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Review Article

MEDICINAL IMPORTANCE OF INGUDI (*BALANITES AEGYPTIACA LINN. DELILE*): A HISTORICAL PLANT

Kumar Sanjeev^{1*}, Singh Deepika², Dwivedi Kamal Nayak¹

¹Department of Dravyaguna, I.M.S. B.H.U. Varanasi, U.P., India

²Department of Kayachikitsa, I.M.S. B.H.U. Varanasi, U.P., India

*Corresponding Author Email: Drsanju38@gmail.com

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ABSTRACT

Ingudi (*Balanites aegyptiaca* Linn. Delile) known as ‘Desert Date’ is a small evergreen tree. It is traditionally used in the treatment of various ailments i.e. jaundice, intestinal worm infection, wounds, malaria, syphilis, epilepsy, dysentery, constipation, diarrhea, hemorrhoid, stomach aches, asthma, fever etc. This review summarizes the medicinal efficacy of Ingudi (*Balanites aegyptiaca* Linn. Delile).

Keywords: Ingudi, Abhigyan Shakuntalam, Ayurveda, Nighantu, Kalidas.

INTRODUCTION

Man, the superior most of all species has always been remaining in a search of One Prime Goal: “The positive health”. From Vedic era to space age, all the researches have been directed by the eminent scholars to achieve the same; ancient Acharyas and modern scientists in this era tried and still trying their best to keep the man young and virile. Veda’s the source of divine knowledge has been enlighten the path of complete solace since ages. Since inception, plants remained as important source of medicine in our country which is evidenced through their uses in traditional system of medicine i.e. Ayurveda, Siddha, Unani, Homeopathy and Chinese medicine (Mukherjee, 2010). The earliest documentation about the usage of plant remedies comes from India as evident from Rigaveda (2000 BC) where Auðadhi sukta includes a good number of plants for various ailments. Realizing the importance of medicinal plants as a natural source of newer medicines, now the world is moving towards the plant based medicine or phytomedicines that repair and strengthens bodily systems (especially the immune system, which can then properly fight foreign invaders) and help to destroy offending pathogens without toxic side effects. History of drug can be studied under Vedic, Upanishad, Purana, Samhita, Nighantu and modern periods. Recent time has witnessed a resurgence of interest in the sagacity and veracity of our monumental heritage. Ingudi (*Balanites aegyptiaca* Linn. Delile) has played a major role in the rich and diverse help of India. We find references that Shakuntala always used this plant to treat wounds sustained by deers in forests (Abhigyan Shakuntalam 4/14 Anka). It is a small evergreen tree rarely reaching 9 m. Young parts pubescent, twigs armed with stout axillary or supra axillary spines, 1-6 cm. long. Found in forest outskirts in drier parts of peninsular India, Rajasthan and from South-East Punjab to West Bengal, Sikkim. Distributed in drier parts of Africa, Pakistan, Egypt. Ingudi (*Balanites aegyptiaca* Linn. Delile) is an evergreen, woody, true xerophytic tree of tremendous medicinal importance. The plant is a hardy; species can thrive in semi arid and arid conditions. It can grow on soils that are sandy, heavy clays, alluvium or gravel and can stand salinity and alkalinity. It can be propagated by root-suckers or through seeds by direct sowing or nursery raised seedlings. The seeds are sown during June-July and 15-30 cm high nursery raised

seedlings are transplanted in the field. Since bulk of the drug material is collected from the wild, no serious efforts are made for its cultivation.

Taxonomy of Ingudi

Kingdom -	Plantae
Subkingdom -	Tracheobionta
Superdivision -	Spermatophyta
Division –	Magnoliophyta
Class –	Magnoliopsida
Subclass -	Rosidae
Order -	Sapindales
Family -	Simaroubaceae
Genus -	Balanites
Species -	Aegyptiaca
Latin name:	<i>Balanites aegyptiaca</i> Linn ^{1,2}

The medicinal virtues of this plant are mentioned in Abhigyan Shakuntalam and Ayurvedic literature viz. Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhavprakash nighantu, Priya nighantu, Hridayadeepak nighantu, etc. This plant finds a prominent place in Abhigyan shakuntalam also. Many of its medicinal properties have been kept secrets by the traditional herbal practitioners³. We can summarize therapeutic uses of different parts of Ingudi (*Balanites aegyptiaca* Linn. Delile) in following (Table 1-5). Ingudi (*Balanites aegyptiaca* Linn. Delile) seed oil has been most extensively used as a healing agent for thousands of years (Abhigyan Shakuntalam by Kalidas 4/14). Therapeutic activity and literary data of Ingudi (*Balanites aegyptiaca* Linn. Delile) were explored from Sanskrit literature (Abhigyan Sakuntalam 4/14), Ayurvedic Literature viz. Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Nighantus viz. Bhavaprakash nighantu, Hridaya deepak nighantu, Priya nighantu etc and also from articles published in journals.

CONCLUSION

The ancients put their maximum effort to treat these conditions. The use of plants as food and medicine is based on initial observation on animals first and many times experience on human beings. In India, the first recorded use

of plants for human welfare is seen in Veda. The study revealed that almost all parts of Ingudi (*Balanites aegyptiaca* Linn. Delile) have immense medicinal potential; either the seed or seed oil form an essential constituents of many Ayurvedic preparation. Indigenously the seed oil have wider

application in the treatment of kustha, svitra (skin disorder) krimi (germicidal) vrana (wound healing) Siro-roga (Migrane), Madhumeha (Diabetes mellitus), Mushikavisha (micebite), Mutrakriccha (Burning micturation), Jvara (Fever), Swasa roga (Respiratory diseases).

Table 1: Ingudi in Charaka Samhita

S. No	Name	Formulation Name	Karma	Reference
1	Ingudi	Lauhadi rasayana	Krimihara	C. Ci 1-3/15
2	Ingudi	Sarsapadi taila	Kustha	C. Ci 7/119
3	Ingudi	Manashiladi dhuma	Kasa	C. Ci 18/69
4	Ingudi	Ingudi-dhuma	Dhumapanas	C. Ci 18/75 ⁴

Table 2: Ingudi in Sushruta Samhita

S. No	Name	Formulation Name	Karma	Reference
1	Ingudi	Ingudi Taila	Kustha,	S. Su.45/118
2	Ingudi	Agargodhika yoga	Romanasaka	S. Ci.1/108
3	Ingudi	Kalayanaka lavana	Krimi,Gulma Prameha, Aesa	S. Ci.4/32
4	Ingudi	Vikankatadi lepa	Kaphaja granthi	S. Ci.18/13
5	Ingudi	Karanjadi Taila	Medaja granthi	S. Ci.18/19
6	Ingudi	Ingudi Taila	Vrana ropana	S. Ci.18/28
7	Ingudi	Panchangi varti	Kapha nasaka	S. Ci.22/55
8	Ingudi	Saladi dhuma	Mukharoga	S. Ci 22/69
9	Ingudi	Karanjadi lepa	Parilehi karnapali	S. Ci. 25/22
10	Ingudi	Ingudi Taila	Dustavranas	S. Ci 31/5
11	Ingudi	Brihatyadidhuma varti	Kasa	S. Ci 40/4
12	Ingudi	Inguda kalka	Dusika dansa	S. Ka.7/12
13	Ingudi	Vidangadi duma	Kaphaja timira	S. Ut 17/42
14	Ingudi	Ingudi Taila	Kaphaja Karnasula	S. Ut.21/31
15	Ingudi	Sarladi varti	Kaphaja-Pratisyaya	S. Ut 24/33
16	Ingudi	Ingudi Tsvaka churna	Sirovirechana Kaphaja-Siroroga	S. Ut.26/20
17	Ingudi	Raktapittahara yoga	Raktapitta	S. Ut.45/27
18	Ingudi	Mustadidhumvarti	Kapha-Vataj kasa	S. Ut 52/23 ⁵

Table 3: Ingudi in Astanga Hridaya

S. No	Name	Formulation Name	Karma	Reference
1	Ingudi	Manashiladi dhuma	Kaphaja Kasa	A.H. Ci 3/68
2	Ingudi	Kutajadi svedana	Parilehika	A.H. Ut 18/49
3	Ingudi	Vyosadidhuma varti	Dusta Pinasa	A.H. Ut 20/15
4	Ingudi	Ingudadya taila	Kriminasaka	A.H. Ut 24/16 ⁶

Table 4: Ingudi in Astanga Samgraha

S. No	Name	Formulation Name	Karma	Reference
1	Ingudi	Ingudi taila	Arsa,kustha,krimi	A. S. Su 6/105
2	Ingudi	Manashiladi dhuma	Kasa Chikitsa	A. S. Ci.4/47
3	Ingudi	Ingudi taila	Prameha	A. S. Ci.14/3
4	Ingudi	Mahanila ghrita	Vrana, Updansa	A. S. Ci. 22/4
5	Ingudi	Kosamraadi dhUma	Pakva pratisyaya	A. S. Ut 24/47
6	Ingudi	Kakadhanadi lepa	Kaphaja granthi	A. S. Ut 35/20
7	Ingudi	Gunjadaya taila	Medaja granthi	A. S. Ut 35/32 ⁷

Table 5: Rogaghnata (Therapeutic uses)

Roga	Bp.N	K.N	R.N	M.N	N.A	So.N	G.RM	Data Base Medicinal Plants
Kustha	+	+	-	+	+	-	+	+
Krimi	+	+	-	+	-	-	+	+
Vrana	+	+	+	+	-	+	+	+
Sula	+	+	-	+	-	-	+	-
Visha	+	+	-	+	-	-	+	-
Svitra	+	+	-	+	-	-	+	+
Bhuta roga	+	+	-	+	+	-	+	-
Graha	+	+	-	+	+	-	+	-
Jantu	-	-	+	-	-	+	-	-
Granthi	-	-	-	-	-	+	-	-
Agnidagdha	-	-	-	-	-	-	-	+
Siroroga	-	-	-	-	-	-	-	+
Agnimandya	-	-	-	-	-	-	-	+
Udarasula	-	-	-	-	-	-	-	+
Vibandha	-	-	-	-	-	-	-	+
Raktavikara	-	-	-	-	-	-	-	+
Jirnakasa	-	-	-	-	-	-	-	+
Swasa	-	-	-	-	-	-	-	+
Mutrakriccha	-	-	-	-	-	-	-	+
Musakavisa ⁸⁻¹³	-	-	-	-	-	-	-	+

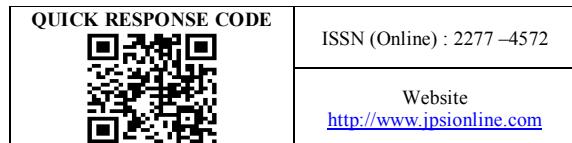
ABBREVIATIONS USED

C.Su.	: Charak Sutrashtan
C.Ci.	: Charak Chikitsasthan
S.Su.	: Sushruta Sutrashtan
S.Ci.	: Sushruta Chikitsasthan
S.Ka.	: Sushruta Kalpasthan
S.Ut	: Sushruta Uttartantra
A.H.Ci.	: Ashtanga Hridaya Chiktsasthan
A.H.Ut.	: Ashtanga Hridaya Uttartantra
A.S.Su.	: Ashtanga Samgraha Sutrashtan
A.S.Ci.	: Ashtanga Samgraha Chikitsasthan
A.S.Ut.	: Ashtanga Samgraha Uttartantra
B.P.N	: Bhavaprakash Nighantu
K.N	: Kaidev Nighantu
R.N	: Raj Nighantu
M.N	: Madanpal Nighantu
N.A	: Nighantu Adarsha
So.Ni	: Sodhala Nighantu
G.R.M	: Gunaratnamala

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