



**REVIEW ARTICLE** 

# Madhura Triphala: A Detailed Review

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# ABSTRACT

*Madhura Triphala* is a combination of three fruits with *madhura* or sweet taste. It includes *Draksha* (*Vitis vinifera* Linn), *Kashmarya* (*Gmelina arborea* Linn) and *Kharjura* (*Phoenix dactylifera* Linn.) which was constituted during the *Nighantu* period. The three fruits are widely used in many *Ayurvedic* formulations. There arises a scope for controversy due to inclusion of *Parushaka* (*Grewia asiatica* Linn.) and (or) *Dadima* (*Punica granatum* Linn.) in place of *Kashmarya*. Present work aims to address *Madhura Triphala* in detail and discuss different aspects of it along with their probable mode of action.

Key Words Madhura Triphala, Draksha, Kashmarya, Kharjura, Dadima, Parushaka

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# **INTRODUCTION**

*Madhura triphala* is a combination of three fruits of predominantly sweet taste. It is said to have properties like *Chakshushya*, *Dipana*, *Ruchya* and acts on *dhatus* especially by increasing *shukra* hence the *Vrishya karma*<sup>1</sup>. It is also proclaimed to be useful in *Vishamajvara*. The reason for controversy probably resulted from differing opinion of authors of *Nighantu*. It may also be due to unavailability of the required drugs across the country and hence substituting it with a drug having similar properties. This has led to confusion about which drug has to be considered.

# MATERIALS AND METHODS

An effort was made to collect all the references pertaining to *Madura Triphala* across *Brihat Trayi, Laghu Trayi* and *Nighantus* followed by interpreting them using their *rasa panchaka* and *karmas*. An overview of description of individual drugs of Madhura triphala is mentioned in table 1:

 Table 1 Morphological description with synonyms in various languages, Rasa-panchaka and phytochemical constitution of individual drugs of Madhura Triphala<sup>2</sup>

Criteria		Draksha <sup>3</sup>	Kashmarya <sup>4</sup>	Kharjura <sup>5</sup>	Parushaka <sup>6</sup>	Dadima <sup>7</sup>
1.	<b>Botanical Source</b>	Vitis Vinifera	Gmelina arborea	Phoenix	Grewia asiatica	Punica granatum
		Linn.	Roxb.	dactylifera Linn.	Linn.	Linn.
2.	Family	Vitaceae	Verbenaceae	Aracaceae	Tiliaceae	Punicaceae
3.	Sanskrit synonyms	Svaduphala,	Gambhari,	Bhumi-	Parapara, Alpasthi	Danatabeeja,
		Gostani,	Shriparni,	kharjurika,		Vrittaphala,
		Phalottama,	Bhadraparni,	Swadwi,		Vrittaphala
		Uttarapatha	Madhuparnika,	Duraroha,		







			Mrudvika, Madhurasa, Rasala, Harahura Abeeja, Parvataja, Karamardika,	Kashmiri, Kashmari, Peetarohini Krishnavrinta, Madurasa, Mahakusumika, Katphala, Hira, Mahakusumika, Sindhuparni, Sindhuveshanam , Sthulatvacha	Mriduchhada, Kakakarkoti, Svadumastaka, Skandhaphala, Svaduphala, Sulemani, Mridula, Dalahinaphala		P
4. me	4. Na English me		Grapes	Gmelina, Goomar Teak, Gumhar, Cashmiri tree, Malay Beechwood, White Teak, Yamanae	Date Palm	Phaisa, Faisa	Pomogranate
		Hindi	Angur, Dakh, Munakka	Gambhari, Khambhari, Kambhar, Gambhar Gamhar, Kumhar, Kasmar	Khaur, Deshi Khajur, Khijur	Phalsa, Dhamin Shukri	Anar, Dadim
		Kannada	Drakshi	Shivani Mara	Kharjura, Ichuli	Vettaha, Dagal, Tadalasa Buttiyudippe	Dalimbe
		Marathi	Draksha, Angur	Shivan, Shivanasal	Khajur Shindi	Phalsa	Dalimb
		Malayalam	Muntiri	Kumbula	Itta	Chadicha	Matalam
		Tamil	Draksha, Kotten	Gumadi, Gummudu Teku	Perich chankay	Unnu	Madalai, madalam
		Telugu	Draksha	Padmagomuru Gumar Tek	Kharjura kaya	Chittiki, Jana, Nallajana,	Dadimakaya
		Gujarati	Dharakh	Shivan	Khajur	Phalsa	Dadam
		Bengali	Maneka, Drakhya	Gamar gachh	Gharar-Khejur	Phalusa	Dadim, Dalim- gachh
		Oriya	Angoor	Bhodroporni, Butalo	Khejuri	Mirgichara, pharasakoli	Dalima, Dalimba
		Assamese	Angoor, Draksha	Gomari	Khajur	Man-bijal	Dalim
		Punjabi	Angoor, Dakh	Phakra	Pinda Khajur	Dhaman	Anar
5.	Charako	okta Varga	Virechanopaga,	Virechanopaga,	Shramahara,	Jwarahara,	Hridya Varga,
			Dahaprashaman	Jwarahara,		Shramahara,	Chhardinigrahana,
			a, Shothahara	Snehopaga,		Virechanopaga	Shramahara Varga
6.	Sushrute	okta Gana	Kakolvadi	Sariyadi, Bruhat	Madhura Varga	Varga Parushakadi	Parushakadi
			Parushakadi	Panchamula			
7.	Bhavapr Varga	akashokta	Amradı Phalavarga	Guduchyadı Varga	Amradı Phalavarga	Amradi Phalavarga	Amradı Phalavarga
8.	Habitat		North-western	Hilly Regions of	Punjab, Sindh	Punjab, Gujarat &	All over India
			India, Punjab, Kashmir,	Himalayas and South India		Some regions of South India	
			Karnataka, Maharashtra,				
			Andhra Pradesh			~ .	
9.	Morpho	logy Habit	Tendril climbing vine	Moderate, deciduous tree	Tall tree with a height of 100 ft.	Shrub or a small tree	Deciduous Shrub/ Small tree







		Root	Tap root	Tap root	Tap root	Tap root	Tap root
		Stem	Weak, symodium climbing by leaf opposed, simple or branched tendrils which represent modified scorpioid shoots	Erect with grayish yellowish corky with white, mealy, pubescent branchlets	Erect, trunk covered with resistant bases of petioles, foot is often surrounded by a dense mass of root suckers	Erect stem with long, slender, drooping branches, and the young branchlets are coated with hairs	Erect with smooth grey and thin bark often armed with small axillary or terminal thorns
	Leaf S a p n r v		Simple, alternate, palmate with multi-costate reticulate veination	10-20cm long, 7.5-15 cm wide broadly ovate, acuminate, entire, glabrous, above when mature, stellately fulvous tomentose beneath base is cordate, or sometimes truncate, and shortly cuneate, Petioles are 5- 5.75 cm long, cylindric, puberculous, glandular at the top	Pinnae is 20-40 cm long, regularly distichous	Simple, 7-17cm long, 6-12cm wide, ovate or suborbicular, acute or subacuminate or cuspidate, sharpely or often coarsely doubly serrate, Petiole cm long, thickened at the top.	Opposite, 2.5-6cm long, oblong- lanceolate / oblanceolate, glabrous, entire, shining above, bright green beneath, Base narrowed into a very short petiole
		Inflor escen ce	Leaf opposed panicles	Densely fulvous- hairy panicle reaching 30cm long	Panicle, Dioecious	Axillary cyme, petals yellow in colour	Solitary, sometimes 2-4 together,
		Fruit	Globose, succulent berry arising in clusters, green when raw, greenish yellow or reddish Black color are 2 main varieties	Drupe, 2-2.5 cm long, ovoid or pyriform, smooth, green when raw, orange- yellow when ripe	Oblong, 25-75mm long, reddish brown or yellow when ripe, pulp is fleshy and sweet,	Berry globose, Green- cherry red or purplish red, becomes dark purple or nearly black when fully ripened.	Globose, 4-7cm diameter tipped with the calyx, rind is coriaceous, woody, interior septate with membranous walls of carpels, each containing numerous seeds, angular from mutual pressure.
		Seeds	Small, hard, woody or no seeds in popular varieties	2- seeds in a fruit,	Seeds are cylindrical with a long furrow in front	Small, hard	With a watery outercoat containing pink juice, and a horny inner coat
10.	Useful part		Fruit	Root bark, fruits	Fruit	Flowers	Fruit bark, Stem, Root bark, flowers
11.	Phytochemical Constituents		Fruit <sup>8</sup> Sugars (15-20%), Acids, gum, tannins, tartaric, citric, racemic	Phenols, tannins, saponins, flavonoids, alkaloids & anthraquinones.	Vitamins, Carbohydrates, Tricin-7-O-B-D- Glucoside & Isohamnetin3-0-	Fruit- Tannin, Leucanthocyanins, Leysin, Prolin, Glutaric acid, Arabinose,	Glucose, fructose, maltose, starch, oxalic acid, carotene, thiamine,

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	& malic acids chlorides of potassium, sodium, sulphate of potash, tartarate of lime, magnesia, alum, iron, albumin <b>Seeds</b> - Dense fixed oil with 5% tannic acid, linoleic acid, Vitamin E, phenolic compounds, flavonoids, proanthocyanidi ns and stilbenes.		B-D-Glucoside	Quercitin & Glucose Seed- rich in linolic acid	riboflavin, nicotinic acid, Vitamin C, pectin, amino acids, citric acid, tannin, punicic acid etc
<b>12.</b> Time of Harvesting	November- March	April-May	Fruiting wise, dependant on the geographical area	May-June	August-October
13. Propagation	Cuttings	Seeds and vegetative methods	Seeds, offshoot and tissue culture	Seeds, Cuttings	Seeds, Hardwood cuttings, Softwood
14. Substitutes	<i>Gmelina</i> <i>arborea</i> Linn. fruits	1)Gmelina asiatica Linn for roots 2) Premna flavescena Ham. for leaves 2) Flowers of Madhuka - Madhuka - Madhuca longifolia J.F.Macbr for fruits	-	<ol> <li>Grewia tena Forsk.</li> <li>2)Grewia flavescens Juss.</li> </ol>	
15. Adulterants	-	<i>Trewia nudiflora</i> Linn.	-	-	-
16. <i>Rasa</i>	Madhura	Madhura , Amla	Madhura	Madhura, Amla, Kashaya	Madhura, Kashaya, Amla
17. Guna	Snigdha , Guru	Laghu, Ruksha	Guru, Snigdha	Laghu, Snigdha	Laghu, Snigdha
18. Veerya	Sheeta	Ushna	Sheeta	Sheeta	Anushna
<u>19. Vipaka</u>	Madhura	Madhura	Madhura	Madhura	Madhura
20. Doshaghnata	Vata- Pitta	Vata-Pitta	Vata-Pitta	Vata-Pitta	Tridosha
21. <i>Nurma</i>	Brimnana, Balya Jwarahara Hridya, Trishnahara Daha shamaka, Vrishya, Mutrala, Ruchya Swarya, Chakshushya	Hridya, Hridya, Trishnahara, DahashamakaVr ishya, Rasayana, Medhya Keshya, Murala, Raktapitta- shamaka, vishaghna, sandhaniya	Baiya, Jwaragnna Hridya, Trishnahara, Dahahara, Shramahara, Murchanashaka Swasahara, Kasahara,	Jwarahara, Jwarahara Hridya, Trishnahara Dahashamaka, Shramahara Shukrala, Shophahara Ruchya Vishtambhakara	Jwarahara, Jwarahara, Hridya, Tarpana, Dahahara, Shukrala , Medhya,





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Figure 1 Photos of all the individual sources of Madhura Triphala

Figure showing different constituents of Madhura Triphala in their natural habitat. A disease-wise **Table 2** Individual Indications in Diseases

classical indications of individual drugs is mentioned in table 2.

Drug	Draksha	Kashmari	Kharjura	Parushaka	Dadima
Disease					
Pandu	+	+	+	-	+
Jwara	+	+	+	+	+
Hridroga	+	-	+	+	+
Raktapitta	+	+	+	-	+
Shwasa-Kasa	+	-	+	-	-
Agnimandya	-	+	-	-	+
Atisara	-	+	+	-	+
Daha	+	+	+	+	+
Shosha	+	+	+	+	-
Madatyaya	+	-	+	+	+
Trishna	+	+	+	+	+
Bhrama	+	-	-	-	-
Kshaya/Karshya/Shrama	+	+	+	+	-
Klaibya	+	+	+	+	-
Gulma(Pittaja)	+	+	-	+	+

## Draksha

Draksha is considered as *phalottama*, by most authors. A recent research has demonstrated

pharmacological effects of Draksha including skin protection, antioxidant, antibacterial, anticancer, anti-inflammatory and anti-diabetic





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activities, as well as hepatoprotective, cardioprotective and neuroprotective effects in experimental studies <sup>9</sup>.

# Kashmarya

Kashmarya is an indigenous species which can grow well at heights up to 1,500 m. It is also one among the constituents of *Dashamoola* and has important actions like *Rasayana*, *Medhya*, *Keshya* etc.

The roots, fruits and the leaves of Gambhari have great medicinal value therefore traditionally it was widely used as an anti-helminthic, antimicrobial, anti-diabetic, anti-aging, analgesic, diuretic, hepato-protective and antiepileptic agent<sup>10</sup>.

#### Kharjura

It has different pharmacological action like antibacterial, anti-inflammatory, anti-diabetic, anti-asthamatic, nephroprotective, hepatoprotective and aphrodisiac activities<sup>11</sup>.

#### Parushaka

Parushaka is naturally found upto altitude of 3000 ft. The fruits mature asynchronously.

Recent advances in research on *Falsa* concluded its antimicrobial and anti-diabetic activity<sup>12</sup>.

A brief review of work so far carried out is compiled in the present study which shows radioprotective, antioxidant, antimalarial, antihyperglycemic, antipyretic, analgesic, antifungal, antiviral, antiplatelate, anticancer and immunomodulatory effect of plant<sup>13</sup>. It is said to have pharmacological actions like anti-cancerous, hypoglycemic, anti-inflammatory and anti-microbial property apart from being a good anti-oxidant <sup>14</sup>.

# Review of *Madhura Triphala* as a whole Brihat Trayis

The concept of *madhura triphala* as a combination is not found in the *Brihat Trayis* and *Laghu trayis* but individual fruits have a considerable importance. *Acharya Charaka* considers *Mridvika* as the best fruit while *Acharya Sushruta* mentions all the five as one among best along with *Rajadana (Mimusops hexandra Roxb.)* and *Matulunga (Citrus medica Linn.)* <sup>15, 16</sup>. *Acharya Vagbhata* labels *Draksha* and *Dadima* to be the first and second best among fruits<sup>17</sup>.

## Nighantu Period

We find mention of *Madhura Triphala* from the period of *Nighantus* where a trend of systematic grouping of drugs on basis of their combined actions on the diseases was started. Keeping *Draksha* as the main constituent, different authors gave variation in the ingredients accompanied with the combined rasa-panchaka. Table 3 documents the different opinions of *Nighantukaras* on the constituents of *Madhura Triphala*, Table 4 contains different synonyms and *vargikaran*. Table 5 contains Rasa-Panchaka and Table 6 tabulates the different actions opined them.

## Dadima





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Drug Name	DN*	Shodhal N <sup>18</sup>	Madanpala N <sup>19</sup>	Raj N <sup>20</sup>	Kaiyadeva N <sup>21</sup>	BP N** 22	Shaligram N <sup>23</sup>	Night Adars	antu sh <sup>24</sup>	Shankar N <sup>25</sup>
Draksha	+	+	-	+	+	-	+	+#	+^	+
Kashmari	+	+	-	+	+	-	+	-	-	+
Kharjura	+	+	-	+	-	-	+	+	+	+
Parushaka	-	-	-	-	+	-	-	+	-	-
Dadima	-	-	-	-	-		-	-	+	-

\*DN- Dhanwantari Nighantu gives synonym dwitiya triphala or svadu triphala \*\*BP- Bhava Prakash Nighantu N- Nighantu # Svadu Triphala ^ Madhura Triphala

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Fable 4 Synonyms	& Varga	Classification	in Nighantus
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	DN	Shodhal	Raj N	Kaiyadeva	Shaligram N	Nighantu	Shankar
		N		N		Adarsha	N
Varga	Mishrakadi	Mishraka	Mishraka	Mishraka	Sankhya	Haritakyadi	Sankhya
	Varga	dhyaya	Varga	Varga	Varga	Varga	Varga
Synonym	Dwitiya	Dwitiya	Madhuradi	Phalottama	Triphala,	Madhuradi	-
	Triphala,	Triphala	Phala	Triphala	Madhura	Phala Trayam	
	Traiphala		Trayam		Phalatraya		

#### Table 5 Rasa-panchaka of Madhura Triphala

Drug Name	DN	Shodhal	Raj N	Kaiyadeva N	Shaligram	Nigh	antu	Shankar
		N			N	Adar	rsha	N
Rasa	-	-	-	-	Madhura	-	-	Madhura
Guna	-	-	-	-	Vishada	-	-	Vishada
Virya	-	-	-	-	-	-	-	-
Vipaka	-	-	-	-	Madhura	-	-	Madhura
Doshaghnata	-	-	-	-	Kapha-Vata	-	-	Kapha-Vata

**Table 6** Action of Madhura Triphala according to different Nighantus

Action	DN	Shodhal N	Raj N	Kaiyadev a N	Shaligra m N	Nighantu Adarsha		Shankar N
Chakshushya	+	-	-	-	-	-	-	-
Dipana	+	-	-	-	-	-	-	-
Ruchya	+	-	-	-	-	-	-	-
Vishamajvaragh	+	-	-	-	-	-	-	-
na								
Shukravardhaka	-	-	-	-	+	-	-	+
/ Vrishya								
Dhatuvardhaka	-	-	-	-	+	-	-	+

# DISCUSSSION

The combination of Draksha, Kashmarya phala and Kharjura is accepted by the majority of Nighantus giving synonyms like dwitiya triphala, traiphala and Madhuradi Phala Trayam<sup>1, 18-25</sup>. Dhanwantari Nighantu mentions Chakshushya, Ruchya and Vishamajwara nashana action which can be attributed due to their individual properties while Dipana action maybe a combined result. The individual doshaghnata is Vata- Pitta Shamana but Shaligram and Shankar Nighantu mention Madhura Triphala to be Kapha- Vata Shamaka. They also attribute Dhatuvardhaka action especially on Shukradhatu which can be explained by the individual properties of Brimhana and Vrishya.

Kaiyadeva Nighantu has replaced Kharjura with Parushaka and calls it as Phalottama Triphala. Nighantu Adarsha replaces Kashmari with Parushaka in the original combination calling it







Svadu Triphala. It also mentions another type of madhura Triphala with Draksha, Kharjura and Dadima called Anya Svadu Triphala. Regardless of the controversy, we find that Draksha is the common constituent. All the five drugs have common Madhura rasa, Madhura vipaka, vata-pitta reducing action, Brimhana, Jwaraghna, Hridya, Tarpana and Dahahara actions. Also the need to change ingredients must have been due to the unavailability of *Kashmarya* or *Kharjura* in the region. The permutations and combinations of all the four drugs are found in various *Ayurvedic* formulations which have been tabulated in Table 7.

Table 7: List of Formulations	containing pe	ermutation &	combination of	drugs of	Madhura trip	hala <sup>26, 27</sup>

	Draksha, Kashmari & Khariura	Draksha, Kharjura & Parushaka	Draksha, Kashmarya & Parushaka	Draksha & Kashmarya	Draksha & Kharjura	Draksha & Parushaka	Draksha & Dadima
1. •	Draksha - Kashmaryadi Kashayam	Drakshyadi ghrita (Yoga Ratnakara Gulmadhikara)	Drakshadi Kashayam (Ah. Jwara Chikitsa)	Aravindasavam BR 17	Amritapras ha Ghritam (AH CHI 3)	Ashokarishtam (Bhaishajya Ratnavali 66)	Kantakari Ghritam (AH. Chi 3)
2.	Mahamayuradi Gutika	Kharjuradi Mantha (Chakradatta)	Vatsamayantak a Ghritam (Sahasrayogam )	Brahmi Drakshadi Kashayam (Sahasrayogam)	-	Mustadi Marmakashayam (Sahasrayogam)	-
3. ·	Shiva Gutika	-	-	Chandanasavam (Bhaishajya Ratnavali 88)	-	Manasamitra Vatakam(Sahasr ayogam)	-
4.	-	-	-	Chyavanaprasha m Sharangdhar Samhita, Ashtanga Hrudaya, Uttaratantra,39	-	Parushakadi Leham (PM)	-
5.	-	-	-	Dashamularishta m (Bhaishajya Ratnavali 74)	-	-	-
6.	-	-	-	Kutajarishta (BR7)	-	-	-
7.	-	-	-	Pushyanuga Churnam (AH. U 34)	-	-	-
8.	-	-		Sarvamayantaka Ghritam Sahasrayogam	-	-	-
9.	-	-	-	Sukumara Ghritam (AH Chi. 13)	-	-	-
10. 0	-	-	-	Ushirasavam (Bhaishajya Ratnavali)	-	-	-

**CONCLUSION** *Madhura Triphala* is a one among its kind combination. It has *madhura* 

rasa, guru- snigdha gunas, sheeta veerya and madhura vipaka with vata-pitta pacifying action.

Regardless of the controversy, the same *rasa* July 10<sup>th</sup> 2022 Volume 17, Issue 1 **Page 15** 







*panchaka* of the combination is to be expected. Researches on the individual drugs have identified activities such as anti- aging, antiepileptic, anti-inflammatory, anti-microbial, antidiabetic, hepatoprotective, cardioprotective, neuroprotective etc. A further research on *Madhura Triphala* is needed to establish the combined actions and its novel utility in Ayurveda.

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# **CONFLICTS OF INTEREST:**

The corresponding author declares no conflicts of interest.







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