].

Bhavaprakasha Nighantu[14] **(16th Century AD)**
In Bhavaprakasha Nighantu, Nagarmustaka is included under "Karpuradi varga" and its synonyms are bhadramusta and gundra. Nagarmustaka is katu, tikta, kashyaya dravaya, deepana, pachana, grahi and kapha-pittahara. It is useful in Trishna, Jvara, Aruchi and Jantu roga[28].

Raj Nighantu[15] **(17th Century AD)**
In Raj Nighantu, Nagarmustaka is mentioned under "Pippalayadi varga" and author has given 14 synonyms according to its morphological description, habitat and gunakarma. These are Apara, nagarmusta, nagarotha, nagaradi Ghana sangya, chakaranga, nadeyi, chudala, pindmusta, shishira, vrishadhvankshi, kacchruha, charukasera, ucchata, Purnakoshtha and Kapalini. Nagarmustaka is Tikta, katu, kashayaya, sheet dravaya. It is beneficial in pittaja jvara, atisara, aruchi, trishna, daha and shram roga[29].

Shaligram Nighantu[16] **(19th Century AD)**
In Shaligrama Nighantu, Nagarmustaka is described as a variety of Mustaka and included under "Karpuradi varga". According to this nighantu, synonyms of Nagarmustaka are nadeyi, vrishadhamankshi, kacchruha, chudala, pindmusta, nagarotha, kalapini[30].

Nighantu Adarsh[17] **(20th Century A.D.)**
Bapalal Vaidya has placed the drug Nagarmustak in "MustadiVarga". He has mentioned about Nagarmustaka under the varieties of Mustaka[31].

Mahaushadha Nighantu[19] **(1971)**
In this book Nagarmustaka has been placed in "Chandanadi Varga"v and given the following synonyms- Bhadramusta, vamamusta, rajmusta, kaseruka, tridhara, granthila, pindmusta, kavirtamustaka, kacchruha, kilalmustaka, , sugandhi, jalaj, kantkaramaka and chakravigraha. Two varities of mustaka has mentioned in this nighantu and these are Mustaka & Bhadramustaka. According to this nighantu, Bhadramustaka is a synonym of Nagarmustaka. Nagarmustaka is tikta, kashyaya, katu and hima dravaya. It is medhya dravaya and useful in vata roga, andhya, visarpa, kandu, kustha, visha. It also cures Pittaja jvara, atisara, krimi and trishna.

Pharmacological activities of Nagarmustaka
Like Mustaka, Nagarmustaka also act as Deepan, Pachana, Sangarhi, lekhaniya, Jvaraghna, Krimighna etc. and useful in Jvara, Atisara, Auchi, Trishna, Daha, Shrama roga, krimi roga, Vata roga, kustha, visarpa and other disorders.

DISCUSSION

Mustaka and Nagarmustaka are the miraculous herbs of Ayurveda. These drugs have been used from the ancient times in the treatment of numerous disorders. In ayurveda, Mustaka is taken as to be best among Deepana, Pacahan and Sangrahika drugs. Mustaka has been used as an ingredient of many important formulations and some of them are very useful in daily practice like Sudarshana churna, Chayvanprash, Shadangpaniya, Navayasa churna, Bala taila, Anu taila, Dashmulasava, Musta churna, Panchbahdra kwatha, Kutajastaka, Yograj guggulu, Pushyanuga churna, Dhatrilauha, Balachaturbhadrika churna, Brihat Manjishthadi kwatha, Brihat Gangadhara churna, Chandraprabhavati, Gokhshuradi guggulu, Kumarayasva, Dashmularista, Ashokarista, Haridrakhanda etc.

Mustaka and Nagarmustaka have been mentioned as synonyms as well as varieties in different Ayurvedic texts. This controversy may be due to very much similar morphology of

both the plants. In Brihatrayi, only description of Mustaka was found. Description of Nagarmustaka was found mainly in different Nighantus. In Nighantus, Nagrmustaka has been mentioned as a variety of Mustaka.

Mustaka and Nagarmustaka are vey much similar in morphology but some differences are also present which distinguished both the plants. Both the plants can be differentiated on the basis of their rhizomes, inflorescence, leaves, stem and size of plant. Rhizome is the useful part of both the plants which is used as a medicine. Rhizomes of both the plants are totally different. Rhizomes of Mustaka are small and oval shaped, while the rhizomes of Nagarmustaka are large in size, elongated and cylindrical in shape which distinguish both the plants.

In Ayurveda, both Mustaka and Nagarmustaka are useful in several diseases and specifically valued as Deepaniya (appetizer), Pachaniya (digestive stimulant), Sangrahi (anti-diarrhoeal), Lekhaniya (scarifying), Trishnanigrahana (thirst restaining), Dahashamaka (reduces burning sensation), Amapachana, Raktashodhana, Krimighana (anthelmintic), Mutrala (diuretic), Stanayashodhana (galactopuificator), Vishaghana (anti-poisonous), Jvaraghana(antipyretic), Vranaropak (wound healer), Kandughana, Arshoghana, Chardinigrahana, Medhya, Jantughana, Vatanulomana, Shramahara and useful in the treatment of Jvara (Fever), Atisara (Diarrhoea), Aruchi (Anorexia), Ratapitta, Trishna, Daha, Krimiroga (Worm-infestation), Tvak vicar (Skin disorders), Arsha (Piles), Kasa (Cough), Prameha (Diabetes), Striroga, Balroga, Vatrakta (Gout), Amavata (Rheumatoid arthritis), Vata vyadhi, Apasmara (Epilepsy) etc. Because of similar properties of both the plants, Nagarmustaka can be used as a good substitute for Mustaka.

CONCLUSION

From this review it can be concluded that Mustaka and Nagarmustaka are very valuable medicinal herbs of ayurveda and used as an ingredient of different formulations which are used extensively in ayurveda for the treatment of various diseases. Both were considered as synonyms as well as varieties in some ayurvedic texts but in different Nighantus, seperate description of Nagarmustaka was found which indicate that, Nagarmustaka is a different plant.

REFERENCES

1. P.C. Sharma, M.B Yelne, T.J. Dennis, Database on Medicinal Plants Used In Ayurveda, Vol.3, New Delhi, CCRAS, Edition : 2005; P.405-406
2. Surendra Kumar Sharma, Ajay Pal Singh, Morphological, microscopical and physio-chemical investigations on the rhizomes of Cyperus rotundus Linn., RJPBCS, July-Sep 2011, Volume 2 Issue 3; P.798.
3. Dr. Bulusu Sitaram, Bhavprakash of Bhavmishra, Foreword by Prof. K.C.Chunekar, First Edition, Varanasi, Chaukhambha orientalia, 2006; P.217.
4. Rai Puneet Kumar, Kumar Rajesh, Malhotra Yogender, Sharma Dharmesh, Kartthiyagini T., Standardization and Preliminary Phytochemical Inveatigation on *Cyperus rotundus* Linn. Rhizome, IJRAP 2010; 1 (2) 536-542.
5. Dr. Anil K. Dhiman, Medicinal Plants of Uttaranchal State, Varanasi, Chowkhamba Sanskrit Series Office, P.463-464
6. Dr.Gyanendra Pandey, Dravayaguna Vijnana, Part – II, Varanasi, Chowkhamba Krishnadas Academy, Reprint 2004; p.636-649.
7. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Charak Samhita, Vol. I - III, Varanasi, Chowkhamba Sanskrit Series Office, Reprint 2014.
8. Prof. K.R. Srikantha Murthy, Sushruta Samhita, Vol. I-III, 2nd Edition, Varanasi, Chaukhambha Orientalia, 2004, 2005, 2005.
9. Prof. K.R. Srikantha Murthy, Astanga Hridayam, Vol. I-9th, Vol. II, Vol. III, 7th Edition, Varanasi, Chowkhamba Krishnadas Academy, 2013, Reprint 2013, 2014.
10. Dhanwantari Nighantu, Prof. Priya Vrat Sharma, Translated by Dr. Guruprasad Sharma, Fourth Edition, Varanasi, Chaukhamba Orientalia, 2005; P. 23
11. Prof. (Dr.) Gyanendra Pandey, Edited by Prof. R.R. Dwivedi, Forword by Prof. M.S. Baghel, Sodhala Nighantu, Varanasi, Chaukhamba Krishnadas Academy, 2009; p. 27.
12. Prof. (Dr.) Gyanendra Pandey, Madanpal Nighantu, 1st Edition, Varanasi, Chaukhamba Orientalia, 2012; p.136.
13. Kaiyadev Nighantu, Edited and translated by Dr. Priya Vrat Sharma and Dr. Guru Prasad Sharma, Varanasi, Chaukhamba Orientalia; P.252
14. Bhavprakash Nighantu of Shri Bhavmishra, commentary by Prof. K.C Chunekar, edited by Late Dr. G. S. Pandey, Varanasi, Chaukhamba Bharati Academy, Reprint 2013; p.234.
15. Rajnighantu of Pandit Narhari, By Dr. Indradeo Tripathi, Varanasi, Chaukhamba Krishnadas Academy, p.163.
16. Shaligramvaishya, Shaligram Nighantu Bhushanam i.e. Brihat Nighanturatanakar antargat Part 7-8, Bombay-4, Khemraj Shrikrishnadas Prakashan, January 2011; p.55, 56.
17. Bapalal Vaidya, Nighantu Aadarsh, Vol.II, Varanasi, Chaukhamba Bharati Academy; P.706-707
18. Prof. Priya Vrat Sharma, Priya Nighantu, Second Edition, Varanasi, Chaukhamba Surbharti Prakashan, 1995, p.82
19. Prof. Aryadas Kumara Singh, Mahaushadha Nighantu, Hindi commentary by Sri Indradeva Tripathi, First Edition, Varanasi, Chaukhmaba Vidyabhawan, 1971; P.93-94.
20. Prof. Priya Vrat Sharma, Namarupajnanam, Varanasi, Chaukhamba Visvabharati, Edition : Reprint 2011; P.157.
21. Dr. Prakash L. Hegde and Dr. Harini, Dravayaguna Vijnana, Vol. II, First Edition, New Delhi, Chaukhamba Publications, 2014; P.590.
22. Prof. P.V.Sharma, Dravayaguna-Vijnana, Vol. 2, Varanasi, Chaukhamba Bharati Academy, Reprint : 2006; p.371.
23. Dr. J.L.N.Shastry, Forworded by, Prof. K.C. Chunekar, Dravayaguna Vijnana, Vol. II, Second Edition, Varanasi, Chaukhamba Orientalia, 2005; p.551.
24. Prof. (Km.) P.V. Tewari, Kasyapa Samhita or Vriddhajivakiya Tantra, Varanasi, Chaukhamba Visvabharati, Reprint: 2002.
25. Pandey J., Harita Samhita, Nirmala Hindi Commentry, First Edition, Varanasi, Chowkhambha Vishwabharti, 2010.
26. Priya Vrat Sharma, Cakradatta, 3rd Edition, Varanasi, Chaukhamba Publishers, 2002.
27. Sharangadhar Samhita of Acharaya Sharangadhar, by Dr. Smt. Shailaja Srivastava, 4th Edition, Varanasi, Chaukhamba Orientalia, 2005.
28. Dr. K.H. Krishnamurthy, Edited by Prof. Priya Vrat Sharma, Bhel Samhita, Varanasi, Chaukhambha Visvavharati, Reprint : 2008.
29. Bhavaprakasha of Shri Bhavamishra, Part – II, 9th Edition, Varanasi, Chaukhambha Sanskrit Sansthan, 2005.
30. Vaidya Lakshmipati Shastri, Yogratnakara, Chaukhamba Prakashan, Reprint : 2010.
31. Bhaishajya Ratnavali of Kaviraj Govind Das Sen, 'Siddhiprada' Hindi Commentary, By Prof. Siddhi Nandan Mishra, Varanasi, Chaukhambha Surbharati Prakashan.

32. Amarkosha of Amarasimha by Hargovinda Shastri, Fourth Edition, Varanasi, Chaukhamba Sanskrit Sansthan, 2001; p. 233.
33. Raja Radha Kant Dev, Shabda Kalpadrum, Vol.3, Nag Prakashak Delhi, Reprint 1985; P.754.
34. e – Nighantu (Collection of Ayurvedic Lexicons), National institute of Medical Heritage (NIIMH), Hyderabad. 2012

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