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Review Article

### MEDICINAL VALUE OF *INULA RACEMES* HOOK. F. (PUSHKARMOOLA)

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#### ABSTRACT

*Inula racemosa* hook.f. is herb (plant) is used in traditional medicine in India for a long time .it is used in drugs by pharma industries for its antispasmodic, anti asthmatic and cardiac tonic properties. This is a member of Asteraceae family. It is commonly known as Puskaramula in Sanskrit and Pokharmula hindi. It is a tall, stout herb found in western Himalayas between 5000 to 14000 ft altitude. The great ayurved physician Charaka has indicated it "PUSKARMULAM HIKKA KASA SWAS PARSWASULA HARANAM"<sup>1</sup> means this is the best drug of Hikka (Hiccups), Swas (Asthma), Parswa sula (both side chest pain). But now these days iris Germanica, *Inula royeliana*, *Hedichyum spicatum* are using instead of *Inula racemosa* by the pharma industries and ayurveda physicians during their clinical practice.

**Keywords:** *Inula racemosa*, Pokharmula, Hikka, Parswasula, Iris germanica, *Inula royelina*, *Hedichyum spicatum*.

#### INTRODUCTION

The Indian system of traditional medicine is a part of a time honored and time tested culture that still intrigues people today. The traditional system of medicine means of Ayurveda, is a medical science practiced for a long time for living disease free life. It depends on medicinal plants for the management of various disease. Among these herbs *Inula racemosa* is a powerful herb for ayurveda medical science and as well as pharma industry also. The controversy about the identification of Puskaramula is as old as ayurveda science. It is not found in vedic literature. First it mentioned as a variety of kustha in holy granth AGNI PURAN. Acharya Charak introduced it as hikka, swas, parswa shula hara<sup>1,2</sup>. The controversy started about this drug with the concept of substitutes that was introduced by Bhavmisra and Yog ratnakar.<sup>3</sup> It is described by both that either kustha or erand moola may be used as the substitute of puskaramula. Iris germanica, *Inula royeliana*, *Hedichyum spicatum* adulteration are used instead of Puskaramula. Puskaramula is used for Swas and Hikka mainly in classical texts. Later on its role also identified in Hrid rog (angina) and Vataj Hrid rog (HHD)<sup>5</sup>. Roots are bitter, acrid, thermogenic, cardiotoxic, expectorant, alexipharmic, anodyne, anti inflammatory, digestive, carminative, aphrodisiac, febrifuge and tonic<sup>1</sup>. One more interesting note that, through HPLC finger printing *Inula racemosa* and *Saussuria lappa* C.B. Clarke both are having similar compounds<sup>4</sup>.

During review of literature it's noticed that Puskaramula is not used for skin diseases whereas *Saussuria lappa* is externally used for various skin diseases.

#### SCIENTIFIC CLASSIFICATION-

Kingdom – Plantae  
Phylum - Magnoliophyta  
Class - Magnoliopsida  
Order - Asterales  
Family - Asteraceae  
Tribe – Inulae  
Genus – *Inula*  
Species – *Inula racemosa*

#### VERNACULAR NAMES<sup>4</sup>-

English – Indian elecampane, sunspear  
Hindi - Pokharmul  
Sanskrit – Puskaramula, kasmira, padma, sugandhikam  
Telugu – Pushkaramulam  
Gujrati – Pokharmul  
Kannada – Puskarmul  
Cashmini – Poshkar  
Malayalam- Puskkarmulam  
Marathi – Pushkarmul  
Tamil - Puskkarmulam

#### SYNONYMS –

Kasmira, Padmapatra, Puskaramula, Kustha, Bheda, Ciram, Jiham, Tirtha, Dhira, Padma, Puskarahava, Brahmatirtha, Mulam, Vatahva, Phala Patra, Viram, Swasari,

Sugandhikam, Mula, Pushkarjata<sup>3</sup>. These synonyms are found in various Ayurveda nighantus.

**CLASSIFICATION CATEGORIZATION –**

Charak- Swashara, Hikkani-grahana<sup>1</sup>  
 Susruta – Phala Vagra  
 Vagbhatta - Hidhma Nigrahana (A.H.)  
 Swas Samaka (A.S.)

**BOTANICAL DESCRIPTION -**

Plant is a tall, stout herb stem is 0.3 to 1.5 mt., high, rough, grooved and all vegetative parts are scabrid tomentose. Basal leaves- 20 - 45 x 12.5 – 20 cm. lower leaves are narrowed to a winged leaf stack. Upper leaves are lanceolate and stem clasping. The abaxial laminal face is densely tomentose. Radical leaves are broad 20-45 x 12.5 -20 cm. broad and elliptic lanceolate shaped with long stalked. The cauline leaves are smaller, oblong and semi apiculate. Stem leaves oblong, half stem clasping usually deeply lobed at the base. Flowers – in heads /racemes, very large 3.8 to 5 cm in diameter. Outer bracts broad, tips triangular, bent back, inner bracts linear, sharp pointed. These are shady yellow daisies produced in mid to late summer. These borne on apical spike like cluster. Fruits -the fruits are slender, hairless, achene 4 mm long, pappus 8 mm long and reddish in colour. Root – root stock branched, fresh roots are irregularly fusiform. Roots have a dull brownish skin with yellowish colour inside. They possess a sweet and somewhat camphoraceous odour and have a bitter taste.

**DISTRIBUTION –**

*Inula racemosa* is distributed at temperate and alpine western Himalayas at an altitude of 5000 to 14000 ft. from Kashmir to Kumaon, Afghanistan to Nepal. It is also found wild among strong alpine scrub vegetation in cold Laddakh (Leh) region of Kashmir.<sup>14</sup>

It 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.<sup>16</sup>

**AYURVEDIC PROPERTIES -<sup>3,4,7</sup>**

Ras – Tikta, Katu  
 Guna – Laghu, Tikshna  
 Virya – Ushna  
 Vipaka – Katu  
 Karma – Kapha Vatahara, Hrdya, Dipana.

**INDICATIONS-**

This is indicated in Hikka (Hiccups), Kasa (Cough), Swas (Asthma), Parswula (both side chest pain), Hrid rog (Cardiac disease, angina & HD), Aadhmaan (Gastritis) and Pandu (Anaemia).<sup>3,4,5</sup>

**USEFUL PART- Root**

DOAGE – Powder 1-3 gm.

**IMPORTANT PREPARATIONS –**

1. Puskarmulasava
2. Puskaradi Churn
3. Puskaradi kalk
4. Puskaradi Kasaya
5. Brhat Yograj guggulu
6. Haritakyadi churn
7. Kankayan gutika

8. Kumaryasav
9. Dasmularista
10. Lodhrasava
11. Mahanarayan Taila

**PHYTOCHEMICAL STUDIES-  
 CHEMICAL CONSTITUTES –**

*Inula racemosa* has Alantolactone, isoalantolactone, inulinolide (Germacranolide), dihydroisoalantolactone, B-sitosterol, D-mannitol, dihydroxyninulinolide, neo-alantolactone, inulinolide, sesquiterpene lactone (inulinol), alantodiene etc.

**ETHNOMEDICINAL USES –**

*Inula racemosa* root is used as an expectorant and resolvent in indurations. It is described as rasayan (rejuvenator and immunomodulator) by Ayurveda Acharyas and used for this purpose by Ayurveda physicians. According to Bhav Prakash it is tikta (bitter pungent) in taste. When it is administered it mitigates vata-kaphaj jwara, sotha, aruchi, swas and parswasool.<sup>3</sup>

It is specific medicine for cough, dyspnea, asthma, pleurisy, tuberculosis and chest pain, special pre-cardiac pain, the roots are given orally in rheumatic pains and liver problems. The liniment is externally used for relieving pain.

The root of *Inula racemosa* is an important ingredient of several polyherbal formulations those are for cardiac disease and inflammatory conditions of spleen and liver. Besides this a compound of *Inula racemosa* root and *Comiphora mukul* called Pushkar Guggulu is a popular anti-obesity, hypolipidemic is indicated in cardiac ailments.

**THERAPEUTIC USES –**

1. HRID ROG – powder of *Inula racemosa* should be taken with honey for heart disease.
2. PARSWA SULA – pushkar mula churna is given with honey.
3. KASA-SWAS- Powder of *Inula racemosa* root should be taken with dash mool kasaya.
4. DIURETIC – Its powder should be taken with lukewarm water.
5. Powder of *Inula racemosa* is used as a tooth powder for tooth ache and various disease of teeth.
6. Powder of *Inula racemosa* is used externally for abscess and boils.

**CONCLUSION**

The plant *Inula racemosa* (Puskarmula) is found at temperate and alpine western Himalaya at 5000 to 14000 ft. Traditionally this plant is used since Agni Puran to upto now days for the treatment of many diseases. Now a days many experiments studies proves many medicinal values and use of *Inula racemosa* in number of diseases. It can be concluded that the drug *Inula racemosa* proved extensive medicinal value for the treatment of so many diseases.

**REFERENCES**

1. Charak Samhita, Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi Chaukhambha Sanskrit Pratishthan Delhi Reprint: 2006 Volume -1; P.338

2. Chuneekar K.C. and Pandey G.S. Bhav Prakasa Nighantu, Chaukhambha Bharati Academy, Varanasi.Reprint:2006 P: 94-96
3. Charak Samhita,Acharya Vidyadhar shukla & Prof.Ravi Dutt Tripathi Chaukhambha Sanskrit Pratishthan Delhi Reprint:2006 Volume -1; P.P.75,76
4. J.L.N.Shastry ,illustrated Dravya guna Vigyan Vol. 2 .Chaukhambha Orientalia ,Varanasi.Edition :2010.P. 298
5. Pro.P.V.Sharma Dravya guna Vigyan Vol. 2 Chaukhambha Bharati Academy, Varanasi P. 296
6. Rustomjee Naserwanjee Khory & Nanabhai Nawrosji Kattrak , Materia Medica of India and Their Therapeutics
7. Prof. P.V.Sharma, Dhanwantri Nighantu comentry, Chaukhambha Orientalia ,Varanasi.P.P. 27.
8. Chauhan N.S. ,Medicinal and Aromatic plants of Himachal Pradesh ,Indus Publishing Company,New Delhi .P -632
9. Aswal B.S. and Mehrotra ,B.N.,Flora of Lauhal – Spiti(A Cold Desert in North West Himalaya) , Bishen Singh,Mahendra Pal Singh , Deharadun, 1994 P – 761
10. Tan R.X., Tang H.Q. HUJ and Shuai B. Lignans and sesquiterpene lactones from Artemisia sieversiana and Inula racemosa phytochemistry.1998,49,157-161.
11. Mishra A.K.Liu, C.H.He.B. and Tan ,R.X. Efficacy of isolantolactone ,a sesquiterpene lactone from Inula racemosa as a herbal fungitoxicant to control take all disease of wheat.Int.Pest Control 2000,42,131-137
12. Chaturvedi P.Sukhla ,S.Tripathi,P.Chaurasia,S. Singh,S.K. and Tripathi Y.B.,Comperative study of Inula racemosa and Saussurea lappa on the glucose level in albino rats Ancient sci Life,1995,15,62-70
13. Kala C.P. Medicinal Plants of Indian Trans Himalayan,Bishan Singh,Mahendra Pal Singh,Dehradun,2003,p.200
14. Kirtikar K R and Basu B D Indian medicinal Plants, Bishan Singh,Mahendra PAL Singh,Dehradun,1991,1351-1352
15. Ojha Side effects of Inulla racemosa root on cardiac function and oxidative stress against isoprotenol induced myocardial ifracture ,Indian J. Biochem Biophys,2011,48,22-28.
16. Sharma Shashi and Sharma Rajendra Kumar , Seed Physiological aspects of Pushkarmool , a threatened medicinal Herb ,Current Science,Vol.99 no12 Page-1801-1806.

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