



**REVIEW ON SRI LANKAN TRADITIONAL MEDICINE -
SHARKARADI KALKA**

Review article

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ABSTRACT

In Sri Lanka many herbal medicines are used for their various effects and their efficacy is traditionally acclaimed. *Sharkaradi Kalka* is an example for such herbal product with various benefits in Sri Lankan traditional medicine. Sri Lankan Indigenous Medicine plays a major role in preventive and curing many disease conditions due to its therapeutic actions and less side effects. The combined herbo mineral formulas are being used frequently in present days. *Sharkaradi Kalka* is one of common formula that used for many disease conditions mainly of *Kapha* imbalances. It is a main component in *Vatikaprakaranaya* or *Beeth Guli Kalka Potha*. According to the traditional texts books *Sharkaradi Kaka* has proven to be a *Kapha* pacifying medicine, due to this pharmacodynamic properties of *Katu* (Pungent), *Thikta* (Bitter) and *Kashaya* (Astringent), *Laghu* (Light), *Ruksha* (Dry), *Thikshna* (Sharp) accompanied by *Ushna* (Hot) *Veerya* and *Katu* (Pungent) *Vipaka*. Interest of herbal products contributes significantly towards human wellbeing of the global population and in future, studies on efficacy of traditional and *Ayurvedic* herbs should be used to establish their therapeutic benefits either alone or in combination with conventional therapies.

Key Words: *Sharkaradi Kalka*, *Vatikaprakaranaya*, Sri Lankan Traditional Medicine

INTRODUCTION: Nature has given a large source of medicinal plants for the past thousands of years; an impressive number of modern drugs have been isolated from natural sources. The plant based, traditional medicine systems continues to play an essential role in health care, with about 80% of the world's inhabitants relying mainly on traditional medicines for their primary health care.^[1] *Sharkaradi Kalka* is a well-known and commonly used drug preparation in Sri Lankan Traditional Medicine. Also it is a main component in *Vatikaprakaranaya* or *Beeth Guli Kalka Potha* which is written by Illeperuma Arachchige don Sadiris da Alwis Illeperuma in 1879. This is consid-

ered as the main authentic text book in Sri Lankan Traditional Medicine.^[2]

Sharkaradi Kalka can be used for many diseases such as *Jwara* (Fever), *Kasa* (Cough), *Swasa*(Asthma) and any *Kaphaja* diseases.^[1] According to the *Vatikaprakaranaya* this is formed in *Kalka* (paste)form.^[2] The fine powder of ingredients are grind with sugar and bee's honey to obtain the *Kalka* and it is preserved in a vessel.^[2] In the modern society at the present there is an increasing demand for the herbal drugs. This is a frequently using and more effective drug in both Traditional and *Ayurveda* Medicine. This is useful in fever, cough, wheezing,

constipation, pain and convulsions of infants in Ayurveda Medicine.^[3]

LITERATURE REVIEW

In Ayurveda there are five basic primary preparations known as *Panchavida Kashaya Kalpana*. They are,

- *Swarasa* (fresh juice extract)
- *Kalka* (herbal paste)
- *Kwatha* (decoctions)
- *Hima* (cold infusions)
- *Panta* (Hot infusions)

Kalka is the herbal paste in semisolid form which is used for internal as well as external applications. Dry or fresh materials can be taken to prepare *Kalka*. If the fresh materials are taken *Kalka* can be obtained without adding water, if dry materials are taken fine powder is mixed and grind with any prescribed liquid material. According to *Mana Paribhasha* – Sri Lankan measuring units, dosage of *Kalka* is one *Karsha*(15g). The life span of *Kalka* found in Sri Lankan Traditional Medicine is more than 24 hours.^[2] *Kalka* can be given with different *Anupana* like honey

(*Madhu*),Ghee (*Gritha*),Sesameoil (*Thaila*),Sugar candy (*Sitha*),Jaggery (*Guda*).

According to the *Vatikaprakaranaya*, herbal ingredients as follows,^[2]

- Gammiris seeds – *Piper nigrum*
- Welmie root – *Glycyrrhiza glabra*
- Thippili fruit – *Piper longum*
- Walagasal seeds – *Embelia ribes*
- Gaspenela fruit – *Sapindus trifoliata*
- Wal molangu seeds – *Piper cubeba*
- Suwadakottan – *Saussurea lappa*
- Athiwidayam – *Aconitum heterophyllum*
- Garlic – *Allium stivum*
- Sirithekku – *Clerodendrum serratum*
- *Karkataka shrungie* – *Rhus succedanea*
- *Akrapatta* – *Anacydus Pyrethrum*
- *Katukarosana* – *Picrorhiza kurroa*
- Sahida lunu-(Rock Salt)
- *Yawakshara lunu* –(Sodium Sulphate)
- *Suwasa lunu* –(Black Salt)
- Sugar
- Bee's honey

Table 01 - Herbal Ingredients used to prepare *Sharkaradi Kalka* are as follows^{[2][3]}

Vernacular name	Sanskrit name	Botanical name	Quantity	Botanical description	Used parts
Gammiris	<i>Maricha</i>	<i>Piper nigrum</i>	5g	Is a perennial woody vine on supporting trees. It is a spreading vine,The leaves are alternate, entire. It belongs to the family <i>Piperaceae</i> and is known as the king of spices. The part used is small grape-like berries and dried parts and fruits	Seeds
Welmie	<i>Maduka</i>	<i>Glycyrrhiza glabra</i>	5g	A plant of the family <i>Fabaceae</i> , from the root of which a sweet taste can be extracted. Is a herbaceous perennial that has been used as a flavoring agent in foods and me-	Roots

				dicinal remedies.	
Thippili	<i>Pippali</i>	<i>Piper longum</i>	5g	It is a flowering vine in the family Piperaceae , cultivated for its fruit, which is usually dried and used as a spice and seasoning.	Fruit
Walagasal	<i>Vidanga</i>	<i>Embelina ribes</i>	5g	Is a species in the family <i>Primulaceae</i> . leaves are simple, alternate at both the ends. Length of leaves is 3 inch	Seeds
Gaspenela	<i>Kumba beeja</i>	<i>Sapindus trifoliata</i>	5g	Is a species of flowering plant in the family <i>Sapindaceae</i> . Trees brittle or semi fibrous; blaze creamy yellow branchlets lenticellate. leaves paripinnate, alternate.	Seeds
Wal Gammiris	<i>kankol</i>	<i>Piper cubeba</i>	5g	Java pepper belongs to the pepper family (<i>Piperaceae</i>). This climbing plant grows up to ten meters, with dark green, leathery leaves.	Seeds
Suwadakottam	<u><i>Kushta</i></u>	<i>Saussurea lappa</i>	5g	Is a genus perennial herb of about 300 species of flowering plants in the tribe <i>Cardueae</i> within the family <i>Asteraceae</i> . leaves simple and alternate.	Rhi-zome
Athiwidaya m	<i>Athiwisha</i>	<i>Aconitum heterophyllum</i>	5g	<i>Ranunculaceae</i> dark green leaves of <i>Aconitum</i> species lack stipules. They are palmate lobed with five to seven segments. The leaves have a spiral (alternate) arrangement. The lower leaves have long petioles.	Root
Sirithekku	<i>Bharngi</i>	<i>Clerodendrum serratum</i>	5g	Is flowering plant in the family <i>Verbenaceae</i> , considered to belong to the family <i>Lamiaceae</i> . This native to the warm temperate regions of the world. They are shrubs, lianas, and small trees, with opposite or whorled leaves.	Stem

Sudu lunu	Rasona	Allium sativum	5g	Is a perennial flowering plant growing from a bulb. It has a tall, erect flowering stem. The leaf blade is flat, linear, solid, and with an acute apex.	Bulb
Karkataka shrungie	Karkata ka Shrungie	Rhus succedanea	5g	Is a deciduous Tree growing to 9 m. It is in flower in July, and the seeds ripen from September to November. The plant is not self-fertile.	Stem
Akrapatta	Akrapatta	Anacydus pyrethrum	15g	Is a perennial herb in habitat and appearance. It is found in North Africa, Mediterranean region and Himalayas.	Stem
Katukarosana	Katuki	Picrorhiza kurroa	30g	The bitter-tasting roots are hard, about 6 inches in length, and creeping. The leaves are oval in shape with a sharp apex, flat, and serrate. The flowers are white or pale purple on a long spike	Rhi-zome

Table 02- Pharmacological properties of dravya used in *Sharkaradi kalka*^{[4][5]}

Dravya	Rasa	Guna	Virya	Vipaka
Gammiris	Katu	Laghu, Thiktha Sukshma	Ushna	Katu
Welmie	Madura	Guru, Snighdha	Sheetha	Madura
Thippili	Katu	Laghu, Snighdha Thikshana	Anushana	Madura
Walagasal	Kashaya Katu	Laghu, Ruksha Thikshna	Ushna	Katu
Gas penela	Katu Thiktha	Laghu, Thikshna	Ushna	Katu
Suwadakottan	Thiktha	Laghu, Ruksha Thikshna	Ushna	Katu
Athiwidayam	Katu Thiktha	Laghu Ruksha	Ushna	Katu
Sirithekku	Katu Thiktha	Laghu Ruksha	Ushna	Katu
Sudulunu	Madura Lavana Katu, Thiktha Kashaya	Snigdha Guru Thikshna	Ushna	Katu
Karkataka shrungie	Kashaya Thiktha	Laghu Ruksha	Ushna	Katu

<i>Akrapatta</i>	<i>Katu</i>	<i>Ruksha Thikshana</i>	<i>Ushna</i>	<i>Katu</i>
<i>Sahida lunu</i>	<i>Lavana</i>	<i>Laghu Thikhna,Ruksha</i>	<i>Ushna</i>	<i>Katu</i>
<i>Yawakshara lunu</i>	<i>Lavana</i>	<i>Laghu Thikhna Ruksha</i>	<i>Ushana</i>	<i>Katu</i>
<i>Suwasa lunu</i>	<i>Lavana</i>	<i>Laghu,Thikshana Ruksha</i>	<i>Ushna</i>	<i>Katu</i>
<i>Suger</i>	<i>Madura</i>	<i>Guru,Snigdha</i>	<i>Seetha</i>	<i>Madura</i>
<i>Bee's honey</i>	<i>Madura Kashaya</i>	<i>Guru,Snigdha</i>	<i>Seetha</i>	<i>Madura</i>

Table 03- Pharmacological description according to the modern phytochemistry^{[6][7]}

Dravya	Chemical constitutes	Pharmacological properties
<i>Gammiris</i>	Piperine,Piplartine Sesamin	Anti-inflammatory,Analgesic Carminative ,Laxative,Expectorant
<i>Walmie</i>	Glycyrrhizin Isoliquiritin Liguiritin	Anti-inflammatory,Diuretic Expectorant
<i>Thippili</i>	piperine, Piplartine Piperlonguminine	Anti-inflammatory,Analgesic Carminative ,Laxative,Expectorant
<i>Walagasal</i>	Embelin Homoembelin Christembine	Analgesic,Anti-helminthic Anti- inflammatory,Anticancer
<i>Gas penela</i>	Saponins,Oleanolic acid Sapindoside	Anti -inflammatory Anti HIV
<i>Suwadakottan</i>	Triterpenoidal saponins	Anti-epileptic, Spermicidal Anti-inflammatory Anti-helmintic, Anti-ulcer
<i>Athiwidayam</i>	Alkaloids	Anti -inflammatory,Expectorant Febrifuge,Anthelmintic Anti-emetic
<i>Sirithekku</i>	Saponins ,Catchin Olionic acid Carbohydrate Flavonoids,Phenolics Steroids ,Terpenes	Bronchodilator,Anti-inflammatory Antineoplastic ,Anti-metastatic Bacteriostatic,Anti-microbial Anti-tubercular,Antibiotic
<i>Sudulunu</i>	Glutamyl cysteins	Antioxidants,Antihypertensive, Anti-hypercholesterolaemic, Cardioprotective, Antiplatelet, Hypoglycaemic, Antimicrobial Antineoplastic
<i>Karkataka Shrungie</i>	Hinokiflavone Cytotoxic biflavonoid	Analgesic,Anti -helminthic Anti -inflammatory,Anticancer
<i>Akrapatta</i>	Pyrethrin Inulin,Anacyline	Analgesic,Anti-helminthic Anti- inflammatory

<i>Katukarosana</i>	Anacardic acid	Anti -inflammatory Factericide, Fungicide, Insecticide, Anti-termite
<i>Sahinda lunu</i> , <i>Yawakshara lunu</i> , <i>Suwasa Lunu</i>	NaCl Na ₂ S	Dissolution Absorption
Sugar	Glucose	Caloric supply Carbohydrate supplementation
Bee's honey	Glucose Fructose	Anti-inflammatory Antimicrobial

DISCUSSION: The use of this Traditional medicine is a very common among Sri Lankan Traditional practitioners. *Sharkaradi Kalka* is commonly indicated for *Kaphaja* diseases specially for children. It has mentioned in traditional texts books and anupana mostly used for children. The qualitative analysis of *Rasa Guna Veerya, Vipaka* on 18 types of ingredients, most prominent *Rasa* in this formula is *Katu, Thiktha* and *Kashaya and Guna, Laghu, Ruksha, Thikshna*. The majority of ingredients posses *Ushna Veerya* with pacifying *Kapha Dosha* and the *Vipaka* is noted with the *Katu Vipaka*.

CONCLUSION:

Sharkaradi Kalka is one of common formula that used for many disease conditions mainly of *Kapha* imbalances. According to the compile review of *Sharkaradi Kaka* has proven to be a *Kapha* pacifying medicine, due to this pharmacodynamic properties of *Katu, Thiktha* and *Kashaya, Laghu, Ruksha, Thikshna* accompanied by *Ushna Veerya* and *Katu Vipaka*. *Sharkaradi Kalka* can be used for many diseases such as *Jwara* (Fever), *Kasa* (Cough), *Swasa* (Asthma) and any *Kaphaja* diseases (*Kasa, Swasa, Pratisyā* etc). This medicine may be used internally as *Kalka* (Paste). This medicine is much safer, affordable and more accessible for

children mostly. In future, studies on efficacy of Traditional and *Ayurvedic* herbs should be used to establish their therapeutic benefits either alone or in combination with conventional therapies.

REFERENCES

1. Owolabi J, Omogbai EKI, Obasuyi O. Antifungal and antibacterial activities of the ethanolic and aqueous extract of *Kigelia africana* (Bignoniaceae) stem bark. Afr. J. Biotechnol., 2007; 6 (14): 882-85.
2. Illiyakperuma A. *Vatika Prakarana Deshiya Beheth Guli Kalka Potha*. Panadura, Sri-Lanka: Moden Press; 1879;217-218.
3. Anonymous. *Ayurveda pharmacopoeia*. Vol:1;part 1, Lake House Printing Press, Colombo.1976.
4. D.M.A. Jayaweera. Medicinal plants used in Ceylon part 3, The National Foundation, Sri lanka 2006.
5. Edeoga HO, Okwu DE, Mbaebie BO: Phytochemical constituents of some Nigerian medicinal plants. African journal of Biotechnology 2005;4(7):685-688.
6. Harborne JB: Phytochemical Methods, London. Chapman and Hall, Ltd., 1973: 49-188
7. Kuruppu, A. I., Paranagama, P., & Goonasekara, C. L. (2019). Medicinal plants commonly used against cancer in traditional medicine formulae in Sri Lanka.

Saudipharmaceutical journal: SPJ: the official publication of the Saudi Pharmaceutical Society, 27(4), 565–573.

8. Weragoda PB. The traditional system on medicine in Sri Lanka. J Ethnopharmacol. 1980 Mar; 2(1):71-3. Doi: 10.1016/0378-8741(80)90033-1. PMID: 7464187.

9. Maragalavatta M G S K, Goyal M, harisha C R, Shukla V J, Jadav R. Pharmacognostical and pharmaceutical evaluation of Seetharama Vati in the management of Rheumatoid Arthritis. World journal of pharmaceutical research. Volume 7 issue 5, 1123-1135.

10. Ayurveda pharmacopoeia., 2006., AS publication, department of Ayurveda, Colombo, Sri Lanka., volume 1., part 1., pg 147., ISBN-955-606-041-3.

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