

Seetharama Vati: A polyherbomineral formulation of Sri Lankan Indigenous Medicine: Review

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Abstract

According to the WHO estimations, 80% of the global population utilize traditional medicine presently and 70% of Sri Lankan citizens are depending on their own Indigenous medicine which is also known as Deshiya Chikitsa. Sri Lankan indigenous medicine is mainly rooted from herbomineral modules, which can be used as single dosages or as compound formulae. Seetharama Vati, a polyherbomineral drug is mentioned in the traditional publication 'Vatika Prakaranaya' as the 57th restorative out of 319 Guli and 24 Kalkas. The study was designed for compiling the knowledge based on Seetharama Vati and its therapeutic uses clinically as well as theoretically along with its 37 ingredients. The review was conducted as a literary study using authentic texts like Vatika Prakaranaya, Ayurveda pharmacopeia, Bhavaprakasha Nighantu, Rasa Tarangani etc, and official websites like WHO, easyayurveda, also scientific journal articles from Pubmed, ResearchGate, ScienceDirect etc. According to the quantitative analysis of Rasa, Guna, Veerya, Vipaka, the medication is committed with 71.7% of Katu Rasa, 74.3% of Laghu Guna, 69.2% of Ushna Veerya and 74.4% of Katu Vipaka with Kapha Vata Shamaka action. Therefore, the formula Seetharama Vati can be indicated to the disease conditions which require a Vata Kapha Shamaka action as for the indications mentioned in Vatika Prakaranaya.

Keywords: Seetharama Vati; Vatika Prakaranaya; Sri Lankan Indigenous Medicine.

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Introduction

According to World Health Organization (WHO), Traditional system of medicine is the sum total of knowledge, skill, and practiced on the theories, beliefs, and experiences indigenous for different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.¹ WHO estimates that more than 80% of health care needs in developing countries are met through traditional health care practices.² Extensive investigations around the globe have revealed that medicinal plants were used by human in pre-historic era and that crude extracts

or pure molecules isolations from medicinal plants represent the most ancient mode of medication.³

Traditional medicine in Sri Lanka is a combination of four medical systems: Ayurveda, Siddha, Unani and Deshiya Chikitsa, which mainly uses herbal preparations in single dosage form or in combination to cure as well as to prevent diseases.⁴ Sri Lanka have shown that the Balangoda man have used medicinal plants for over 30,000 years.³ According to the WHO over 70 % of Sri Lankans still benefit from the indigenous system of medicine in Sri Lanka which is also known as Deshiya Chikitsa or Hela Vedakama.⁵ Sri Lanka which is a biologically diverse country is native to

more than 1400 medicinal plant species.⁶ Medicinal plant descriptions and complex prescriptions were preserved on clay tablets, cuneiforms and documented in *materia medica* and Ola leaf manuscripts.⁷ Even though medicinal herbs have been used for human disorders for centuries, most Sri Lankan medicinal plants have not been chemically studied.⁸ Deshiya Cikitsa is a medical system with combination of many branches such as ophthalmology (Akshi Vedakama), fractures and dislocations (Kadum Bindum), burns and scalds (Davum Pilissum), carbuncles and malignancies (Gedi Vana Pilika), and mental disorders (Unmada Vedakama) etc. Sarartha Samgrahaya, Vatika Prakaranaya, Deshiya Chikitsa Sangrahaya, Bhaisajya Manjusa, Aushadha Sangrahaya etc, are some great books which have written on Deshiya Chikitsa.⁹ Arka Prakashaya by King Rawana is considered as the first ever medical book published on Sri Lankan medical system.¹⁰ The treatment is based on internal medicine as well as external medicine. There are more than 11 types of internal dosage forms mentioned in Sri Lankan indigenous medicine; Kwatha Kashaya (decoction), Hima Kashaya (cold infusion), Phanta Kashaya (hot infusion), Swarasa (juice), Kalka (paste), Guli-Vati (pills-tablets), Churna (powder), Avaleha (semi solid linctures), Taila (medicated oils), Parpati (mineral preparations), Manda-Peya-Vilepi (herbal gruels), Putapaka and Basna. Taila (medicated oil), Pattu (medicated pastes), Mallum, Tel Kira, Lepa (skin application), Thavili Pottani (poultice), and Pani (syrup) are some common external compound preparations used in Deshiya Chikitsa.

Vatika Prakaranaya is one of the most important and frequently used book when it comes to Sri Lankan indigenous medicine. The author of the book is Vaidyacharya Illeperuma Aracchige Don Abraham Alwis Illeperuma. The book was published in 1948 including various traditional formulae with its indications as well as Anupana for each.¹² It is written in the poetic form to maintain the literary meaning and the value of the contents. Vatika Prakaranaya consist of 5293 poetries for 319 Guli (pills) and 24 Kalka (pastes) for acute as well as chronic conditions such as Vata Roga, Grahani, Mandam, Kola, Sanni, Valippu, GI tract disorders and inflammatory conditions.¹³

Seetharama Vati is a polyherbo-mineral preparation mentioned starting from the 57th poem in the Vatika Prakaranaya. It include 41 poems with 4 lines in each. Seetharama Vati contains thirty seven

(37) ingredients of which twenty eight (28) herbs and nine (09) minerals. The formula is prepared with the weight of 125mg (1 Rakthika) which is charcoal gray in color with a strong pungent taste (Kashaya Rasa). The drug is therapeutically effective on indicated disease conditions with various Anupana. Herbs are taken either in wet or dry form while, minerals and some herbs are taken after purification (Shodana) process. Most of the ingredients consist of Deepana Pachana Guna along with Kapha Vata Shamaka action due to its Ushna Veerya and Katu Vipaka.

Ingredients

Fourteen ingredients are mentioned in the first poem taken in dry form along with garlic in fresh. Thikulu (ginger, pepper, long pepper), Sathapushpa (dill seed), Kottam (Indian costus tree), Asamoda (bishop's weed), Deduru (cumin seed and black cumin seed), Nerivisa (indian aconite), Suraduru (fenel seed), Yashti (Licourice), Thivaga (nutmeg seed, nutmeg seed cover, clove) are taken in five (5) Madata (1.25g) from each and garlic for the weight of all above (70 Madata -17.5g).

Eight ingredients are mentioned in second poem including both herbal and mineral origin. Savinda (rock salt), Thuttan (calamine), Manosila (red arsenic), Puskara (borax), Kelinda (kurchi seeds), Kothamburu (coriander), Thurisi (copper sulfate), Seenakkaram (potash alum), are taken in 04 Madata (1g) while Rath Handun (red sandalwood) is taken for the total weight from each one of them (32 Madata - 8g). The mineral materials should be added after the process of Shodana.

Iwada (atis root), Gal Mada (rock alum), Kulu Rahana (hellebore), Hingulu (cinnabar), Hiriyaal (yellow arsenic) are to be taken from each 3 Madata (0.750g) and Hingu (devil's dung) is added to the mixture as a sum of above five ingredients (15 Madata - 3.75g).

The young leaves of Heen Maduru Thala (sacred basil), Nika (Chinese chest tree), Wela (wild spider flower), Kudu Mirissa (toon tree), Kosamba (neem tree), Gata Thumba (ceylon slitwort), are taken freshly and cleaned in advance to get the two (2) Madata weight of dry form as mentioned in the book. Vada Kaha (calamus / sweet flag) is taken as a collection of all those six materials (12 Madata - 3g). The following table indicates its different ingredients, their used part and required composition (table 1).¹⁴

Table 1: Ingredients of Seetharama Vati and used part with the quantity.

Local name	Sanskrit name	Scientific name	Family	Used part	Used amount
Sudu Duru	Sweta Jeeraka	Cuminum cyminum Linn.	Umbelliferae	Seeds	Madata 5 (1.25g)
Kaluduru	Krushna Jeeraka	Nigella sativa	Ranunculaceae	Seeds	1.25g
Asamodagam	Ajamoda	Trachyspermum ammi	Umbelliferae	Seed	1.25g
Mahaduru	Kunchi/ Vruhath Jeeraka	Foeniculum vulgare	Umbelliferae	Seeds	1.25g
Satakuppa	Shathapushpa	Anethum graveolens	Apiaceae	Seeds	1.25g
Viyali Inguru	Nagara/ Shunti	Zingiber officinale	Zingiberaceae	Rhizome	1.25g
Gammiris	Maricha	Piper nigrum Linn.	Piperaceae	Seeds	1.25g
Thippili	Pippali	Piper longum Linn.	Piperaceae	Seeds	1.25g
Karabu	Lavanga	Syzygium aromaticum	Myrtaceae	Flower bud	1.25g
Vasavasi	Jathi Patri	Myristica fragrans	Myristicaceae	Seed covering	1.25g
Sadikka	Jathi Phala	Myristica fragrans	Myristicaceae	Seed	1.25g
Neri Visha	Vatsanabha	Aconitum ferox	Ranunculaceae	Tuberous root	1.25g
Suwanda Kottan	Kushta	Saussurea lappa	Asteraceae	Root	1.25g
Valmi	Yashtimadu	Glycyrrhiza glabra Linn.	Fabaceae	Root	1.25g
Heen Maduruthala	Thulasi	Ocimum tenuiflorum	Lamiaceae	Young leaf	Madata 2 (0.5g)
Nika	Nirgundi	Vitex negundo	Verbenaceae	Young leaf	0.5g
Wela	Thila Parni	Cleome gynandra	Capparaceae	Young leaf	0.5g
Kudu Mirissa	Native plant	Toddalia asiatica	Rutaceae	Young leaf	0.5g
Kohomba	Nimba	Azadirachta indica	Meliaceae	Young leaf	0.5g
Thumba	Dronapushpi	Leucas zeylanica	Lamiaceae	Young leaf	0.5g
Ridi thuttan	Yashada Bhashma	Calamine (Fe ₂ O ₄ Zn)	-	Purified form	Madata 4 (1g)
Mano shila	Manahshila	Realgar (As ₂ S ₄)	-	Purified form	1g
Kottamalli	Danyaka	Coriandrum sativum L.	Umbelliferae	Seeds	1g
Palmanikkam	Thuttaka (Thursi)	Copper Sulphate (CuSO ₄ .5H ₂ O)	-	Purified form	1g
Sahinda Lunu	Saindava	Rock Salt (NaCl)	-	Purified form	1g
Pushkara	Tanka Tankana	Borax (Na ₂ B ₄ O ₇)	-	Purified form	1g
Kelinda Haal	Kutaja	Holarrhena antidysenterica	Apocynaceae	Seeds	1g
Seenakkaram	Spahatika	Gypsum (K ₂ Al ₂ (SO ₄) ₃ .24 H ₂ O)	-	Purified form	1g
Athi vidayam	Athivisha	Aconitum heterophyllum	Ranunculaceae	Roots	Madata 3 (0.75g)
Gal Mada	Unknown	Rock Alum	-	Purified form	0.75g
Ran Hiriyal	Harithala	Yellow Arsenic (As ₂ S ₃)	-	Purified form	0.75g
Katukarosana	Katuki	Picrorhiza kurroa	Plantaginaceae	Roots	0.75g
Sadilingum	Hingula	Cinnabar (HgS)	-	Purified form	0.75g
Sudu lunu	Rasona	Allium sativum Linn.	Amaryllidaceae	Bulb	Madata 70 (17.5g)
Vada kaha	Vacha	Acorus calamus	Acoraceae	Rhizome	Madata 12 (3g)
Rath Handun	Raktha Chandana	Pterocarpus santalinus	Fabaceae	Hard wood	Madata 32 (8g)
Perum Kaayam	Hingu	Ferula asafetida	Umbellifereae	Resin	Madata 15 (3.75g)
Ambul dodum	Jambira	Citrus aurantium	Rutaceae	Juice	As required
Githel	Grita	-	-	-	As required

Method of preparation

The method of preparation is well explained in the fifth poem: after collecting all ingredients in required quantity in clean and powder form, they should be mixed together and grind with each 'Heen Maduru Thala (sacred basil), Nika (Chinese chest tree), Nimba (neem), Fresh ginger (ginger juice), Orange juice (sour orange), Githel (ghee oil), Nimba Thaila (neem oil) separately for 7 days. The final mixture should be reformed into small pills; the size according to the Vatika Prakaranaya is of a green gram (125 mg). Finally, the pills are dried in shades and stored in an airtight container.

Therapeutic indications

Table 2: Indications and different Anupana for Seetharama Vati.

Disease condition	Anupana
Vataja Jvara	Trikatu Kashaya (Pippali, Thippili, Nagara) Dashamula Kashaya Shunti and Bilva-patra Kashaya Nimba Patra Swarasa
Pittaja Jvara	Vasa-mula Kashaya Parpata Kashaya with cow's milk Trikatu Kashaya (Pippali, Thippili, Nagara)
Kaphaja Jvara	Dhanyaka Kashaya Vruhati, Kantakarika, Amurtha, Musthaka and Nagara Kashaya Musthaka, Hriversa, Paata, Bhu-nimba, Katuki and Amurtha Kashaya with Bee honey
Vata-Pitta Jvara	Laghu Pancha Moola Kashaya (Shalaparni, Prushnaparni, Vruhati, Kantakarika, Gokshura) with Bee honey and Sugar
Kapha-Vata Jvara	Dashamul Kashaya
Sanni and Kapha Vata Kopha	Denibadi Kashaya (Nimba, Bhu-nimba, Vruhati, Kantakarika, Shyonaka, Paata, Varuna and Nagara Kashaya with Saindhava Lavana and Hingu
Asthma	Trikatu, Hingu and Dhanyaka Kashaya with Bee honey
Shirah Daha	Nasya with Nirgundhi-patra Swarasa
Hanusthamba (Lock Jaw)	Nasya with Kashmarya Swarasa and Sesame oil
Vamana (Vomiting)	Mixture of Sugar cane juice, Bee honey, and Nagara juice Laaja Churna with Bee honey
Kola (Acute respiratory distress), Sanni (Acute clinical conditions with fever and respiratory distress)	Mustha, Hriversa, Sweta-chandana, and Vasa Kashaya with Bee honey and Ghee
Vata Kopha, Sanni, Jvara	Trikatu, Triphala, Dhanyaka, Vacha, Katuki, Nimba, Amurtha and Mustha Kashaya
Vadu Gey Sanniya (Post-partum complications)	Nirgundi, Nimba, Kudu Mirissa (<i>Toddalia asiatica</i>), Thulasi, Kulatta, Triphala, Vacha and Nagara Kashaya Amurtha, Musthaka, Vasa, Nimba, Trikatu, and Nagara Kashaya with Hingu
Akshepa (Convulsion)	Nimba, Nirgundi, Thilaparni (Wela), Yakuvanassa (<i>Leonotis nepetifolia</i>), Vasa, and Lashuna kashaya with <i>Pas Thel</i> (Oils of Tila, Eranda, Nimba, Mee & Ghee)
Asthma and VPK Sanni	Nimba, Nagara, and Lashuna grind and add Neem oil & Hingu
Amma and Awililla (mild orthopedic casualties in soft tissues)	Nirgundi, Nimba, Nagara, and Karanja Kashaya with Neem Oil and Sesame oil

Table Cont....

Atisara (Diarrhoea)	Mustha Kashaya with Bee honey
Atisara with pain	Kutaja Kashaya
Ama, Gulma Abdomina pain	Trikatu, Hingu, Vacha, Dhanyaka, and Lashuna Kashaya
Vomiting	Mixture of Krushna Jeeraka, Lashuna, Sharkara, and Ghee Nagara and Sharkara Swarasa
Vomiting with Diarrhoea	Mixture of Nagara, Bee honey, and Sharkara
Ila Aduma (acute bornchia asthma)	Kuppameniya (<i>Acalypha indica</i>) Swarsa, Dodam Pagiri (<i>Citrus aurantium</i>), and Sahindava Lavana with Neem oil
Bala Roga	Nagara, Nimba, Lashuna Swarasa with Sesame oil
Mutrashmari and Athisara	Kakiri seed (<i>Cucumis melo</i>), Wedi Lunu (Pottasium nitrate), Kalka with King-coconut water
All Sanni	Nagara Swarasa
(Acute clinical conditions with fever and respiratory distress)	Nimba, Lashuna, Ghee, Red-onion, and Sweta-chandana Kashaya with Sugar
Kola (Acute respiratory distress)	Nimba, Vasa, Lashuna, Kuppamaniya, Yakuvanassa (<i>Leonotis nepetifolia</i>), and Nagara Kashaya with Neem oil

Discussion

The Seetharama Vati is commonly indicated for disease conditions with a Kapha Vata elevation. Therefore, the expected pharmacological action on Tridosha is mainly Kapha Vata Shamaka effect. The quantitative analysis of Rasa, Guna, Virya, and Vipaka on 39 ingredients of Seetharama Vati is revealed that Katu Rasa is predominantly seen with 71.7%, followed by Thikta Rasa (53.8%), Kashaya Rasa (28.2%), Madhura Rasa (23%),

Lavana Rasa (7.6%) and Amla Rasa (2.5%) which decrease Kapha Dosha. The most prominent Guna in this formula is Laghu Guna (74.3%), Guru Guna (46.2%), and Theekshna Guna (41.0%). Collectively, the majority of ingredients possess Ushna Veerya (69.2%) which pacifies the Vata Kapha dosha. The Vipaka of Seetharama Vati is noted with the highest percentage in Katu Vipaka (74.4%), followed by Madhura (17.9%) and Amal Vipaka (2.6%) respectively (figure 1).

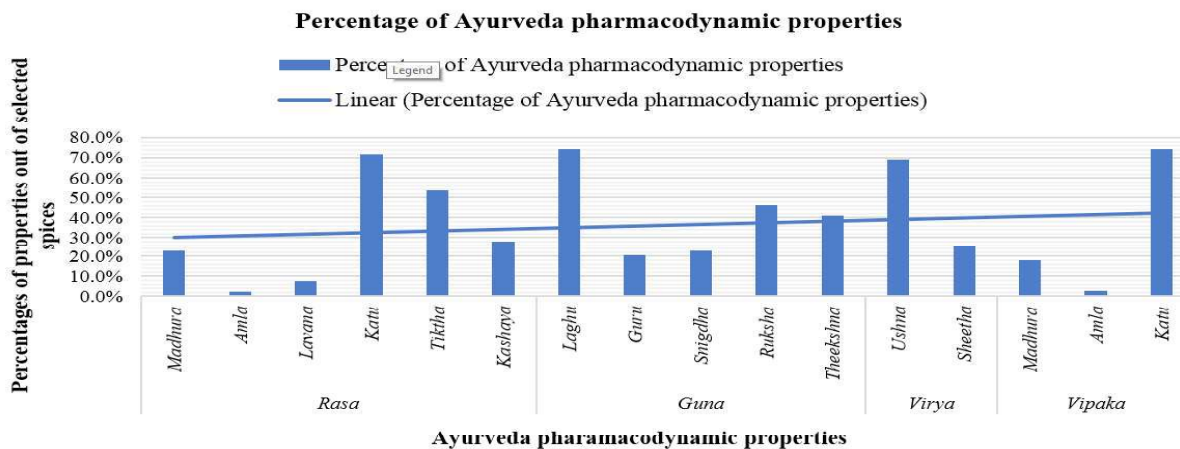


Fig. 1: Summary of the pharmacodynamic properties in the compound drug.

Conclusion

Popularity of Sri Lankan indigenous medicine plays a major role in prevention and curing numaral disease conditions due to its less side effects and potent therapeutic actions. The combined herbo-mineral formulas are being used frequently because of the severity and the chronicity of the diseases in present days. Seetharama Vati is one common so

called formula that used for many common health conditions mainly of Kapha and Vata imbalance. According to the compile review and the qualitative analysis, the formula of Seetharama Vati has proven to be a Kapha Vata pacifying medicine, due to its prominent phamacodynamic properties of Katu, Thiktha, Kashaya Rasa and Laghu, Rooksha, Theekshna Guna accompanied by Ushna Veerya and Katu Vipaka. Seetharama Vati is an essential

drug in Sri Lankan Ayurveda which is prescribed in acute conditions of many common diseases. Therefore, it can be concluded that the Seetharama Vati, can be indicated mainly for Vata Kapha conditions such as Jvara, Kola, Sanni, Valippu and Shwasa etc.

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