



A Classical Drug Review on Triphala-Aragwadhadi Kashaya w.s.r. to Medadhatu dushti (Dyslipidemia)

Dr. Rekha*, Dr. Uganta Meena**, Dr. Hirva Viramgama***

*Assistant Professor, Department of Samhita Evum Siddhant, Kala Ashram Ayurved Medical College and Hospital Gogunda, Udaipur

** Assistant Professor, Department of Kaumarbhritya, Dhanwantari Ayurveda College, Koydam, Gujrat

***Assistant Professor, Department of Samhita Evum Siddhant, Gokul Ayurvedic College, Siddhpur, Gujarat

ABSTRACT

Aim: Medadhatu dushti (Dyslipidemia) is Santarpanajanya Vyadhi. The presence of high cholesterol in 25–30% of urban and 15–20% rural subjects as per recent studies data. Triphala-Aragwadhadi Kashaya is a formulation consists of herbal drugs as mentioned in Charaka Samhita with the applicability in Medadhatu dushti (Dyslipidemia). **Material and Methods:** Ayurvedic texts, as well as the data bases Google scholar, PubMed, Medline, AYUSH Research Portal, and Digital Helpline for Ayurveda Research Articles (DHARA), Research Gate web-based search engines, journal, were used to search for relevant literature and information. **Result:** Medadhatu dushti (Dyslipidemia) is a 'Kapha-Vata pradhana Tridoshaj vyadhi', Triphala-Aragwadhadi Kashaya referred in Charaka Samhita was reviewed, analysed in detail and showed the dominance of Ruksha and Laghu Guna with Tridosha Shamaka property and along with Dipana, Pachana, Lekhana, Anulomana, Upashoshana, Kleda-shoshana, Chhedana, Koshtha shuddhikara Karmas. Pharmacological activity like anti-hyperlipidemic, antidyslipidemic, antilipidemic, antiobesity effect were also reported. **Conclusion:** The classical formulation Triphala -Aragwadhadi Kashaya is a very unique and finds its great utility in management of Medadhatu dushti (Dyslipidemia).

Keywords: Anti-hyperlipidemic, Dyslipidemia, Lekhana, Medadhatu dushti, Triphala -Aragwadhadi Kashaya

1.INTRODUCTION

In the present busy and sophisticated life, most of the people neglect their lifestyle and diet patterns which lead to several metabolic disorders, in which Dyslipidemia occupies a major part and also important atherosclerotic risk factor. Review of population-based studies reveals the increasing mean total cholesterol levels in India. The presence of high cholesterol in 25–30% of urban and 15–20% rural subjects as per recent studies data in which

prevalence is lower than in high-income countries. The most common dyslipidemia is borderline high LDL cholesterol, low HDL cholesterol, and high triglycerides in India¹. Dyslipidemia defines as an abnormal amount of lipids (e.g., cholesterol and/or fat) present in the blood and prolonged elevation of insulin levels can lead to Dyslipidemia². Faulty diet (which are high in saturated fat and cholesterol) is one major factor amongst the etiological factors of Dyslipidemia which increases blood cholesterol and triglyceride level.

In terms of Ayurveda, it can be correlated with '*Santarpaka Hetu*' as *Kapha* and *Medovardhaka* as mentioned in *Santarpaniya Adhyaya* of *Charakasamhita*³. The causes (diets and regimens) of vitiation of *Kapha Dosha* and *Medovaha Srotas* play an important role in the general etiology of the disorder of *Medo Dhatu*. The disorder of *Medo Dhatu* indicates the abnormalities of *Medo Dhatu*, qualitatively or quantitatively, and functionally or structurally. *Charaka* has mentioned the etiological factors for *Medo Dushti*, which are mostly exogenous and he has also particularly mentioned '*Beejadosh*' as a causative factor for over production of the *Medo Dhatu*. In Ayurveda, Dyslipidemia may be defines as the *Poshaka Medodhatu* (comprising of different categories of lipoproteins) will be in excess in circulation can be referred to the conditions such as quantitatively increased *Abaddha Meda* or *Asthayi Medodhatu*⁴. *Acharya Vagbhata* has clearly specified that the *medodushti vikaras* are to be treated with *Langhana* therapy on regular basis (*Nityam Langhaneeyam*)⁵ and also mentioned different types of *Langhana* based on various gradients of *Sthaulya*⁶.

Ayurveda, the most ancient medical science, has given *Trisutras*, namely *Hetu* (causative factors), *Linga* (signs and symptoms), and *Aushadha* (treatment)⁷. *Chikitsa Chatushpada* i.e. *Bhishak*, *Dravya*, *Upasthata* and *Rogi*

¹ R. Gupta, et al., Recent trends in epidemiology of dyslipidemias in India, *Indian Heart J* (2017). <http://dx.doi.org/10.1016/j.ihj.2017.02.020>

² <http://en.wikipedia.org/wiki/Dyslipidemia> accessed on 22/5/2021

³ Y T Acharya editor Agnivesha, *Charaka Samhita. Sutra Sthana. Ayurveda Dipika Vyakhya*, Sanskrit Version. Ch.23. Ver. 3-4. Reprint edition, 2011. Varanasi: Chaukhamba Publications, New Delhi, Pg. 122.

⁴ Y T Acharya editor, Agnivesha, *Charaka Samhita. Vimana Sthana. Ayurveda Dipika Vyakhya*, Sanskrit Version. Ch.5. Ver.16. Reprint edition, 2011. Varanasi: Chaukhamba Publications, Pg.251.

⁵ Pt H.S. Paradkar editor Vagbhata, *Ashtanga Hridaya. Sutra Sthana. Sarvangasundara commentary of Arunadatta and Ayurvrdarassayana commentary of Hemadri*, Sanskrit Version.Ch.14. Ver.11. Reprint edition, 2006. Varanasi: Chaukhamba Krishnadas Academy, Pg. 224.

⁶ Pt H.S. Paradkar editor Vagbhat, *Ashtanga Hridaya. Sutra Sthana. Sarvangasundara commentary of Arunadatta and Ayurvrdarassayana commentary of Hemadri*, Sanskrit Version.Ch.14. Ver.12-14. Reprint edition, 2006. Varanasi: Chaukhamba Krishnadas Academy, Pg. 224.

⁷ Y T Acharya editor, Agnivesha, *Charaka Samhita. Sutra Sthana. Ayurveda Dipika Vyakhya*, Sanskrit Version. Ch.1. Ver. 24. Reprint edition, 2011. Varanasi: Chaukhamba Publications,

are the pillar for success of *Chikitsa* in Ayurveda⁸. *Dravya* stands second most among *Chikitsa Chatushpada*, as indicated by Acharya *Vagabhatta*.

Selection of the medicine with opposite properties to the cause of disease is helpful in the management of the disease. *Medadhātu dushti* (Dyslipidemia) is *Santarpanajanya Vyadhi*. Acharyas have advised *Apatarpana Chikitsa* for *Santarpanajanya Vyadhi* because *Apatarpana* is opposite to *Santarpana*⁹.

In Ayurveda classics, many drugs are described for the *Medadhātu dushti* (Dyslipidemia). The drugs *Triphala-Aragwadhadi Kashaya* have been used by the virtue of their qualities, which are opposite to that of *Medadhātu* and also drugs have been described for the treatment of *Santarpanajanya Vyadhi* by Acharya *Charaka*.

Triphala-Aragwadhadi Kashaya is a formulation consists of herbal drugs as mentioned in *Charaka Samhita*¹⁰. Present review is aimed at gathering the information about the details of the constituents of this formulation along with the applicability of this formulation in *Medadhātu dushti* (Dyslipidemia).

2. MATERIALS AND METHODS

2.1. Method of review

All the relevant Ayurvedic texts, as well as the data bases Google scholar, PubMed, Medline, AYUSH Research Portal, and Digital Helpline for Ayurveda Research Articles (DHARA), dissertation works from Ayurveda colleges, studies available on Research Gate web-based search engines, journal, were used to search for relevant literature and presented in systematic manner.

2.2. Procurement of Trial Drugs

All the trial drugs i.e. *Triphala-Aragwadhadi Kashaya* was identified. The pharmacognostical, pharmaceutical and microbiological studies of all drugs were carried out in the Pharmacognosy Laboratory, Modern Pharmaceutical Chemistry Laboratory and Microbiology Laboratory for authenticity of raw drugs and shelf lives of finished products.

2.3. Preparation of Drugs

All the drugs were prepared as per the method of preparation of *Kashaya* as mentioned in *Sharangadhara Samhita*¹¹.

Pg.3.

⁸ Y T Acharya editor, Agnivesha, Charaka Samhita. *Sutra Sthana*. Ayurveda Dipika Vyakhya, Sanskrit Version. Ch.9. Ver. 3. Reprint edition, 2011. Varanasi: Chaukhamba Publications, Pg.95.

⁹ Y T Acharya editor, Agnivesha, Charaka Samhita. *Sutra Sthana*. Ayurveda Dipika Vyakhya, Sanskrit Version. Ch.1. Ver. 62. Reprint edition, 2011. Varanasi: Chaukhamba Publications, Pg.7.

¹⁰ Y T Acharya editor, Agnivesha, Charaka Samhita. *Sutra Sthana*. Ayurveda Dipika Vyakhya, Sanskrit Version. Ch.23. Ver. 10-12. Reprint edition, 2011. Varanasi: Chaukhamba Publications, Pg. 244.

2.4. Materials for *Triphala-Aragwadhadi Kashaya*

Description of Ingredients of *Triphala-Aragwadhadi Kashaya*, English / Latin name, Part used and its quantities are as given in Table 1:

Table 1: Ingredients of ‘*Triphala-Aragwadhadi Kashaya*’

Sr. No	Name of the Ingredient	Botanical name/ English Name	Part used	Proportion
1.	<i>Haritaki</i>	<i>Terminalia chebula</i> Retz.	Fruit	1 Part
2.	<i>Bibhitaki</i>	<i>Terminalia belerica</i> Roxb.	Fruit	1 Part
3.	<i>Amalaki</i>	<i>Embelica officinalis</i> Gaertn.	Fruit	1 Part
4.	<i>Aragwadha</i>	<i>Cassia fistula</i> Linn.	Fruit pulp	1 Part
5.	<i>Shyonaka</i>	<i>Oroxylum indicum</i> Linn.	Stem bark	1 Part
6.	<i>Saptaparna</i>	<i>Alstonia scholaris</i> Linn.	Stem bark	1 Part
7.	<i>Kutaja</i>	<i>Holarrhena antidysentrica</i> Roth.	Stem bark	1 Part
8.	<i>Musta</i>	<i>Cyperus rotundus</i> Linn.	Rhizome	1 Part
9.	<i>Madanaphala</i>	<i>Randia dumetorum</i> Lam.	Dried fruit pulp	1 Part
10.	<i>Nimba</i>	<i>Azadiracta indica</i> A. Juss	Stem bark	1 part

3. RESULT

The pharmacological properties of the formulation can be explained on the basis of the individual drug properties as mentioned below:

1. HARITAKI

Latin Name	<i>Terminalia chebula</i> Retz.
Family	Combretaceae
Synonyms	<i>Abhaya, Kayastha, Shiva, Pathya, Vijaya, Amruta, Shiva, Rohini, Vijaya, Chetaki, Putana, Haimavatya, Shreyasi, Jivanti.</i>
Vernacular Name	● English Name: Myrobalan ● Hindi Name: Harad ● Gujarati Name: Himeja, Pulo Harada
Classical Categorization:	● Charakasamhita: <i>Jwavarghna Mahakashaya, Prajasthapana Mahakashaya, Kusthaghna Mahakashaya, Kasaghna Mahakashaya, Arshoghna Mahakashaya</i> ● Susrutasamhita: <i>Triphala Gana, Amalakyadi Gana, Parusakadi Gana, Trivrutadi Gana</i>

¹¹ Parashuram Shastri editor, Sharangadhara, Sharangadhara Samhita, Madhyama Khanda Ch.

2. Ver.12. Reprint edition, 2005. Varanasi: Chaukhamba Orientalia; Pg. 144.

Part Used	Fruits
Rasapanchaka	● Rasa: Kashaya, Katu ,Tikta, Amala, Madhura ● Guna: Laghu, Ruksha ● Virya: Ushna ● Vipaka: Madhura
Karma	● Vedanasthapana, Rasayana, Vranashodhana, Vranaropana, Brimhaniya, Dipana, Pachana, Medhya, Krimighna, Kushthagha, Chakshushya, Anulomana. ● Externally: <i>Vraṇashodhana-Ropaṇa, Vedanasthapana, Shothahara.</i> ● Internally: <i>Buddhi-Indriya Balya, Dipana, Srotoshodhana, Yakrututtejaka, Shothahara, Shonitasthapana, Anulomana, Krumighna, Mrudurechana, Rasayana, Vrushya, etc.</i> ● Haritaki has been considered as Pathya (wholesome to everyone). Its actions are Ayushya, Varnya, Vayahstapani, Paushtika and Medhya etc.
Therapeutic uses	<i>Vibandha, Aruchi, Udavarta, Gulma, Udararoga, Arsha, Pandu, Shotha, Jirnajwara, Vishamajwara, Prameha, Shiroroga, Kasa, Tamakashwasa¹²</i>
Chemical constituents	Tannic acid, chebulinic acid, glycoside, anthraquinones and polyphenolic compounds ¹³ .
Pharmacological actions	<i>Rasayana, Chakshushya, Ayurvedhaka, Anulomana, Shwasaghna, Kasaghna, Krimighna, Pramehaghna, Arshoghna, Kushthagha, Shothaghna.¹⁴</i>

2. BIBHITAKI

Latin Name	<i>Terminalia belerica</i> Roxb.
Family	Combretaceae
Synonyms	<i>Aksha, Karshaphala, Karshaphala, Bhutavasa, kalidruma, Karnaphala.</i>
Vernacular Name	● English Name: Beleric Myrobalan

¹² Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.48

¹³ Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.48

¹⁴ Prof. D.S. Lucas, Dravyaguna-Vijnana, Ch 1. Reprint edition, 2015. Chaukhambha

Vishwabharati Varanasi, Pg.156.

	● Hindi Name: Baheda, Finasa, Bahera ● Gujarati Name: Baheda
Classical Categorization:	● Charakasamhita: Jvarahara Mahakashaya, Virechanopaga Mahakashaya ● Sushrutasamhita: Triphala Gana, Mustadi Gana ● Vagbhata: Mustadi.
Part Used	Fruit rind, Seed, seed kernal
Rasapanchaka	● Rasa: Kashaya ● Guna: Ruksha, Laghu ● Virya: Usana ● Vipaka: Madhura ● Doshakarma: Kaphahara, Tridoshaghna
Karma	Kaphapittajita, Bhedaka, Kruminasana, Chakshusya, Keshya, Kasahara ¹⁵
Therapeutic uses	Svarabheda, Netraroga, Kasa, Chhardi, Krumiroga, Vibandha ¹⁶ .
Chemical constituents	Gallic acid, tannic acid and glycosides ¹⁷ .
Pharmacological actions	Bhedana, Kasaghna, Netrahita, Keshya, Krimighna, Balarogahara, Chhardinigrha, Madakaraka, Vajikarana, Vataghna, Svarya, Vedanasthapana, Shothahara, Raktasthambana, Dipana, Pachana, Anulomana, Jwaraghna, Dhatuvaradhaka and Kusthaghna. ¹⁸

3. AMALAKI

Latin Name	<i>Emblica officinalis</i> Gaertn.
Family	Euphorbiaceae.
Synonyms	Vayastha, Vrushya, Jatiphalarasa, Shiv, Dhatriphala, Shreephala, Amrutaphala
Vernacular Name	● English Name: Indian Gooseberry ● Hindi Name: Amla, Aonla ● Gujrati Name: Anvla
Classical	● Charak: Jwaraghna, kasaghna, Virechnopaga, Kusthaghna,

¹⁵ Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.26

¹⁶ Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.26

¹⁷ Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.26

¹⁸ D.S. Lucas, Dravyaguna-Vijnana, Ch 2. Reprint edition, 2015. Chaukhambha

Vishwabharati Varanasi, Pg.158.

Categorization:	<i>Vayasthapana.</i> ● Shushruta: <i>Amalakyadi, Parushkadi, Triphala.</i> ● Vagbhata: <i>Parushakadi.</i>
Part Used	Root, Bark, Leaf, Fruit, Seed.
Rasapanchaka	● Rasa: <i>Amlapradhana, Pancharasa (Lavanavarjita)</i> ● Guna: <i>Laghu, Sara, Mrudu, Ruksha</i> ● Virya: <i>Sheeta</i> ● Vipaka: <i>Madhura</i> ● Doshakarma: <i>Tridoshashamaka</i>
Karma	<i>Chedana, Upasho-shana, Kledashodhana, Vrishya, Rasayana, Medhya</i>
Therapeutic uses	<i>Prameha, Jwara, Adhmana, Shosha, Trushna, Raktapitta, Amlapitta, Daha.</i> ¹⁹
Chemical constituents	● Its fruit contains vit C, phyllembin, linolic acid, indole acetic acid, terchebin, corilagin, ellagic acid and phyllembic acid. ● In root, ellagic acid, lupeol, and oleanolic aldehyde are present. ● Bark - leucodelphinidin, procyanidin, tannin etc. ● Ascorbic acid and gallotannins²⁰.
Pharmacological actions	<i>Raktapittahara, Pramehaghna, Vrishya, Rasayani, Mruduvirechaka, Mutrala, Yakruttejaka, Dipana, Stambhana, Dahaprashamana, Chakshushya, Medhya, Anulomana, Hridya, Garbhasthapana</i> ²¹

4. ARAGWADHA

Latin Name	<i>Cassia fistula</i> Linn.
Family	Leguminosae
Synonyms	<i>Krutmala, Vyadhighata, Shampaka, Nrupdruma</i>
Vernacular Name	● English Name: Indian Laburnum, Purging cassia ● Hindi Name: Amalatasa, Sonahali ● Gujarati Name: Garmala, Garmalo

¹⁹ Ayurvedic Pharmacopoeia of India Part- I Volume-I. New Delhi: MHFWDISMH; 2001. P.4

²⁰ Ayurvedic Pharmacopoeia of India Part- I Volume-I. New Delhi: MHFWDISMH; 2001. P.4

²¹ D.S. Lucas, Dravyaguna-Vijnana, Ch 1. Reprint edition, 2015. Chaukhambha

Vishwabharati Varanasi, Pg.164.

	•
Classical Categorization:	• Charakasamhita: Kusthaghna Mahakashaya, Kandughna Mahakashaya • Susrutasamhita: Aragwadhadi Gana, Shyamadi Gana, Adhobhagahara Gana
Part Used	Pulp of fruits
Rasapanchaka	• Rasa: Madhura, Tikta • Guna: Guru • Virya: Ushna • Vipaka: Madhura • Doshakarma: Vatapittashamaka, Pittakapha Samsodhana
Karma	Sramshana, Koshta shuddhikara
Therapeutic uses	Vibandha, Udavartta, Gulma, Shula, Udararoga, Hrudroga, Prameha ²² .
Chemical constituents	Sugar, Mucilage, Pectin and Anthraquinone. ²³
Pharmacological actions	Kusthaghna, Kandughna, Raktashodhaka, Koshtashuddhikara, Kaphanissaraka, Mutrajanana, Dahaprashamana, Amapachaka, Jwaraghna, Shulaprashamana, Rechana ²⁴ .

5. SHYONAKA

Latin Name	<i>Oroxylum indicum</i> Vent.
Family	Bignoniaceae
Synonyms	Shyonaka, Tuntuka, Tintuka, Kutannata, Bhalluka, Prthusimba.
Vernacular Name	• Hindi Name: Sona, Sonapatha • Gujarati Name: Tentu
Classical Categorization:	• Charakasamhita- Shothahara, Sheetaprashamana, Anuvasanopaga. • Susrutasamhita - Brihat panchamula, Rodhradi, Viratarvadi
Part Used	Root, Bark
Rasapanchaka	• Rasa: Madhura, Tikta, Kashaya • Guna: Laghu, Ruksha • Virya: Ushna • Vipaka: Katu

²² Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.7

²³ Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.7

²⁴ Ayurvedic Pharmacopoeia of India Part- I Volume-I.New Delhi: MHFWDISMH; 2001. P.7

	● Doshakarma: <i>Kapha-vatashamaka</i>
Karma	<i>Ama-pachana, Dipana, Anulomana, Krimighna</i>
Therapeutic uses	<i>Atisara, aruchi, krimi, shotha, kasa, bastishotha, vatavyadhi, amavata, dourbalya, jvara, vrana-shotha.</i>
Chemical constituents	Stem and root bark contain three flavone colouring matters viz. Oroxylin A (stem bark 0.65; root bark 0.86%), bioicalcin (stem bark 5%) and chrysin (stem bark 0.35%).
Pharmacological actions	<i>Dipana, Grahi, Vataghna, Kaphaghna, Pittaghna, Kasaghna, Vedanasthapana, Bastishothahara, Stambhana, Vranaropana, Shothahara, Rechaka.</i> ²⁵

6. SAPTAPARNA

Latin Name	<i>Alstonia scholaris</i> R.Br.
Family	Apocynace
Synonyms	<i>Saptaparnina, Vishaltwaka, sharada, vishamchhada, Salmalipatra, Gandhapushpa, Sarada-saradi, Saptadala, Gajamada, Vikasanasila, Gucchapushpa, Bahutvaka, Salmalicchada, Uchvriksha.</i>
Vernacular Name	● English Name: Dita ● Hindi Name: Chhitvana, satauna ● Gujarati Name: Satvana
Classical Categorization:	● Charakasamhita: <i>Tiktaskandha, Kashayaskandha, Kushthaghna, Udardaprashamana, Shirovirechana</i> ● Sushrutasamhita: <i>Aaragwadhadi, Lakshadi, Adhobhagahara</i>
Part Used	Bark, Latex, Flowers
Rasapanchaka	● Rasa: <i>Tikta, kashaya</i> ● Guna: <i>Laghu, snigdha</i> ● Virya: <i>Ushna</i> ● Vipaka: <i>katu</i> ● Doshakarma: <i>Kapha-pitta shamaka</i>
Karma	<i>Sthaulyahara, Shothahara, Dipana, Pachana, Grahi, Trishnanigraha, Krumighna, Tvakadoshahara, Jwaraghna, Vishaghna.</i>
Therapeutic uses	<i>Vishamajwara, Raktavikara, Hridroga, Kasa-Shwasa, Prameha, Sutikaroga, Agnivardhana, Pravahika, Yakritdourbalya, Krimiroga,</i>

²⁵ D.S. Lucas, Dravyaguna-Vijnana, Ch 2. Reprint edition, 2015. Chaukhambha

Vishwabharati Varanasi, Pg.222.

	<i>Kushtha, Udarda, Jirnavrana, Jwarajanya dourbalya, Dantakrimi.</i>
Chemical constituents	- Indian bark contains alkaloids - Non alkaloidal content: Steroles - Latex is found to contain 2.8-7.9% caoutchouc. The coagulum contains caoutchin 12.9-26.5 and resins 69.0-78.7%
Pharmacological actions	<i>Agnidipaka, Vranaropana, Vatanulomana, Kushthaghna, Raktvikarahara, Jantughna, Shwasahara and Pravahikahara.</i> ²⁶

7. KUTAJA

Latin Name	<i>Holarrhena antidysenterica</i> Linn.
Family	Apocynaceae.
Synonyms	<i>Girimallika, Siviphala, Svetapushpa, Dirghpatraka, Indayava, Sakrayava, Kalinga.</i>
Vernacular Name	English Name: Ester tree, Conessi bark Hindi Name: Koraya, Kuda Gujarati Name: Kuda, Kadachhal, Kudo
Classical Categorization:	Charakasamhita: Arshoghna, Kandughna, Stanyashodhana, Aasthapanopaga, Vamana. Sushrutasamhita: Aragwadhadi, Pippaliyadi, Haridradi, Lakshadi, Urdhavabhaagahara. Vagbhata: Aragwadhadi, Pippaliyadi.
Part Used	Bark, leaves, seeds, flowers.
Rasapanchaka	Rasa: Tikta, Kashaya. Guna: Laghu, Ruksha. Virya: Sheeta Vipaka: Katu Doshakarma: Kaphapittashamaka.
Karma	<i>Dipana, Ama-pachana, Upashoshana</i>
Therapeutic uses	<i>Amadosha, Atisara, Ashmari, Kushtha, Visha, Vrana, Arsha, Jwara, Prameha.</i>
Chemical constituents	Conessidine, connessimine, conkurchine, holadiene, holarrhenine, holarrhimine, kurchine, holarrhine, kurchicine, holadysine, holadysamine, holantosines A & B; kurchaline, kurchiphyllamine,

²⁶ D.S. Lucas, Dravyaguna-Vijnana, Ch 2. Reprint edition, 2015. Chaukhambha Vishwabharati Varanasi, Pg.258.

	holacetine etc.
Pharmacological actions	<i>Amahara, Dipana, Krimighna, Raktastambhana, Vranaropana, Jwaraghna, Dhatushoshana, Shulaprashamana, Kusthaghna, Chhardinigrhana, Lekhana.</i> ²⁷

8. MUSTA

Latin Name	<i>Cyperus rotundus</i> Linn.
Family	Cyperaceae
Synonyms	<i>Varida, Mustaka, Kuruvinda</i>
Vernacular Name	• English Name: Nut grass • Hindi Name: Motha • Gujarati Name: Moth, Nagarmotha
Classical Categorization:	• Charakasamhita: <i>Lekhaniya, Trishnanigrahana, Kandughna.</i> • Sushrutasamhita: <i>Mustadi, Vachadi.</i> • Vagbhata: <i>Mustadi, Vachadi.</i>
Part Used	Rhizome
Rasapanchaka	• Rasa: <i>Tikta, Katu, Kashaya</i> • Guna: <i>Laghu, Ruksha</i> • Virya: <i>Sheeta</i> • Vipaka: <i>Katu</i> • Doshakarma: <i>Kaphapittashamaka</i>
Karma	<i>Dipana, Ama-pachana, Lekhana</i>
Therapeutic uses	<i>Aruchi, Atisara, Agnimandya, Trisna, Raktavikara, Kasa, Mutrakrichha, Rajorodha, Stanyavikaara, Charmavikara, Kandu, Kushtha, Jvara, Dourbalya, Visha, Mastishkadourbalya, Vatarakta, Madatyaya, Vrana.</i>
Chemical constituents	Cineol copadiene, copaene, cyperen 1 & 2, cyperenone, isopatchoulene, cyperotundone, cyperol, cyperolone, æ – cyperone, epoxyguaiene, isocyperol, isokobusone, kobusone, mustakone, patchulene, rotundone, æ & ß selinene, sugenol, ß sitosterol etc.
Pharmacological actions	<i>Grahi, Agnidipaka, Pachana, Kaphaghna, Pittaghna, Raktakopahara, Trishanigrahana, Jwaraghna, Krimighna, Swedajanana, Mutrajanana, Stanyavardhaka, Artavajanana,</i>

²⁷ D.S. Lucas, Dravyaguna-Vijnana, Ch 2. Reprint edition, 2015. Chaukhambha Vishwabharati Varanasi, Pg.257.

	<i>Garbhashayottejaka, Keshavardhaka, Vranaropaka, Balya and Vishaghna.</i> ²⁸
--	---

9. MADANAPHALA

Latin Name	<i>Randia spinosa</i> Poir.
Family	Rubiaceace
Synonyms	<i>Madan, Chhardan, Pindi, Shalyaka, Vishpushpaka</i>
Vernacular Name	• English Name: Emetic nut • Hindi Name: Mainphala, • Gujarati Name: Mindhala
Classical Categorization:	• Charakasamhita: Vamaka, Phalinidravya • Sushrutasamhita: Urdhavabhagahara, Aaraghwadhadi Gana, Mushakadigana.
Part Used	Fruit
Rasapanchaka	• Rasa: Madhura, Tikta • Guna: Laghu, Ruksha • Virya: Ushna • Vipaka: Katu • Doshakarma: Kaphavatashamaka
Karma	<i>Lekhana, Vishaghna</i>
Therapeutic uses	<i>Gulma, Vidradhi, Kushta, Shleshmajwara, Pratishaya.</i>
Chemical constituents	Essential oil, Saponine, tannin and resin
Pharmacological actions	<i>Lekhana, Vamanakaraka, Vidradhiroganivaraka, Pratishyahara, Vranaropana, Kusthaghna, Kaphaghna, Anahaghna, Shothaghna, Gulmaghna, Vishaghna, Swedajanana, Raktashodhaka, Artavajanana, Jwaraghna.</i>

10. NIMBA

Latin Name	<i>Azadirachta indica</i> A. Juss.
Family	Meliaceae
Synonyms	<i>Arista, Pichumarda</i>
Vernacular Name	• English Name: Margosa tree • Hindi Name: Nima • Gujarati Name: Kadvo limbdo

²⁸ D.S. Lucas, Dravyaguna-Vijnana, Ch 2. Reprint edition, 2015. Chaukhambha Vishwabharati Varanasi, Pg.442.

Classical Categorization:	● Charakasamhita: Kandughna Mahakashaya ● Sushrutasamhita: Aragwadhadi Gana, Guduchyadi Gana, Lakshadi Gana
Part Used	Stem bark
Rasapanchaka	● Rasa: Tikta, Kashaya ● Guna: Laghu, Ruksha ● Virya: Sheeta ● Vipaka: Katu ● Doshakarma: Kaphapittashamaka
Karma	Krimighna, Ama-pachana, Kleda-shoshana
Therapeutic uses	Krimi, Raktavikara, Jvara, Daha, Vrana, Kandu, Vatavyadhi, Netraroga, Kushtha, Pramehaghna, Yakritvikara
Chemical constituents	Bitter principles Nimbin and Nimbiol²⁹ ● Leaves – Azedirachtin, Azedirachtanin, azadirone, nimbandiol, nimbin, nimbolide etc. ● Stem bark – nimbin, nimbidin, kulinone, margosinolide etc. ● Root bark – nimbin, nimbidin. ● Fruits – Azadirachtin, azadirechtol, azadirachnol, melianone, nimbiol, nimocin etc. ● Seed oil – Tocopherol, azadirone, azadiradione, nimbinin, salannol, nimbin, nimbidin etc. ● Flowers – Azadiradione, margosene, arachidic acid etc.
Pharmacological actions	Grahi, Rochana, Krimighna, Katupausthika, Raktashodhaka, Jvaraghna, Daha Prashamana, Vranashodhana, Kandughna, Vedanasthapana Chakshushya, Kushthaghna, Pramehaghna, Yakrittejaka, Garbhashayottejaka. ³⁰

²⁹ Ayurvedic Pharmacopoeia of India, Part- I, Volume-II. New Delhi: MHFWDISMH; 2001.

P.127

³⁰ D.S. Lucas, Dravyaguna-Vijnana, Ch 2. Reprint edition, 2015. Chaukhambha Vishwabharati Varanasi, Pg80.

Table No. 2: Average of Pharmacodynamics of *Triphala-Aragwadhadi Kashaya*

Properties	Observations in <i>Triphala-Aragwadhadi Kashaya</i>	
	Total No. of Drugs	Percentage%
Rasa		
<i>Madhura</i>	5	50
<i>Amla</i>	2	20
<i>Katu</i>	3	30
<i>Lavana</i>	-	-
<i>Tikta</i>	7	70
<i>Kashaya</i>	8	80
Guna		
<i>Guru</i>	1	10
<i>Laghu</i>	8	70
<i>Ruksha</i>	8	70
<i>Snigdha</i>	2	20
<i>Sheeta</i>	1	10
<i>Mridu</i>	1	10
Vipaka		
<i>Madhura</i>	4	40
<i>Katu</i>	6	60
Virya		
<i>Ushna</i>	3	50
<i>Sheeta</i>	2	50
Doshaghnata		
<i>Vata</i>	7	70
<i>Pitta</i>	8	80
<i>Kapha</i>	9	90
Karma		
<i>Anulomana</i>	2	20
<i>Dipana</i>	5	50
<i>Pachana</i>	5	50
<i>Koshtha shuddhikara</i>	1	10
<i>Lekhana</i>	3	30
<i>Chedana</i>	1	10
<i>Upashoshana</i>	2	20
<i>Kleda-shoshana</i>	2	20
<i>Krimighna</i>	2	20

4. DISCUSSION

Medadhatu dushti (Dyslipidemia) is a '*Kapha-Vata pradhana Tridoshaj vyadhi*', and Acharyas has recommended *Vataghna* and *Kaphaghna aushadhi*. The ingredients of *Triphala -Aragwadhadi Kashaya* showed the dominance of *Kashaya (Pradhana rasa)* – *Tikta, Madhura, Katu, Amla Rasa (Anurasa), Katu Vipaka, Ushna Virya* with the dominance of *Ruksha* and *Laghu Guna* followed by *Snigdha, Sheeta, Mridu* and *Guru Guna* with *Tridosha Shamaka* Property and dominance of *Dipana, Pachana*, followed by *Lekhana, Anulomana, Upashoshana, Krimighna, Kleda-shoshana, Chhedana, Koshtha shuddhikara Karmas* (Table 1 & 2).

Triphala -Aragwadhadi Kashaya has pharmacological activity like anti-hyperlipidemic, antidyslipidemic, antilipidemic, antiobesity effect and in reducing the lipid level could be due to the antioxidant mechanisms, free radical scavengers and inhibition of lipid oxidation which is a key step³¹.

5. CONCLUSION

The classical formulation *Triphala -Aragwadhadi Kashaya* is a very unique and finds its great utility in management of *Medadhatu dushti* (Dyslipidemia) and therefore need scientific evaluation through pharmacological and clinical studies to validate the same. Large scale manufacturing and multiples of clinical trials can be useful for generation of large amount of clinical trial data.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

ACKNOWLEDGEMENTS

The authors are thankful to the Director, ITRA for providing facilities, support and to carry out the research work in the institute.

COMPETING INTEREST

Authors have declared that no competing interest exist.

REFERENCE

³¹ Peerzada AM, Ali HH, Naeem M, Latif M. *Cyperus rotundus* L: Traditional uses, phytochemistry and pharmacological activities. *Journal of Ethnopharmacology*. 2015; 174: 540-560