



UNIQUE JOURNAL OF AYURVEDIC AND HERBAL MEDICINES

Available online: www.ujconline.net

Review Article

PHARMACODYNAMIC ACTIONS OF SELECTED DECOCTION FORMULAS USING FOR *SHWĀSA RŌGA* (BRONCHIAL ASTHMA) IN TRADITIONAL MEDICINE IN SRI LANKA

Kumudu Rupika Weerasekera^{1*}, Narmada Dissanayaka²

¹Senior Lecturer, Department of *Kaya Chikitsa*, Institute of Indigenous Medicine, University of Colombo, Sri Lanka

²Medical Officer, Department of Ayurveda, Sri Lanka.

Received 07-09-2013; Revised 09-10-2013; Accepted 11-11-2013

*Corresponding Author: **Kumudu Rupika Weerasekera**, E-mail: kumuduweerasekera@yahoo.com

ABSTRACT

There has been a shift in universal trend from synthetic to herbal medicine recently. It is ancient wisdom that plants have therapeutic value and are used to treat various diseases since Neanderthal age. All ancient civilizations in the world are known to use plants for medicinal purposes. Ayurveda and traditional medicines are well known to the world for their natural ingredients and multiple benefits. Medicinal Plants play an important role in human life to combat diseases since time immemorial. Bronchial Asthma is a one of common respiratory disease in Sri Lanka that affects the all age groups. In Traditional Medicine in Sri Lanka Bronchial Asthma is correlated with *Shwāsa Rōga* and suggests number of decoction formulas (*Kashāya Vattōru*) for this disease. The purpose of this study was to determine a pharmacodynamic action of selected decoction formulas for *Shwāsa Rōga* and recognize the action of these decoction formulas towards on *Prānavaha Srōtas*. This study was done by using traditional medicine text books. After referring these books, thirty decoctions were selected for *Shwāsa Rōga*. Out of those, ten decoction formulas were randomly selected and Pharmacodynamic action was elicited and the effect of *Prānavaha Srōtas* was analyzed in that ten decoction formulas. After analyzing of all *Rasa* of each and every formulas; *Katu*, *Thiktha* and *Kashāya* are obvious and the percentages of those are 27.53%, 27.53%, and 20.22% respectively. The percentages of *Lagu*, *Rūksha* and *Tikshna guna* are 24.85%, 20.00%, 10.30% respectively. And also *Kaphagna* action is 67.79% and *Kapha Nissāraka* action is 32.89%. The conclusions were *Katu*, *Tiktharasa*, *Lagu* and *Guru guna*, *Ushna veerya* and *Katu vipāka* ingredients are frequently used in decoction formulas for *Shwāsa Rōga* in Traditional Medicine in Sri Lanka and also the used ingredients in decoction formulas either act on *Kaphagna* or *Kapha nissāraka* on *Prānavaha Srōtas*.

Keywords: Bronchial Asthma, *Shwāsa Rōga*, *Prānavaha Srōta*, Decoction formula

INTRODUCTION

Bronchial Asthma (BA) is a one of common respiratory disease in Sri Lanka that affects the all age groups. There are 195321 BA patients were reported in Sri Lanka in 2010. Death occurs were reported as 830 in Island wide in 2010. According to age group, 59-69 was the highest affected age range in Sri Lanka¹. According to Ayurveda, BA is correlated with *Tamaka Shwāsa* (TS)². *Shwāsa* derives its root from *Swash* +a (suffix) = *Shwāsa jeevane*, meaning the existence of life through *Prāna Vāyu*³. TS literally mean, that the person who suffers from TS, sees darkness in front of his eyes when there is an acute attack. The most prominent *Dōsha* of TS is *Kapha*. Further, there is an obstruction of the *Prānavaha Srōtas* due to *Prāna vāyu* in associated with *Kapha*, leaves off its normalcy,

begins to move in the upward direction, giving rise to more of respiration and producing breathlessness with catching pain in the head, neck, chest and flanks, cough accompanied with cracking sound, delusion, loss of appetite, running and thirst⁴. The concept of *Srōtas* is a fundamental principle of Ayurveda. *Srōtas* play a major role in maintaining health as well as manifesting diseases. In general, *Srōtas* means body passage or body channel. It helps to circulate body fluid as well as body elements. *Prānavaha Srōtas* resembles with respiratory system. *Prānavaha Srōtomula* is *Hridya* (heart) and *Mahāsrōtas* (central cavity)⁵.

According to traditional medicine in Sri Lanka, *Shwāsa Rōga* is commonly known as "*Shwāsa*"⁶. It is divided into five categories in texts "*Yogarnavaya*" and "*Prayōga Rathnāvaliya*" but not in other texts in traditional medicine.

According to *Prayōga Rathnāvaliya*⁷, the five types of *Shwāsa* are *Ksudrakaya*, *Tamakaya*, *Jeernakaya*, *Mahā Shwāsaya* and *Ūrdva Shwāsaya*. The pain which is alpa (less) called *Ksudrakaya* and mentioned under the curable diseases. *Tamakaya* has symptoms of *Peenasa* and *moha* and it increased in bad weather time and it is categorized under the maintaining diseases. Breathlessness occurs in *Jeernakaya*. *Mahā Shwāsaya* has symptoms of *mahath gōshā* (noisy sound), *Sihi mulāva* (unconsciousness), and *Mahath vēdana* (severe pain). *Ūrdva Shwāsa* has symptoms of *Ūrdva drushti* (upward rolling eye balls), *Moha* (unconsciousness), *Lehi rujā* (heart pain), *Pārshwa shūla* (flanks pain) and *Shareera shūla* (severe body ache). Those three types are categorized under the incurable diseases. The synonyms for *Shwāsa Rōga* in traditional medicine are “*Īlaya*”, *Illappuwa*” and “*Eduma*”. Also it called as “*Musavelaseeruwa*”⁶. It is not to be seen that “*Shwāsa Rōga*” could be cured definitely even in traditional medicine texts but suggests number of decoction formulas for “*Shwāsa Rōga*”.

OBJECTIVES

Objectives of this study was to find out the pharmacodynamic action of this ten selected traditional decoctions for *Shwāsa Rōga* and find the action of this selected formulas towards on *Prānavaha Srōtas*.

MATERIAL AND METHODS

The study was done by using traditional medicine text books. After referring the books, thirty decoctions were selected for *Shwāsa Rōga*. Out of those, ten decoction formulas were randomly selected and the Pharmacodynamic action was evaluated in those ten decoction formulas. Then *Rasa*, *Guna*, *Veerya* and *Vipāka* were analyzed of all decoction formulas. Later, the all identical properties were categorized together and the effect of *Pranavaha Srōtas* was elicited and they were indicated as percentage of the ten decoction formulas.

RESULTS

Selected ten decoction formulas are mentioned below tables No.1 to 10 with Sinhalese name and botanical name.

DISCUSSION

Katu Rasa, *Tikshna Guna*, *Ushna Veerya* and *Katu Vipāka* are majority in decoction 1 and also *Kapha nissāraka* action is most prominent. *Katu*, *Tikta* and *Kashāya Rasa*, *Lagu*, *Rūksha Guna* and *Ushna Veerya* are most prominent in decoction 2 and action is *Kaphagna*. *Lagu*, *Rūksha Guna* and *Ushna Veerya* are prominent in decoction 3. *Katu*, *Tikta* and *Kashāya Rasa* are much in that decoction and affect on *Prānavaha Srōtas* is *Kaphagna*. *Katu*, *Kashāya Rasa* are predominant in decoction 4. *Rūksha*, *Lagu Guna* and *Ushna Veerya* are prime in that decoction and more *Kaphagna* action is in it. *Katu*, *Tikta* and *Kashāya* are prime rasa in formula 5. Also more *Lagu Guna* as well as *Rūksha*, *Tikshna Guna* are in that decoction and 50% of *Kaphagna* and 40% of *Kapha Nissāraka* actions are in it. *Kahagna* action is prominent in formula 6 and also most prominent in *Katu*, *Tikta*, *Kashāya Rasa*, *Lagu Rūksha Guna*,

Ushna Veerya and *Katu Vipāka* in that decoction. Much *Kahagna* action in decoction 7 and more *Kapha Vāta Shaman* properties in this formula as above mentioned. *Katu*, *Tikta* and *Kashāya Rasa*, *Rūksha Tikshna* and *Lagu Guna* and *Ushna Veerya* are most prominent in decoction 8, but mostly there is *Madura Vipāka* and equal quantities of *Kaphagna* and *Kapha Nissāraka* action. *Katu*, *Tikta Rasa Lagu*, *Rūksha*, *Tikshna Guna* *Ushna Veerya* and *Katu Vipāka* are prime properties in formula 9 and more *Kaphagna* action indicates that formula. All drugs here are *Ushna Veerya* in decoction formula 10 and also *Kapha Vāta Shaman Guna* is most prominent in it. Besides one drug in that, all others are *Kaphagna* action on *Prānavaha Srōtas*. *Kapha* and *Vāta Dosha* are pacified by *Katu*, *Tikta*, *Kashāya Rasa*, *Lagu*, *Rūksha Tikshna Guna*, *Ushna Veerya* and *Katu Vipāka*. Consider about all decoction formulas, the most prominent *Rasa* are *Katu*, *Tikta* and *Kashāya*. The percentages of those are 27.53%, 27.53% and 20.22% respectively. The percentages of *Lagu*, *Rūksha* and *Tikshna Guna* are 24.85%, 20.00%, and 10.30% respectively. Also *Kaphagna* action is 67.79% and *Kapha Nissāraka* action is 32.89%.

CONCLUSION

In traditional medicine in Sri Lanka, *Katu* and *Tikta Rasa*, *Lagu*, *Rūksha* and *Tikshna Guna*, *Ushna Veerya* and *Katu Vipāka* ingredients are frequently use for decoctions prescribe to *Shwāsa Rōga*. These mentioned *Rasa*, *Guna*, *Veerya* and *Vipāka* properties are either act as *Kaphagna* or *Kapha Nissāraka* on *Prānavaha Srōtas*. In *Shwāsa Rōga*, *Prānavaha Srōtas* is obstructed by vitiate *Kapha Dōsha* and it relives by *Kaphagna* and *Kapha Nissāraka* actions of above selected 10 decoction formulas.

Recommendation

This study was done by using only traditional medicine text books. So then evaluation of the clinical efficacy is most important by using decoction formulas.

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Table 1: Decoction formula 1

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Iguru <i>Zingiber officinale R.</i>	Katu	Guru Snigdha Tikshna Rūksha	Ushna	Madura	Kapha Vāta hara	Kaphagna
Sudulūnu <i>Allum sativum L.</i>	Katu Madura Tikta Kashāya	Pichchila Snigdha Guru Tikshna	Ushna	Katu	Kapha hara	Kapha Nissāraka
Perunkāyam <i>Ferula foetida R.</i>	Katu	Laghu Snigdha Sara Sīkshna	Ushna	Katu	Kapha Vāta hara	Kapha nissāraka
Sahinda lunu Rock salt	Lawana	Guru	Sheeta	Katu	Tridōsha hara	Kapha nissāraka
percentage %	Katu 75 Tikta25 Kashāya25	Tikshna75 Rūksha25 Laghu 25	Ushna75 Sheeta25	Katu75 Kadura25		Kapha Nissāraka75 Kaphagna25

Table 2: Decoction formula 2

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Sirithekku <i>Clerodendrum serratum (L.)M.</i>	Tikta katu Kashāya	Rūksha Laghu	Ushna	Katu	Kapha Vāta hara	Kaphagna
Elabatumul <i>Solanum indicum L.</i>	Katu Tikta	Laghu	Ushna	Katu	Kapha hara	Kaphagna
Viyali kaha <i>Curcuma longa R.</i>	Tikta Tikta	Rūksha	Ushna	Katu	Kapha Pitta Hara, Kapha Vata hara	Kaphagna
Adathōda <i>Adhatoda vasicaN.</i>	Katu Tikta	Laghu	Sheeta	Katu	pitta slēshma hara, kapha hara	Kapha nissāraka
Rasakinda <i>Tinospora codifolia L.</i>	Tikta Kashāya	Guru	Ushna	Madura	Tridosha hara, Vata Kaphahara	Kaphagna
Koththamalli <i>Coriandrum sativum L.</i>	Kashāya Tikta Madura	Snigdha Laghu	Ushna	Madura	Tridosha hara, Kapha Vāta hara	Kaphagna
Iguru <i>Zingiber officinale R.</i>	Katu	Guru Snigdha Tikshna Rūksha	Ushna	Madura	Kapha Vāta hara	Kaphagna
Thippili <i>Piper longumL.</i>	Katu Tikta	Snigdha Laghu	Ushna	Madura	Kapha Vāta hara	Kaphagna
percentage %	Katu75 Tikta 87.5 Kashāya 37.5	Tikshna12.5 Rūksha 37.5 Laghu 25	Ushna 87.5 Sheeta 12.5	Katu 50 Madura 50	-	Kapha Nissāraka 12.5 Kaphagna75

Table 3: Decoction formula 3

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Sirithekku <i>Clerodendrum serratum (L) M.</i>	Katu Tikta Kashāya	Lagu Rūksha	Ushna	Katu	Kapha hara	Kaphagna
Kottan Saussurea lappa C.B.CI	Katu Tikta Madura	Laghu	Ushna	Katu	Tridōsha hara	Kaphagna
Thippili <i>Piper Longum L.</i>	Katu Madura	Snigdha	Ushna	Madura	Tridōsha hara	Kaphagna
Esala <i>Cassia fistula L.</i>	Tikta Madura	Guru Snigdha Mrudu	Sheeta	Madura	Tridōsha hara	Kapha nissāraka
Aralu <i>Terminalia chebula R.</i>	Tikta Madura Katu Kashāya Amla	Rūksha Laghu	Ushna	Madura	Tridōsha hara	Kaphagna
Velmee <i>Glycyrrhiza glabra L.</i>	Madura	Guru Snigdha	Sheeta	Madura	Slēshma hara VataPitta Shamana	Kapha nissāraka
Vishnukrānthi <i>Evovulus asinoides L.</i>	Katu Tikta	Laghu	Ushna	Katu	kapha vata Shamana	Kapha Nissāraka
Sūkiri Sugar	Madura	Rūksha Guru	Sheeta	Madura	Kaphapitta Shamana	Kaphagna
percentage %	Katu 62.5 Tikta 62.5 Kashāya 37.5	Tikshna 12.5 Rūksha 37.5 Laghu 50	Ushna 75 Sheeta 37.5	Katu 37.5 Madura 62.5		Kapha Nissāraka 37.5 Kaphagna 62.5

Table 4: Decoction formula 4

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Aralu <i>Terminalia chebula R.</i>	Tikta Madura Katu Kashāya Amla	Rūksha Laghu	Ushna	Madura	Tridōsha hara	Kaphagna
Beli <i>Aegle marmelos C.</i>	Madura Katu Kashāya	Rūksha Laghu	Ushna	Katu	Tridōsha hara	Kaphagna
Boo mul <i>Ficus religiosa L.</i>	Madura Kashāya	Rūksha Snigdha	Sheeta	Katu	Kapha hara	Kaphagna
Ghethel Clarified butter	Madura	Guru Snigdha	Sheeta	Madura	Vata Pitta hara	Kapha Nissāraka
Suwasa lunu Black salt	Lawana Katu	Laghu Snigdha	Ushna	Madura	Tridōsha hara	–
percentage %	Katu 40 Tikta 20 Kashāya 60	Rūksha 60 Laghu 60	Ushna 60 Sheeta 40	Katu 40 Madura 60		Kapha Nissāraka 60 Kaphagna 20

Table 5: Decoction formula 5

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Sudulūnu <i>Allum sativum</i> L.	Katu Madura Tikta Kashāya Lawana	Pichchila Snigdha Guru Tīkshna	Ushna	Katu	Kapha hara	Kapha nissāraka
Sārana <i>Boerhavia</i> <i>diffussa</i> L.	Tikta Madura Kashāya	Rūksha Laghu	Ushna	Madura	Tridōsha hara	Kaphagna
Aralu <i>Terminalia</i> <i>chebula</i> R. & W.	Tikta Madura Katu Kashāya Amla	Rūksha Laghu	Ushna	Madura	Tridōsha hara	Kaphagna
Bulu <i>Terminalia</i> <i>bellerica</i> R.	Tikta Katu Kashāya	Laghu Rūksha	Ushna	Madura	Kapha Pitta hara	Kaphagna
Nelli <i>Phyllanthus</i> <i>emblica</i> L.	Madura Amla Tikta Katu Kashāya	Laghu Rūksha	Sheeta	Madura	Tridosha hara	Kaphagna
Vanapala <i>Adhatoda vasica</i> N.	Katu Tikta	Laghu	Sheeta	Katu	Pitta Slēshma hara	Kapha nissāraka
Udu <i>Phaseolus mungo</i> L.	Madura	Guru Snigdha	Ushna	Madura	Kapha Vardaka, Vāta Shāmaka Pittakāraka	Kapha uthklesha
Kollu <i>Dolichos biflorus</i> A.	Kashāya	Laghu Vidāhi	Ushna	Katu	Kapha Vāta Shāmaka	Kapha nissāraka
Dēvduru <i>Cedrus deodara</i> R.	Tikta Katu	Laghu Snigdha	Ushna	Katu	Kapha Vāta nāsha	Kapha nissāraka
Sahinda lunu Rock salt	Lawana	Guru	Sheeta	Katu	Tridōsha hara	Kapha nissāraka
Percentage %	Tikta70 Katu60 Kashāya60	Laghu70 Rūksha40 Tīkshna 10	Ushna70 Sheeta30	Katu50 Madura40		Kapha Nissāraka50 Kaphagna40

Table 6: Decoction formula 6

Drug	Rasa	Guna	Veerya	Vipāka	Vipāka	Effect on Prānavaha Srōtas
Midi <i>Cosciniumfenestratum</i> G.	Katu Tikta Kashaya	Laghu	Ushna	Katu	Kapha Vāta hara	Kapha Nissāraka
Edaru <i>Ricinus coounis</i> L.	Tikta Madura	Guru	Ushna		Kapha Vata hara	Kaphagna
Bebila <i>Sida cordifolia</i> L.	Madura	Guru Snigdha Pichchila	Sheeta	Madura	Tridosha hara	—
Siddhiguru <i>Zingiber officinale</i> R.	Katu	Guru Snigdha Tikshna Rūksha	Ushna	Madura	Kapha, Vāta hara	Kapha Nissāraka
Nika <i>Vitex nogundo</i> L.	Katu Tikta Kashāya	Laghu	Ushna	Katu	Kapha Vāta hara	Kaphagna
Aralu <i>Terminalia chebula</i> R. & W.	Tikta Madura Katu Kashāya Amla	Rūksha Laghu	Ushna	Madura	Tridosha hara	Kaphagna

Katuvelbatu <i>Sonlanum xanthocarpum</i> S.	<i>Tikta</i> <i>Katu Kashāya</i>	<i>Rūksha Laghu</i> <i>Sara</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha Vāta</i> <i>hara</i>	<i>Kaphagna</i>
Velkasabiliya <i>Tragia involucrate</i> L.	<i>Tikta Katu</i>	<i>Lagu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Vāta Kapha</i> <i>hara</i>	<i>Kaphagna</i>
Percentage %	<i>Katu</i> 75 <i>Tikta</i> 75 <i>Kashāya</i> 50	<i>Lagu</i> 62.5 <i>Rūksha</i> 37.5 <i>Tikshna</i> 12.5	<i>Ushna</i> 87.5 <i>Sheeta</i> 12.5	<i>Katu</i> 50 <i>Madura</i> 37.5	-	<i>Kaphagna</i> 62.5 <i>Kapha Nissāraka</i> 25

Table 7: Decoction formula 7

Drug	Rasa	Guna	Veerya	Vipāka	Vipāka	Effect on Prānavaha Srōtas
Sudulūnu <i>Allium sativum</i>	<i>Katu Madura</i> <i>Tikta Kashāya</i>	<i>Pichchila</i> <i>Snigdha Guru</i> <i>Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>hara</i>	<i>Kapha nissāraka</i>
Murungā <i>Moringo oleifera</i> L.	<i>Katu</i> <i>Kshāra</i>	<i>Laghu Rūksha</i> <i>Tikshna Sara</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>Vāta Shamana</i>	<i>Kaphagna</i>
perunkāyam <i>Ferula asafoetida</i> R.	<i>Katu</i>	<i>Laghu Snigdha</i> <i>Sara Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>Vāta hara</i>	<i>Kapha nissāraka</i>
Sidhiguru <i>Zingiber officinale</i> R.	<i>Katu</i>	<i>Guru Snigdha</i> <i>Tikshna Rūksha</i>	<i>Ushna</i>	<i>Madura</i>	<i>Kapha,</i> <i>Vāta hara</i>	<i>Kaphagna</i>
Midi <i>Cosciniumfenestratum</i> G.	<i>Katu</i> <i>Tikta Kashāya</i>	<i>Guru</i> <i>Sara</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>Vāta hara</i>	<i>Kaphagna</i>
Beli <i>Aegle marmelos</i> L.	<i>Madura Katu</i> <i>Kashāya</i>	<i>Rūksha Laghu</i>	<i>Ushna</i>	<i>Madura</i>	<i>Tridōsha hara</i>	<i>Kaphagna</i>
Palol <i>Stereospermum</i> <i>suaveolens</i> DC.	<i>Katu</i> <i>Tikta Kashāya</i>	<i>Rūksha Laghu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Tridōsha</i> <i>hara</i>	<i>Kaphagna</i>
Thotila <i>Oroxylum indicum</i> L.	<i>Tiktha</i> <i>Kashāya</i>	<i>Rūksha</i> <i>Lagu</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kapha</i> <i>Pitta hara</i>	<i>Kaphagna</i>
Athdemata <i>Gmelina arborea</i> R.	<i>Tikta Kashāya</i> <i>Madura</i>	<i>Guru</i>	<i>Ushna</i>	<i>Katu</i>	<i>Tridōsha</i> <i>Shāmaka</i>	-
Asvenna <i>Alysicarpus vaginalis</i> DC	<i>Madura</i> <i>Tikta</i>	<i>Snigdha</i> <i>Guru</i>	<i>Ushna</i>	<i>Madura</i>	<i>Tridōsha</i> <i>Shāmaka</i>	<i>Kaphagna</i>
Polpalā <i>Aerva lanata</i> L.	<i>Madura</i> <i>Kashāya</i>	<i>Lagu</i> <i>Sheeta</i>	<i>Ushna</i>	<i>Madura</i>	<i>Kapha</i> <i>Pitta hara</i>	<i>Kaphagna</i>
Elabatu mul <i>Solanum indicum</i> L.	<i>Katu Tikta</i>	<i>Laghu</i> <i>Rūksha</i> <i>Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>Vāta hara</i>	<i>Kaphagna</i>
Katuvelbatu Sonlanum <i>xanthocarpum S&W</i>	<i>Tikta</i> <i>Katu Kashāya</i>	<i>Rūksha Laghu</i> <i>Sara</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>Vāta hara</i>	<i>Kaphagna</i>
Heen nerenchi <i>Tribulus terrestris</i>	<i>Madura</i>	<i>Snigdha</i> <i>Guru</i>	<i>Sheeta</i>	<i>Madura</i>	<i>Vata Pitta</i> <i>shāmaka</i>	<i>Kapha nissāraka</i>
Mee peni Honey	<i>Madura</i> <i>Kashāya</i>	<i>Laghu</i> <i>Rūksha</i>	<i>Sheeta</i>	<i>Madura</i>	<i>Tridōsha</i> <i>hara</i>	<i>Kaphagna</i>
Percentage %	<i>Tikta</i> 46.67 <i>Katu</i> 60 <i>Kashāya</i> 66.6	<i>Laghu</i> 60 <i>Rūksha</i> 53.3 <i>Tikshna</i> 33.33	<i>Ushna</i> 80 <i>Sheeta</i> 20	<i>Madura</i> 40 <i>Katu</i> 60		<i>Kaphagna</i> 73.3 <i>Kapha</i> <i>Nissāraka</i> 20

Table 8: Decoction formula 8

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Detta <i>Baliospermum montanum M.</i>	Katu	Tikshna	Ushna	Katu	Kapha Vāta, Pitta Shāmaka	Kapha Nissāraka
Balila <i>Sida cordifolia L.</i>	Madura	Guru, Snigdha Pichchila	Sheeta	Madura	Tridōsha Shāmaka	
Sārana <i>Boerhavia diffusa L.</i>	Tikta Madura Kashāya	Rūksha Laghu	Ushna	Madura	Tridōsha Shāmaka	Kaphagna
Eradu <i>Rcinus communis L.</i>	Tikta Madura	Guru	Ushna	Madura	Kapha, Vāta Shāmaka	Kaphagna
Ehela dalu <i>Cassia fistula L.</i>	Tikta Madura	Guru	Ushna	Madura	Tridōsha Shāmaka	Kapha Nissāraka
Sudulūnu <i>Allium saivum L.</i>	Katu Madura Tikkta Kashāya	PichchilaSnigdha Guru Tikshna	Ushna	Katu	Kapha Shāmaka	Kapha Nissāraka
Udu <i>Phaseolus mungo L.</i>	Madura	Guru, Snigdha	Ushna	Madura	Kapha Vardaka Vāta Shāmaka	Kapha Uthklēshaka
Vadakaha <i>Acorus calmus L.</i>	Katu Tikta	Rūksha Laghu	Ushna	Katu	Kapha Vāta Shāmaka	Kapha Nissāraka
Yavakāra lunu Potassium Carbonate	Katu	Laghu Snigdha	Ushna	Katu	Kapha Vāta Shāmaka	Kaphagna
Percentage %	Katu 44.44 Tikta 55.56 Kashāya 22.22	Rūksha 22.22 Laghu 22.2 Tikshna 22.22	Ushna 88.89 Sheeta 11.11	Katu 44.4 Madura 55.5		Kapha Nissāraka 33.33 Kaphagna 33.3

Table 9: Decoction formula 9

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Ehela <i>Cassia fistula L&W.</i>	Thikta Madura	Guru	Ushna	Madura	Tridosha Shāmaka	Kapha Nissāraka
Karada <i>Pongamia pinnata L.</i>	Tikta Katu	Tikshna	Ushna	Katu	Kapha Pitta Shāmaka	Kaphagna
Diyamiththa <i>Picrorhiza kurroa R.</i>	Tikta	Laghu Tikshna	Ushna	Katu	Kapha Vāta Shāmaka	Kaphagna
Katukarōsana <i>Picrorhiza kurroa R.</i>	Katu Tikta	Rrūksha Laghu Sara	Sheeta	Katu	kapha Pitta Shāmaka	Kaphagna Kapha Nissāraka
Percentage %	Katu 50 Tikta 100	Rūksha 25 Laghu 50 Tikshna 50	Ushna 75 Sheeta 25	Katu 75 Madura 25	-	Kapha Nissāraka 50 Kaphagna 75

Table 10: Decoction formula 10

Drug	Rasa	Guna	Veerya	Vipāka	Dōsha karma	Effect on Prānavaha Srōtas
Thala <i>Sesamum indicum</i> L.	<i>Katu</i> <i>Thikta</i> <i>Madura</i>	<i>Guru</i> <i>Snigdha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha, Pitta, Vāta</i> <i>Shāmaka</i>	<i>Kapha</i> <i>nissāraka</i>
Elabatu <i>Solanum melongena</i> L.	<i>Katu</i> <i>Tikta</i>	<i>Laghu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha Vāta</i> <i>Shāmaka</i>	<i>Kaphagna</i>
Pitavakka <i>Phyelanthus niruri</i> L.	<i>Madura</i> <i>Tikta</i> <i>Kashāya</i>	<i>Laghu</i> <i>Rūksha</i>	<i>Ushna</i>	<i>Madura</i>	<i>Kapha Pitta</i> <i>Shāmaka</i>	<i>Kaphagna</i>
Kūramul <i>Amaranthus tristis</i> L.	<i>Tikta</i> <i>Katu</i> <i>Kashāya</i>	<i>Laghu</i> <i>Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha vāta</i> <i>Shāmaka</i> <i>Pitta Vardhaka</i>	<i>Kaphagna</i>
Abulebiliya <i>Oxalis corniculata</i> L.	<i>Amla</i> <i>Kashāya</i>	<i>Laghu</i> <i>Rūksha</i>	<i>Ushna</i>	<i>Amla</i>	<i>Kapha</i> <i>Vāta Shāmaka</i>	<i>Kaphagna</i>
Medahagu <i>Pergularia daemia</i>	<i>Tikta</i>	<i>Rūksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha Pitta</i> <i>Shāmaka</i>	<i>Kaphagna</i>
Siddhiguru <i>Zingiber officinale</i> R.	<i>Katu</i>	<i>Guru</i> <i>Snigdha</i> <i>Tikshna</i> <i>Rūksha</i>	<i>Ushna</i>	<i>Madura</i>	<i>Kapha Vāta</i> <i>Shāmaka</i>	<i>Kaphagna</i>
Sārana <i>Boerhavia diffusa</i> L.	<i>Tikta</i> <i>Madura</i> <i>Kashāya</i>	<i>Rūksha</i> <i>Laghu</i>	<i>Ushna</i>	<i>Madura</i>	<i>Tridosha Shāmaka</i>	<i>Kaphagna</i>
Kollu <i>Dolichos biflorus</i> A.	<i>Kashāya</i>	<i>Laghu</i> <i>Vidāhi</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha</i> <i>Vāta Shāmaka</i>	<i>Kaphagna</i>
Percentage %	<i>Katu</i> 44 <i>Tikta</i> 75	<i>Rūksha</i> 55.56 <i>Laghu</i> 44.44 <i>Tikshna</i> 22.22	<i>Ushna</i> 100	<i>Katu</i> 55.56 <i>Madura</i> 33.33	-	<i>Kaphagna</i> 88.8 <i>Kapha</i> <i>Nissāraka</i> 11.1

Source of support: Nil, Conflict of interest: None Declared