



## Review Article

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## A COMPREHENSIVE STUDY OF PUSHKARMULA (*INULA RACEMOSA* HOOK. F.) IN BRIHATTRAYI AND LAGUTTRAYI: A REVIEW

Vashisht Kiran<sup>1\*</sup>, Singh D. C.<sup>2</sup>, Thakur Vivek<sup>3</sup><sup>1</sup>Ph.D. Scholar, Department of Dravyaguna, Faculty of Ayurveda, I.M.S, B.H.U, Varanasi, India<sup>2</sup>Professor and HOD, Department of Dravyaguna, Uttarakhand Ayurved University, Rishikul Campus, Haridwar, Uttarakhand, India<sup>3</sup>M.D. Scholar, Department of Rasa-Shastra & Bhaishjya Kalpana, Uttarakhand Ayurved University, Rishikul Campus, Haridwar. Uttarakhand, India

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**\*Corresponding author**

E-mail: vashishtkiran312@yahoo.com

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**ABSTRACT**

Brihatrayi (Greater triad) and Laghutrayi (Lesser triad) are excellent, highly esteemed and extensively used sources of Ayurvedic knowledge. Brihatrayi comprises Charaka Samhita, Sushruta Samhita and Astanga Hridaya and Laghutrayi comprises Madhava nidana, Sharangdhara samhita and Bhava prakasha. There is no reference of Pushkarmula in Vedas, but in Samhita it is used in Swasa & other allied disease and it is stated that Pushkarmula is best medicine for *Hikka, Kasa, Swasa* and *Parshwashula* and also has been included in different groups of drug which are effective in *Swasa roga*. This article reviews the various references of Pushkarmula in Brihatrayi and Laghutrayi regarding its different formulations and its prime therapeutic indications.

**Keywords:** Brihatrayi kala, Laghutrayi, Pushkarmula (*Inula racemosa* Hook F.)

**INTRODUCTION**

Drug consists of the dried root *Inula racemosa* (Hook f.) family Asteraceae. It is a stout herb or undershrub, upto 1.5 meters tall, distributed in North-western Himalayas from Kashmir eastwards, at an altitude between 1600-4200 meters and also cultivated in Himachal Pradesh, Uttarakhand and Sikkim.<sup>1</sup>

*Inula racemosa* (Hook f.) is a tall, stout perennial herb. Its stem erect, .03m-1.5m high. It has simple, alternate, opposite or whorled leaves. Leaves are membranous, irregularly toothed; basal one very large, 0.6-1.2m long, triangular, with a long lobately winged stalk. Stem leaves are smaller. Flowers heads, stalk less, hard, rounded, 3.8-5 cm. dia., 2-5 forming axillary and terminal clusters. Bracts surrounding the heads many, ovate-lanceolate, long, pointed, rigid, bent back, hairless. Corolla 2 cm. long, tubular, dark blue-purple or almost black. Stamens free. Another tails fringed. Achene- 3mm. long curved and compressed. Pappus hairs 1.7cm long, brown, all feathery. Fruit

achene, up to 8mm long, compressed, curved, tip narrowed, with 1 rib on each face, top contracted, cupped. Root is stout, up to 60cm long brownish with longitudinal streaks and furrows with reticulate surface, having characteristic odor.<sup>2</sup>

It act as *Vataghna, Kaphaghna, Jwaraghna, Shothaghna, Ruchya, Swasaghna, Anulomana, Uttejaka, Vranaropana, Vamaka, Deepana, Paachana* and *Parshvashulahara*.<sup>3</sup>

**Pushkarmula (*Inula racemosa* Hook F.) in Brihatrayi****Charaka Samhita: - (1000 B.C.-4<sup>th</sup> A.D.)<sup>4</sup>**

It is first of three most important treatise of Ayurveda, which are jointly known as Brihatrayi. In "Charaka Samhita" Pushkarmula has been described in *Hikkanighrahana Mahakashaya* and *Swashhara Mahakashaya*. In *Agraya prakarana Charaka* has mentioned Pushkarmula best for *Hikka, Kasa, Swasa* and *Parshwashula*. This is used as an ingredient of many preparations for external and internal medication.

**Table 1: Pushkarmula as an ingredient of many preparations in Charaka Samhita**

S. No.	Name of preparations/ Gana / Group of Drugs	Indication	Reference
1.	Hikka Nighrahana Mahakasaya	Hikka Prashaman	C.S.Su. 4/ 30
2.	Swasahar mahakasaya	Swasa Chikitsa	C.S.Su. 4/ 37
3.	Pradhana aushadhi dravya ke hitkar ahitkar karma	Swasa-kasa-hikka- parsva-shula Chikitsa	C.S.Su.25/ 40
4.	Shatyadi Varga	Parsva-shula, Swasa	C.S.Chi. 3/ 211
5.	Baladi Ghrita	Shira-shula Chikitsa	C.S.Chi. 2/ 225
6.	Agurvadi Taila	Sheet-jwara Chikitsa	C.S.Chi. 3/ 267
7.	Lodhrasava	Prameha Chikitsa	C.S.Chi. 6/ 41
8.	Durvadya Ghrita	Rajyakshma, Shirahshula	C.S.Chi. 8/ 108
9.	Yakshma nashak Ghrit	-do-	C.S.Chi. 8/ 101
10.	Shatyadi Churna	Hikka. Swasa	C.S.Chi. 17/ 123
11.	Chitrakadi Leha	Kasa	C.S.Chi. 18/ 53
12.	Hingugranthyadi Churna	Pliha, Udara roga	C.S.Chi. 26/ 22
13.	Katphaldi Kwath	Kapha janya Hridaya roga	C.S.Chi. 26/ 97

**Sushruta Samhita: - (1000 B.C.-2<sup>th</sup> A.D.)<sup>5</sup>**

Sushruta Samhita authorised by Vriddha Sushruta is the next most important treatise of Ayurveda, Sushruta was basically a surgeon, yet he has discussed etiology, diagnosis and treatment of diseases in a very scientific way in his treatise.

He also recognized Pushkarmula as an important drug for clinical practice. As an ingredient of specific formulation or as a member of various groups of drugs in Sushruta Samhita are cited below:

**Table 2: Pushkarmula as an ingredient of many preparations in Sushruta Samhita**

S. No.	Name of preparations/ Gana / Group of Drugs	Indication	Reference
1.	Puskar guna	Rakta pitta nashak	S. S. Su. 46/173
2.	Aptantraka nasak ghrita	Maha vata vyadhi	S. S. Chi. 5/21
3.	Hinguvadi churna	-do-	S. S. Chi. 5/28
4.	Dhanvantari ghrita	Prameha pidika	S. S. Chi 12/5
5.	Kalshisadi ghrita	Jeerna jwara	S. U. 39/ 225
6.	Pushkarmuladi churna	Parshwashula	S. U. 42/ 120
7.	Talishyadi churna	Shwasa	S. U. 51/ 27
8.	Devdarvyadi kwath	Udavarta chikista	S. U. 55/ 45
9.	Panchgavya ghrita	apasmaarnasak	S. U. 61/ 35

**Ashtanga Hridaya: (7<sup>th</sup> A.D.)<sup>6</sup>**

This is third most important treatise among Brihatrayi, written by Acharya Vagbhata. Subjects are very precisely collected and described in this book. Vagabhata followed Charaka and Sushruta regarding importance and use of Pushkarmula. References of Pushkarmula traced in this treatise are mentioned below:-

**Table 3: Pushkarmula as an ingredient of many preparations in Ashtanga Hridaya**

S. No.	Name of preparations/ Gana / Group of Drugs	Indication	Reference
1.	Vata Kapha Jwara Nasaka	Vata Kapha Jwara Shamana	A.H.Chi. 1/166
2.	Agastyaharitaki	Kasha	A.H.Chi.3/128
3.	Dashmula Ghrita	-do-	A.H.Chi.3/56
4.	Kasa Nashaka Peya	-do-	A.H.Chi.3/20
5.	Kasa Nashaka Leha	-do-	A.H.Chi. 3/31
6.	Guduchyadi Yoga	-do-	A.H.Chi. 3/53
7.	Chavyadi Ghrita	-do-	A.H.Chi. 3/158
8.	Pushkarmuladi Ghrita	Hridya roga Nashaka	A.H.Chi. 6/30
9.	Hinguvadi Churna	Gulma Nashaka	A.H.Chi. 14/31
10.	Daha Shula Nasaka Kwath	Daha shula Nashaka	A.H.Chi. 14/49
11.	Maha Panchgavya Ghrita	Apasmara	A.H.U. 7/20
12.	Roga Shamaka	Parshwashula hara	A.H.U. 40/56
13.	-	Visha Nashaka	A.H.U. 36/56

**Pushkarmula (*Inula racemosa* (Hook F.) in Laghutrayi**

**Madhava Nidana (7<sup>th</sup> A.D.)<sup>7</sup>**

It is first of three most important treatise of Ayurveda, which are jointly known as Laghutrayi. In Madhava Nidana Pushkarmula has not been described.

**Sharangdhara Samhita: - (13<sup>th</sup> A.D.)<sup>8</sup>**

It is second of three most important treatise of Ayurveda, which are jointly known as Laghutrayi. In this Samhita Pushkarmula has been described in many diseases as an ingredient of different preparation. The detail descriptions are cited below:-

**Table 4: Pushkarmula as an ingredient of many preparations in Sharangdhara Samhita**

S. No.	Name of preparation/ Gana / Group of Drugs	Indication	Reference
1.	Brihata kshudrayadi kwatha	Vishama jwara	Sa.S.M.2/52
2.	Kshudrayadi kwatha	Swasa, Kasa	Sa.S.M.2/83
3.	Gridrasi nasak kwatha	Gridrashi	Sa.S.M.2/86
4.	Shudarshana churna	Sarva jwara nasaka	Sa.S.M.6/34-35
5.	Katphaladi churna	Jwara, Swasa, Kasa	Sa.S.M.6/39
6.	Brihata Katphaladi churna	Jwara, Swasa	Sa.S.M.6/41
7.	Dvitiya katphaladi churna	-do-	Sa.S.M.6/43
8.	Yavaksharayadi churna	Pancha Kasa	Sa.S.M.6/45
9.	Narayana churna	Jwara, kasa	Sa.S.M.6/83-91
10.	Lavangtriyadya churna	Yakrita, pliha	Sa.S.M.6/101
11.	Tumbroyadi churna	Shula	Sa.S.M.6/107
12.	Hinguvadi churna	Udar shula, Vata roga	Sa.S.M.6/121

**Bhavaprakasha Chikitsa: - (16<sup>th</sup> A.D.)<sup>9</sup>**

This is third most important treatise among Laghutrayi, written by Acharya Bhava Mishra. In Bhava prakasha Pushkaramula is mentioned under Haritakyadi Varga with the following synonyms such as – Pushkara, Padmapatra and Kashmira Kustha. In Bhava prakasha Pushkaramula has been described in form of different preparations as an ingredient which are indicated in various diseases mainly in Vata Kapha Jwara, Shotha, Aruchi, Swasa and Parshwashula etc. are cited below:-

**Table 5: Pushkarmula as an ingredient of many preparations in Bhavaprakasha**

S. No.	Name of preparation/ Gana / Group of Drugs	Indication	Reference
1.	Sudarshna Churna	Vishama Jwara	B.P.Chi.1/126
2.	Chaturbhadra Avelaha	Jwarajanya Kasa, Swasa	B.P.Chi.1/379
3.	Astanga Avelaha	Kaphaja Jwara	B.P.Chi.1/380
4.	Brihata Pippalayadi Kwatha	Pittaja Jwara	B.P.Chi.1/408
5.	Astanga Avelaha	Sannipataja Jwara	B.P.Chi.1/559
6.	Astadasangha Kwatha	-do-	B.P.Chi.1/576
7.	Padamkadi Taila	Jwara	B.P.Chi.1/761
8.	Dasanga Taila	Jwara , Swasa	B.P.Chi.1/844
9.	Swasa roga nasaka yoga	Swasa	B.P.Chi.14/36-38
10.	Tandra nasaka yoga	Murchha	B.P.Chi.19/45
11.	Hinguvadi Churna	Vata Vyadhi	B.P.Chi.24/111
12.	Maha Saindhavadi Taila	Pakshaghata, Urustambha	B.P.Chi.25/47
13.	Hinguvadi Churna	Aamavata	B.P.Chi.26/31
14.	Brihata Saindhavadi Churna	-do-	B.P.Chi.26/117
15.	Tumbarauadi Churna	Shula, Gulma	B.P.Chi.30/45
16.	Hinguvadi Churna	Gulma	B.P.Chi.32/30
17.	Hridaya roga nashaka	Hridaya roga	B.P.Chi.34/12
18.	Punarnavadhya Taila	Ashmari chikitsa	B.P.Chi.37/95
19.	Narayana Churna	Mandagni	B.P.Chi.41/50

**DISCUSSION**

*Inula racemosa* (Hook f.) is the original source of Pushkarmula. There is no reference of Pushkarmula in Vedas, but in Samhita it is use in Swasa & other allied disease and it is stated that Pushkarmula is best medicine for Hikka, Kasa, Swasa and Parshwashula and also has been included in different groups of drug which are effective in Swasa roga. In classics, Pushkarmula has been mentioned in those medications useful in respiratory diseases as a lepa/pralepa/avelaha. The Asteraceae family comprises approximately 1000 genera and 30,000 species, distributed throughout the globe, of which, approximately 177 genera and 1052 species are found in India.<sup>10</sup> *Inula racemosa* is a critically endangered species due to the fragile nature of its habitat, and its exploitation due to commercial medicinal properties. The species is facing the onslaught of indiscriminate over exploitation, habitat destruction and competition. The populations of the species in the entire north western Himalayan range are witnessing a speedy decline in density, dwindling both in size and number.<sup>11</sup>

**CONCLUSION**

The present review on Pushkarmula of both Brihatrayi and Laghutrayi can be useful to know about different formulations of Pushkarmula. By this way we can use Pushkarmula in the treatment of different diseases. Most of the Samhita Grantha have mentioned it in the treatment of Kasa, Swasa (respiratory disease), Hridaya roga, Vata vyadhi (epilepsy), Jwara (fever) and Vrana prasada (wound healing). It is use as Rasayana also. In this regard, further studies need to carry out to explore Pushkarmula for its therapeutics potential in preventing and treating diseases.

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