

A Comprehensive Review of Tinduka (*Diospyrosembryopteris Pers.*)

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ABSTRACT: Tinduka is a lesser-known plant which though finds mention in Ayurvedic Classics for its therapeutic uses such as wound healing, styptic, against female disorders and anti-diarrhoeal action. The various parts of Tinduka have different therapeutics. The fruit is stated to be *kapha-pittaghna*, it is astringent sweet and laghu in guna. The decoction of bark is orally taken in *Udarda*, skin affections, urticaria and similar allergic conditions. A paste of bark is also applied on skin diseases, particularly eruptions and glandular affections. This abstract aims to provide a concise overview of Tinduka as described in Ayurvedic and contemporary sciences.

KEYWORDS: Tinduka, ripe fruit, unripe fruit, bark, styptic, astringent, female disorders

INTRODUCTION: The traditional Indian system of medicine encompasses a vast array of medicinal plants that have been utilised for centuries to promote health and well-being. One such plant is Tinduka. It is an evergreen tree, medium-sized or small with many spreading branches forming a shady crown near the ground, quite-glabrous from ebenaceae family.



REVIEW OF AYURVEDIC LITERATURE ON TINDUKA

Table no 1.1 References of Tinduka in Charaka Samhita^[1]

Sr. No	Reference	Form of presentation	Action & Uses
Charaka Samhita- Sutrasthana^[a]			
1.	C.S.Su.4/43	<i>Udardaprashamana Mahakashyaya</i>	Against <i>Udarda</i> (Urticaria)
2.	C.S.Su. 25/40	<i>Tinduka phala</i>	Causes anorexia
3.	C.S.Su.25/49	<i>Asava</i> prepared from the <i>sara</i> (heartwood) of <i>Tinduka</i>	Promotes strength, digestives, alleviates sleepness, anxiety and anorexia
4.	C.S.Su. 27/147	<i>Phala</i>	<i>Kapha-Pittaghana</i> , astringent, sweet and light
Charaka Samhita- Vimansthana^[b]			
5.	C.S.Vi.8/144	<i>KashayaSkandha</i>	Enema treatment in various <i>KaphaPaittik</i> disorders
Charaka Samhita- Shareersthana^[c]			
6.	C.S.S.8/47	<i>Kastha</i> (wood)	In <i>Sutikagaraparicharya</i> used for fire burning
Charaka Samhita-Chikitisasthana^[d]			
7.	C.S.Ci.14/10	<i>Tinduka Phal</i>	Shape of <i>samanyaarsha</i>
8.	C.S.Ci. 30/79	<i>Tinduka</i> along with other drugs like <i>Dhataki</i> , leaves of <i>Amalaki</i> etc <i>sidhatailam</i> , <i>Dhatakyaditailam</i>	Cures sliminess as well as exudation from the genital tract. Acts against <i>yonivyapad</i> like <i>Vipluta</i> , <i>Upapluta</i> . Cures <i>Uttana</i> (prolapse of uterus), <i>unnata</i> (upward displacement of uterus) and odema accompanied with pustular growth as well as pricking pain.

Charaka Samhita- Kalpasthana^[e]			
9.	C.S.Ka.1/8	<i>Tinduka Vriksha</i>	Described under vegetation of Jangal desha
10.	C.S.Ka.12/91	<i>Phala of Tinduka</i>	<i>Maan</i> (unit of weightofmeasureme nt)

Table 1.2 References of Tinduka in Sushruta Samhita^[2]

Sr.No	Reference	Form of presentation	Action & uses
Sushruta Samhita- Sutrasthan^[a]			
1.	S.S.Su.12/25	<i>KandaTwak of Tinduka</i>	<i>Atidaghada pralepana</i>
2.	S.S.Su.38/48	<i>Nygrodhadi gana</i>	<i>Sangrahi, bhagna sandhankara, raktpittahara, dahahara, medohara</i>
3.	Su.S.Su38/	<i>Salasaradi gana</i>	Destroys the <i>krimi</i> of <i>Kushtha</i> , Kapha-medohara and <i>Mehanashak</i> , <i>Panduhara</i> .
4.	S.S.Su.46/163	<i>PakvaPhala</i>	Description of properties of <i>pakvaphala-Kshayarasapradhana</i> , <i>Kaphapittahara</i> , <i>ruksha</i> , <i>madhura</i>
5.	S.S.Su.46/168	<i>Apakvaphala</i> <i>PakvaPhala</i>	Descriptionofpropert ies of <i>Aam phala-Sangrahi</i> , <i>Vatakopana</i> and <i>Pakva phala-Kapha-Vatahara</i>

Sushruta Samhita Chikitsasthana^[b]			
8.	Su.Chi.2/84	<i>Apakvaphalasisidha tailam</i>	<i>Vrana ropana</i>
9.	Su.Chi.11/9	<i>Kwatha</i> of Guduchi, Tinduka, Kashmiri and Kharjura with <i>madhu</i>	<i>Shonitameha chikitisa</i>
10.	Su.Chi.11/12	<i>Kwatha</i> of Tinduka, Kapittha, Shirisha, Palasha, Patha, Murva and Dusparsha with <i>madhu</i>	<i>Hastimeha chikitisa</i>
11.	Su.Chi.21/6	Tinduka along with triphala lodhra, amrataka <i>Siddhatailam</i>	<i>Kumbhika (shukadosha) chikitisa</i>
12.	Su.Chi.21/10	Tinduka along with Dhava, Ashvakarna, Pattanga and Shalaki, <i>siddhatailam</i>	<i>Avamantha (shukadosha) chikitisa</i>
Sushruta Samhita Uttartantra^[c]			
13.	Su.Ut.21/46	<i>Kwatha</i> of Tinduka, Haritaki, Lodhra, Samanga and Amalaki along with Kapittha <i>swaras</i> and <i>madhu</i>	<i>Karnapurana in Karnasrava</i>
14.	Su.Ut.31/5	<i>Ghrita sidha</i> with Dhava, Ashwakarna, Kakubha, Dhataki, Tinduka, drugs of <i>Kakolyadi gana</i>	<i>Rewatipratisheda (graha)</i>
15.	Su.Ut.39/186	<i>Kwatha</i> prepared with Saptacchada, Guduchi, Nimba and <i>Saphurjaka</i> (synonymn of	<i>Kaphaj jwara</i>

		Tinduka)	
16.	Su.Ut.40/41	<i>Kandatwaka</i> of Tinduka along with Aralu, Dadima, Kutaja, Shami	<i>Aamaja atisara</i>
17.	Su.Ut.60/36	<i>Pushapa</i> of <i>Atimuktaka</i> (syonymn of Tinduka) Kunda and Kamal	<i>Yakshya graha shanti</i>

Table no 1.3 References of Tinduka in Ashtang Hridyam^[3]

Sr.No	Reference	Form of Presentation	Action & uses
Ashtang Hridyam Sutrasthana^[a]			
1.	A.H.Su.15/41	<i>Nygrodhadi gana</i>	<i>Vrana shodhana-ropana, sangrahi, bhagna sadhana, meda, pitta asra, trishna, daha, yoniroga nashak</i>
Ashtang Hridyam Chikitisasthana^[b]			
1	A.H.Ch.12/12	<i>Raga/ Shadava</i> preparation made from Kapitha, Tinduka and Jamun	Prameha pathya
Ashtang Hridyam Kalpasthana^[c]			
2.	A.H.Ka.6/26	<i>Phala</i>	<i>Maan</i> (unit of weight of measurement)
Ashtang Hridyam Uttartantra^[d]			
3.	A.H.Ut.32/22	Tinduka <i>swaras</i>	<i>Vyanga rogahara lepa</i>
4.	A.H.Ut.34/10	<i>Tindukadi siddha tailam</i>	<i>In Kumbhika chikitsa</i> after <i>rakta-aveschana</i> of the <i>vrana</i>
5.	A.H.Ut.34/51	Tinduka along with	Relieves <i>yonivyapad</i>

		other drugs like Dhataki, leaves of Amalaki etc <i>sidhatailam, Dhatakyaditailam</i>	like <i>vipluta, uppaluta</i> and <i>safota</i>
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Table no 1.4 list of synonyms of Tinduka in nighantus

Sr. No	Synonyms	A. K. [4]	SK .D. [5]	Dh. Ni. [6]	So. Ni. [7]	M. Ni. [8]	K. Ni. [9]	Bh. Ni. [10]	R. Ni. [11]	Ni. A. [12]
1	Anilasara	-	-	-	-	-	-	-	-	-
2	Asitakaraka	-	-	-	-	-	-	+	-	-
3	Atimuktaka	-	+	+	+	+	-	+	+	-
4	Deerghanakha	-	-	-	-	+	+	-	-	-
5	Grahi	-	-	-	+	-	-	-	-	-
5	Kalasara	-	+	-	-	+	+	-	-	-
6	Kalaskandha	-	-	+	+	+	+	+	+	+
7	Kendu	-	+	-	-	-	-	-	-	-
8	Krishnasara	-	-	-	+	-	-	-	-	-
	Madhura	-	-	-	+	-	-	-	-	-
9	Neelsara	-	-	+	+	-	-	-	+	-
10	Ramana	-	-	-	-	-	-	-	-	-
11	Ravano	-	-	+	+	+	+	-	-	-
12	Rava	-	-	-	+	-	+	-	-	-
13	Safurjaka	-	-	+	+	-	-	+	+	+
14	Safurjana	-	+	+	+	+	+	-	+	-
15	Shitisaaraka	+	+	-	-	-	-	-	-	-

16	Spandhita	-	-	-	-	+	-	-	-	-
17	Spandhano	-	-	+	+	+	-	-	-	-
18	Srushta	-	-	-	-	-	-	-	-	-
19	Susara	-	-	-	-	-	-	-	-	-
20	Syandana	-	-	-	-	-	-	-	+	-
21	Syandanahvaya	-	+	-	-	-	-	-	-	-
22	Tanuka	-	-	-	-	+	-	-	-	-
23	Tinduki	-	-	-	-	+	-	-	-	-
24	Tinduka	+	+	+	+	+	+	+	+	+
25	Tushta	-	-	-	+	-	-	-	-	-
26	Vara	-	-	-	-	-	+	-	-	-
27	Vikarni	-	-	-	-	-	+	-	-	-
28	Visphurjani	-	-	-	-	+	+	-	-	-
29	Virala	-	-	-	-	+	-	-	-	-

Pharmacodynamics of Tinduka

Table no 1.5 Pharmacodynamics of various parts of Tinduka

Sr.No	Pharmacodynamics	Bark ^[13]	Ripe fruit ^[14]	Unripe fruit ^[15]
Rasa	<i>Tikta</i>	+	-	-
	<i>Kashaya</i>	+	+	-
	<i>Madhura</i>	+	+	+
Guna	<i>Guru</i>	+	-	
	<i>Laghu</i>		-	
	<i>Snighdha</i>	+	-	-
	<i>Ruksha</i>		-	+
Virya	<i>Usna</i>		-	-

		+		
	<i>Sheeta</i>	-	+	+
Vipak	<i>Madhura</i>	+	-	-
	<i>Katu</i>	-	+	+

VARIETIES OF TINDUKA

Table no 1.6 varieties of Tinduka in the Ayurvedic texts

Grantha	Variety of Tinduka
Dhanwantari Nighantu ^[16] Raja Nighantu ^[17] Kaiyadeva Nighantu ^[18] Shaligram Nighantu ^[20]	Kakatinduka is considered as variants of Tinduka
Madanpal Nighantu ^[21]	Vishatinduka is taken as variants of Tinduka
Nighantu Sangreha ^[22]	Kakatinduka and tinduka as separate plants
Adarsh Nighantu ^[23]	Mentions another spiny variety that has small fruit, unpalatable astringent taste and pungent; this fruit produces intoxicating effect.

Table no 1.7 Varieties of Diospyros used as Tinduka

Sr no.	Varieties of Diospyros used as Tinduka	English Name
1	<i>Diospyros peregrina</i> (Gaertn.) Gurke syn <i>Diospyros embryopteris</i> Pers <i>Diospyros malabarica</i> (Desr) Kostel	Malabar ebony Rubber ebony Indian Persimon
2	<i>Diospyros melanoxylon</i> Roxb	Coromandel Ebony East Indian Ebony
3	<i>Diospyros paniculata</i> Dalz,	Panicle flowered Ebony
4	<i>Diospyros tomentosa</i> Roxb	Persimon
5	<i>Diospyros montana</i> Roxb	Bombay ebony

6	<i>Diospyros kaki</i> Linn	Japanese Persimon
7	<i>Diospyros lotus</i> Linn	Causian Persimon Date plum Lilac Persimon

Table no 1.8 Some classical therapeutics of bark, unripe and ripe fruit of Tinduka

Sr.No	Therapeutics of Unripe fruit ^[24]	Therapeutics of bark ^[25]	Therapeutics of ripe fruit ^[26]
1.	Sangrahi	Atisaraghna	Sangrahi
2.	Varnahara	vranya	Asravikaranashna
3.	Lekhan	raktastambhaka	Lekhana

CONCLUSION

The review of Ayurvedic literature on Tinduka furnishes ample references to explore its therapeutic uses of diseases. Tinduka by its pharmacodynamic properties of kashaya rasa pradhanata and laghu-ruksha guna acts against kapha vitiation, thus listed to be useful in diseases like kapha pradhanayoni rogas (female disorders) like upapluta, vipluta (correlated with leucorrhoea in contemporary medicine), in prameha disorders like Shonitameha and Hastimeha in particular since it is Kapha-pittashamak. It is vranaya drug since it is styptic due to its Kashaya rasa, it promotes healing of the sadhyovrana (fresh wound) due to its astringent property. Due to its Kashatya rasa pradhanta and laghu ruksha guna it acts against vitiated kapha and pittahence it is useful in skin diseases as well. The decoction of bark is orally taken in *Udarda*, skin affections, urticaria and similar allergic conditions those are kapha pitta pradhana. A paste of bark is also applied on skin diseases, particularly eruptions and glandular affections. Tinduka is atisaraghna due to its Sangrahi karma and kashaya rasa. These classical uses open a room for innovation for exploration of role of the drug, Tinduka in modern day diseases like I.B.S., female disorders, as antiseptic, and as antimicrobial agent. Tinduka is found to be of enormous therapeutic uses as stated in the Ayurvedic and contemporary texts. The drug can be explored further for its uses. The various varieties of Tinduka like *Diospyros malabarica*, *D. cordifolia* etc can be compared amongst themselves for their therapeutic uses.

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