



Review Article

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DOSAGE FORMS OF DASAMOOLA IN AYURVEDIC THERAPEUTICS: AN OVERVIEW

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ABSTRACT

Ayurveda is a science of life that has been around for thousands of years. In Ayurvedic medicine, polyherbal combinations are common for treating various ailments, especially Vata Roga. In the Classical literature of Ayurveda, so many compound formulations are found with more than two ingredients, and Dasamoola is one of them. The health benefits of Dasamoola have been used in several formulations for different diseases like Swasa (Bronchial asthma), Kasa (Cough), Siroroga (disease-related Brain), Tandra (Drowsiness), Sotha (Inflammation), Anaha (distended abdomen), Parswa Sula and Aruchi (Anorexia). Even though this formulation has been widely used in the Ayurvedic system of medicine to cure inflammation-related diseases, no more profound research studies have been conducted to prove its antioxidant and anti-inflammatory activities. From the pharmacological study, Dasamoola had impeccable anti-inflammatory activity. The Dasamoola preparation contains various phytochemicals such as alkaloids, tannins, saponins, flavonoids and quinones, total phenolic content and exhibits antioxidant and anti-inflammatory activities.

Keywords: Ayurveda, Dasamoola, Phytochemicals

INTRODUCTION

Ayurveda is a science of life that has served humanity for thousands of years. In the other classical literature of Ayurveda, therapeutic uses of Dasamoola have been mentioned in different dosage forms. Dasamoola means roots of ten medicinal plants used to prepare Ayurvedic drugs¹. Dasamoola is divided into two groups of plants: Mahapanchamoola (big roots), which contain five trees, and Laghupanchamoola (little roots), which include five small plants. Each of the herbs has extraordinary medical qualities; combined, they have a synergistic result. The roots of five trees are Brihat Panchmoola, and the roots of shrubs are Laghu panchmoola. Brihat Panchmoola contains Bilva, Gambhari, Agnimantha, Patala, and Shyonaka, whereas Laghu Panchmoola contains Bruhati, Gokharu, Kantakari, Prishniparni,

Shalaparni shrubs. These ten roots are used widely for treating vitiated Vata, Pitta and Kapha dosa. In disease conditions like Amavata, Sandhi Vata, Jwara, Kasa, Swasa, Tandra Anaha etc., Dasamoola has been extensively used in Ayurveda. Phytochemical screening of the aqueous extract of Dasamoola drug showed the presence of anthraquinones, flavonoids, leucoanthocyanins, phenols, reducing sugars, and tannins. Due to their potent medicinal qualities, these plants are in high demand to produce Ayurvedic medicines. They are widely used in producing numerous Ayurvedic formulations, including, Cyavanaprasam, Dasamoola rishtam, Kamsa haritaki and Agasthya rasayanam, among others. In the present paper, Dasamoola is detailed in its therapeutic and pharmacological aspects.

Dasamoola Composition

Sanskrit Name	Botanical Name	Family
Bilva	<i>Aegle marmelos</i> Corr.	Rutaceae
Shyonak	<i>Oroxylum indicum</i> Vent.	Bignoniaceae
Gambhari	<i>Gmelina arborea</i> Roxb	Verbenaceae
Patala	<i>Stereospermum suaveolens</i> DC	Bignoniaceae
Agnimantha	<i>Clerodendrum phlomidis</i> Linn	Verbenaceae
Shalparni	<i>Desmodium gangeticum</i> DC	Fabaceae
Prishniparni	<i>Uraria picta</i> Desv.	Fabaceae
Brihati	<i>Solanum indicum</i> Linn.	Solanaceae
Kantakari	<i>Solanum surattense</i> Burm.f.	Solanaceae
Gokshura	<i>Tribulus terrestris</i> L	Zygophyllaceae

Properties of Dasamoola

Name of Plant	Rasa	Guna	Veerya	Vipaka	Dosa Karma
Bilva	Kasaya, Tikta	Laghu, Ruksya	Ushna	Katu	Vatakapha prasamana
Shyonak	Madhura, Tikta, Kasaya	Laghu, Ruksya	Ushna	Katu	Kaphavata prasamana
Gambhari	Tikta, Kasaya, Madhura	Guru	Ushna	Katu	Tridosahara
Patala	Tikta, Kasaya, Katu, Madhura	Laghu, Ruksya	Ushna	Katu	Tridosahara
Agnimantha	Tikta, Kasaya, Katu, Madhura	Laghu, Ruksya	Ushna	Katu	Kaphavata prasamana
Shalparni	Madhura, Tikta	Guru, Snighdha	Ushna	Madhura	Tridosahara
Prishniparni	Madhura, Tikta	Laghu, Snighdha	Ushna	Madhura	Tridosahara
Brihati	Tikta, Katu	Laghu, Ruksya	Ushna	Katu	Kaphavata samaka
Kantakari	Tikta, Katu	Laghu, Ruksya	Ushna	Katu	Kaphavata samaka
Gokshura	Madhura	Guru, Snighdha	Seeta	Madhura	Vatapitta samaka ²

Pharmacological action of Dasamoola

Phytochemical screening of the aqueous extract solution of Dasamoola drug showed the presence of anthraquinones, flavonoids, leucoanthocyanins, phenols, reducing sugars and tannins.

Tannins offer the astringent activity property, which speeds up the recovery of wounds and inflammation of mucous membranes³. An essential chemical raw material, i.e., Anthraquinones, is only found in aqueous extract and is used to

treat diarrhoea⁴. Compounds like flavonoids are also found in the Dasamoola powder aqueous extract⁵. They have reportedly been found to offer a variety of beneficial qualities, including anti-inflammatory, oestrogenic, enzyme inhibition, antibacterial, anti-allergic, antioxidant, vascular cytotoxic, and antitumor activities⁶⁻⁷. Both the aqueous and methanolic extracts of Dasamoola extract found phenolic substances. Polymeric phenolics are of tremendous relevance as a cellular support material since they are a crucial component of cell wall structure⁸⁻⁹. Aqueous and chloroform extracts include reducing sugar molecules.

Therapeutic uses of Dasamoola with different dosage forms in Bhaishajya Kalpana

SN	Name of the Formulation	Reference (Bhaishajya Ratnavali)	Indication
Dosage form - Kwatha			
1.	Dasamooladi Kwatha	Ch. 5, p-53	Vatika Jwara
2.	Dasamuli Kwatha + Pippali churna	Ch. 5, p-61	Kapha vataja jwara, Swasa, Amavata, Kasa, Parwapida
3.	Dwasanga Kwatha	Ch. 5, p-64	Kasa, Swasa, Sannipataja Jwara
4.	Astadasanga Kwatha	Ch. 5, p-64	Hikka Kasa, Swasa, Hrudgraha Sannipataja Jwara
5.	Madhya Bhargyadi Kwatha	Ch. 5, p-73	Visama jwara, Jeerna Jwara
6.	Bruhat Bhargyadi Kwatha	Ch. 5, p-73	Jwara, Pliha-Yakrut brudhhi, Gulma, Sotha
7.	Dasamoola Kwatha	Ch. 14, p-293	Ksaya, Kasa, Parswasula, Skanda sula
8.	Dasamoola Kwatha + Puskaramula	Ch. 16, p-332	Kasa, Swasa, Hrutsula, Parswasula
9.	Dasamoola Kwatha+ Kalyanaka Guda	Ch. 25, p-373	Apasmara
10.	Dasamulyadi Kwatha	Ch. 26, p-376	Viswachi, Avabahuka
11.	Dasamulibala Kwatha	Ch. 26, p-377	Gudhrasi, Khanja, Pangu
12.	Rasnadi Dasamoola Kwatha	Ch. 29, p-436	Amavata
13.	Dasamoola Kwatha + Ghrita	Ch. 69, p-737	Sutika Roga
14.	Dasamoola Kwatha + Yavaksara + Lavana	Ch. 30, p-451	Hrudroga, Swasa, Gulma, Sula
15.	Dasamooladi Kwatha	Ch. 40, p-533	Jalodara, Sotha, Slipada, Galagandam
16.	Dasamoola Kwatha + Ghrita + Mamsarasa	Ch. 46, p-590	Pariseka in Sotha, Vrana
17.	Dasamoola Kwatha + Kalyanaka Guda	Ch. 25, p-373	Apasmara
18.	Dasamoola Kwatha + Silajit + Sarkara	Ch. 35, p-499	Vatakundalika, Asthila, Vatavasti
Dosage form - Avaleha			
19.	Dasamoola Guda	Ch. 8, p-176	Grahani, Sotha, Sula, Pliha brudhi, Udara roga
20.	Dasamoola Guda	Ch. 9, p-225	Arsa, Pandu
21.	Chyvan Prash	Ch.14, p-296-297	Kasa, Swasa, Ksina, Uraksata, Daurbalya
22.	Agastya Haritaki	Ch. 15, p-327	Kasa, Swasa, Hikka, Jwara, Hrudroga
23.	Bhargi Guda	Ch. 16, p-336	Kasa, Swasa
24.	Kulutha Guda	Ch. 16, p-337	Kasa, Swasa, Hikka
25.	Bruhat Goksuradi Avaleha	Ch. 36, p-503	Asmari, Mutrakruhra, Mutraghata, Usnavata
26.	Dasamoola Haritaki (Kamsa Haritaki)	Ch. 42, p-566	Sotha, Jwara, Gulma, Pandu
Dosage form - Taila			
27.	Vayuchhaya surendra Taila	Ch. 26, p-393	Vatavyadhi, Gatrakampa, Apasmara
28.	Bruhat Bala Taila	Ch. 26, p-393	Vatavyadhi
29.	Mahamasa Taila	Ch. 26, p-413	Paksaghata, Ardita Vata, Vadhirjya, Hanusthamba
30.	Suskamuladi Taila	Ch. 42, p-567	Sotha
31.	Dasamuli Taila	Ch. 62, p-682	Karna Vadhirjya
32.	Dasamoola Taila (Swalpa)	Ch. 65, p-711	Shirasula
33.	Dasamoola Taila (Ditiya)	Ch. 65, p-712	Shirasula, Suryavarta, Abhisyanda
34.	Dasamoola Taila	Ch. 65, p-712	Jwara, Kasa, Swasa
35.	Dasamoola Taila (Madhyama)	Ch. 65, p-712	Shirasula, Slipada
36.	Dasamoola Taila (Bruhat)	Ch. 65, p-712	Shirasula, Ardhava bhedaka, Suryavarta, Karnaroga
37.	Dasamoola Taila (Bruhat) ditiya	Ch. 65, p-712	Shirasula, Karna Sula, Netra Sula
38.	Dasamoola Taila (Mahat)	Ch. 65, p-713	Shiroroga, Sotha, Vrana

39.	Dasamoola Taila	Ch. 65, p-713	Shiroroga, Asthi Sula
Dosage form - Ghrita			
40.	Dasamoolasatpalaka Ghrita	Ch. 5, p-134	Jwara, Plihabrudhi
41.	Kunkumadi Ghrita	Ch. 14, p-311	Kasa, Swasa, Rajajakshma, Ksina, Raktapitta
42.	Dasamoolasatpalaka Ghrita	Ch.15, p-327-328	Hrutsula, Parswa Sula, Hikka, Swasa
43.	Panchagavya Ghrita	Ch. 25, p-372	Apasmara, Jwara, Sotha, Gulma
44.	Mahachaitas Ghrita	Ch. 25, p-372	Apasmara, Jwara, Swasa, Kasa
45.	Dasamooladya Ghrita	Ch. 26, p-389	Vatavyadhi
46.	Sukumar Ghrita	Ch. 34, p-497	Mutrakruchhra, Banksana Sula, Medhra Sula
47.	Mayuradya Ghrita	Ch. 65, p-711	Shiroroga, Ardita, Karna roga
48.	Mayuradya Ghrita	Ch. 65, p-711	Shiroroga, Manyasthambha, Netraroga, Apasmara
49.	Chhagaladya Ghrita	Ch. 74, p-794	Vatavyadhi, Kustha, Daurbalya
Dosage form - Arista			
50.	Dasamoolarista	Ch. 74, p-796	Vatavyadhi, Udararoga, Kustha, Mutrakuchhra ¹⁰

Therapeutic uses of Dasamoola

The Dasamoola formulation has been used in Swasa (Bronchial asthma), Kasa (Cough), Shiroroga (disease-related Brain), Tandra (Drowsiness), Sotha (Inflammation), Anaha (distended abdomen), Parswa sula and Aruchi (Anorexia)¹¹.

CONCLUSION

Nowadays, Dasamoola has been used in different dosage forms to treat various ailments. These are collectively used in Amavata, Sandhivata, Swasa, Kasa, Sotha etc. These can be attributed to their high flavonoids, steroids, tannins and triterpenoids. Till now, no such type of research work has been carried out about the combination form of Dasamoola. So, it required extensive research for the individual dosage form of Dasamoola for the benefit of the public and researchers.

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