



## Review Article

### ETHNOBOTANY OF KERALA'S KARKIDAKA KANJI (MEDICATED GRUEL)

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#### ABSTRACT

The Malayalam month of *Karkidaka* fall during monsoons rather classically known as the *Varsha ritu* (July-August). Kerala is a hub of unique healthcare practices. One such practice is the "*Karkidaka Chikitsa*" which includes both internal and external medications taken during the month. *Karkidaka Kanji* fondly known as *Oushadha Kanji* is a medicated gruel, either consumed along with these treatments or alone during this period. In *Varsha ritu*, there will be decreased *Jatharagni* and *Sharira bala*. Hence the seasonal adaptations are carried out for *Tridosha shamana* and *Deepana*. This maybe the principle behind adopting *Karkidaka Kanji* by traditional practitioners of Kerala. In the present study details of the recipe was collected from among the traditional practitioners, Ayurvedic doctors of Kerala and the results were tabulated. An in depth literature survey was done for analysing the properties of the medicines used in the preparation. The analysis showed that this is an example of *Ritucharya* modified according to *Desa* and *Satmya*. This study highlights the importance of documenting the ethnic practices for further reference.

**KEYWORDS:** *Deepana, Karkidaka Chikitsa, Karkidaka Kanji, Medicated Gruel, Varsha ritu.*

#### INTRODUCTION

Kerala, lies along the coastline, to the extreme South West of the Indian Peninsula flanked by the Arabian sea on the west and the mountains of the western ghats on the East. This land is especially known for its rich ethnobotanical diversity and traditional medical practices. There are many unique traditions like the *Ashtavaidya* tradition which are treasures of ancient medical knowledge. It has a long tradition deeply rooted on the principles of healthy lifestyle and hygiene. Here the normal six *Ritus* as described in the classics cannot be determined promptly. The duration of winter season is less & rainy season is more and there are mainly two rainy seasons i.e., the Southwest Monsoon that arrives in the month of June called '*Edavappathy*' (as it comes in the middle of the month of '*Edavam*' on the Malayalam calendar) and the North East Monsoon which gathers clouds from the Bay of Bengal and these bearers of rain hurry to Kerala through the Palakkad Gap in the Western Ghats.

The body is considered highly receptive to Ayurveda treatments during the period of South West monsoon which can be correlated with *Varsha ritu* as described by the Acharyas. The main aim during this time is to protect the *Agni* which is vitiated and adopt regimens which are *Tridosha shamana* in nature. There are various therapies both

internal and external which are followed during this period especially in Kerala. One among them is a medicated gruel called *Karkidaka kanji*. *Karkidaka kanji* consists of boiled cereals and herbs which is highly *Deepana* and *Pachana* in nature. Along with *Njavara* rice (*Oryza sativa*), 12 to 24 types of medicinal herbs are used in preparing the gruel. Intake of this medicinal dish as a dietary supplement improves the production of cellular energy and enhance energy and stamina of person. The following of a strict routine can cancel the effect of the sudden transition from the scorching summer to the cool monsoons. There are various recipes of *Karkidaka kanji* which are followed in different parts of Kerala. This study aimed at documenting the ingredients used in different parts of Kerala and to understand them along with their properties.

#### METHODOLOGY

A survey was conducted among the practitioners of Kerala to get an idea regarding the variations in the recipes of *Karkidaka kanji* and the results were tabulated. The herbs were analyzed along with their properties to find out the rationale behind their inclusion in the recipe. Research works conducted on these drugs were also analyzed. The general method of preparation of the *Karkidaka kanji* was codified along with the properties of the drugs

used and the ingredients used by some of the major pharmaceutical industries were also assessed.

**Method of Preparation:** The ingredients are crushed and juice is extracted from it. The *Njavara* rice is mixed with the juice and boiled with required amount of water. Spices like cumin, pepper, garlic is then added followed by coconut milk and the mixture is cooked well. Once the rice is cooked small onion which is fried in ghee is mixed with the gruel.

This rice gruel is prepared and consumed fresh on all the days of this month. It is usually consumed in the evenings. While having *Karkidaka kanji*, consumption of tea or coffee is usually avoided. So are non-vegetarian and oily foods which may further deteriorate the *Agni*. Since it is a medicinal

broth, it is advisable to take rest for one to two hours after drinking the *Karkidaka Kanji* for its better digestion. The prepared *Kanji* may be consumed in the lukewarm stage. This *Kanji* may be taken either early in the morning in empty stomach or at the evening as dinner, or both times if possible, for a minimum of Seven days continuously. The course can be continued in multiples of 7 days, till 28 days.

## RESULTS

The most common ingredients of the preparation includes along with their properties have been tabulated as below. It also includes ingredients like jaggery, aniseed (*Pimpinella anisum*), coconut milk and salt.

**Table 1: The most common method of preparation along with its ingredients**

Name	Botanical name	Rasapanchaka	Properties	Proven studies
Njavara rice	<i>Oryza sativa</i>	Rasa- Svadu Guna- Laghu, Snigdha	Tridoshagna, Hima	Antioxidant, Antidiabetic <sup>[1]</sup>
Broken wheat	<i>Triticum aestivum</i>	-	Vrshya, Jeevana, Sandhaanakari, Sthairyakrth, Sara	Anti-cancer, Anti-ulcer, Antioxidant, Anti-arthritis <sup>[2]</sup>
Mudga	<i>Vigna radiata</i>	Rasa- Svadu Guna- Laghu, ruksha Vipaka- Sheeta	Jwaragna	Antioxidant, antimicrobial, anti-inflammatory, anti-diabetic, anti-hypertensive, lipid metabolism accommodation, antihypertensive and antitumor <sup>[3]</sup>
Ghrta	-	Rasa- madhura Guna- snigdha Virys- seeta Vipaka- madhura	Alakshmijwarapaham Snehanam Uthamam Vayasahsthanam	Antioxidant
Palandu	<i>Allium cepa</i>	Rasa-madhura, katu Guna- snigdha Virya- anushna/ usna Vipaka- madhura	Vatahara, Balaveeryakara	Antidiabetic <sup>[4]</sup> Cardioprotective <sup>[5]</sup>
Jathiphala	<i>Myristica fragrans</i>	Rasa- Katu, tikta Guna- Lagu, Ruksha Veerya- Ushna Vipaka- Katu	Deepana, Rochana	Antibacterial <sup>[6]</sup> Antidepressant <sup>[7]</sup> Analgesic <sup>[8]</sup>
Black cumin	<i>Nigella sativa</i>	Rasa- Katu Guna- Laghu, Ruksha Veerya- ushna Vipaka- Katu	Vatakaphahara, Deepana, Rochana	Cardioprotective Anticancerous <sup>[9]</sup>
Naagara	<i>Zingiberofficinale</i>	Rasa- Katu Guna- Guru, Ruksha, teekshna Veerya- Ushna Vipaka- Svadu	Vatakaphahara, Deepana	Antiarthritic <sup>[10]</sup> Antidiabetic <sup>[11]</sup>

Preparing *Karkidaka kanji* in the traditional way also includes another set of ingredients which have been analyzed along with their properties.

**Table 2: Another set of ingredients included in the traditional preparation of *Karkidaka kanji***

Name	Botanical Name	Rasapanchaka	Properties	Proven studies
Muthil (Mandukaparni)	<i>Centella asiatica</i>	Rasa- Tiktha Guna- Laghu Veerya- Sheetha Vipaka- Madhura	Rakthapithahara, Hrdya, Aruchihara, Medhya, Rasayana	Hepatoprotective <sup>[12]</sup> Neuroprotective <sup>[13]</sup>
Thakara (Chakramarda)	<i>Cassia tora</i>	Rasa- Katu Guna- Laghu, Rooksha Veerya- Ushna Vipaka- Katu	Kaphahara, shwasahara, Kustahara, Krimihara Kanthisoukumaryakara, Balya	Anticancerous <sup>[14]</sup>
Kumbala (Kooshmanda)	<i>Benincasa hispida</i>	Rasa- Madhura Guna- Laghusnigdha Veerya- Sheeta Vipaka- Madhura	Bastishudhikara, Hrdya	Gastroprotective <sup>[15]</sup>
Mullan Cheera (Tanduleeyaka)	<i>Amaranthus spinosus</i>	Guna- Laghu, Ruksha Veerya- Sheeta	Srshtamutramala Rochana, Deepana, Vishaharaka	Gut modulatory & Bronchodilator <sup>[16]</sup> Antidiabetic & Anticholestrolemic <sup>[17]</sup>
Thazhuthama (Punarnava)	<i>Boerhavia diffusa</i>	Rasa- Madhura, Tikta, Kashaya Guna- Laghu, Ruksha Virya- Ushna Vipaka- Katu	Saarini, shophanashini	Hepatoprotective <sup>[18]</sup> Antimicrobial & Antioxidant <sup>[19]</sup>
Uzhinja (Kakamardanika)	<i>Cardiospermum halicacabum</i>	-	Jwarahara, Vataghni	Antioxidant <sup>[20]</sup> Antiarthritic <sup>[21]</sup>
Manithakkali (Kakamachi)	<i>Solanumnigrum</i>	Rasa- Tikta Guna- Laghu, Snigdha Veerya- Anushna Vipaka- Katu	Rasayani, Jwarajith, Tridosaharam	Antiviral <sup>[22]</sup> Anticholestrolemic Antihyperglycemic <sup>[23]</sup>
Mathan (Pumpkin)	<i>Cucurbita moschata</i>	-	-	Antilipogenic <sup>[24]</sup> Anti-oxidant <sup>[25]</sup>

The ingredients used by three major pharmaceutical industries have been summarized as follows.

**Table 3: Ingredients of *Karkidaka kanji* by three major pharmaceutical industries**

Industry 1	Industry 2	Industry 3
Ariyaru (a combination of six seeds) Uluva ( <i>Trigonella foenum</i> ) Trikatu ( <i>Shunti</i> , <i>Maricham</i> , <i>Pippali</i> ) Jeerakam ( <i>Cuminum cyminum</i> ) Satapushpa ( <i>Anethum graveolens</i> ) Karimkurinji ( <i>Strobilanthes ciliatus</i> ) Putharichunda ( <i>Solanum nigrum</i> ) Kurumthotti ( <i>Sida retusa</i> )	Navara Rice ( <i>Oryza sativa</i> ) Raw Rice Wheat ( <i>Triticum aestivum</i> ) Uluva ( <i>Trigonella foenum</i> ) Orila ( <i>Desmodium gangeticum</i> ) Moovila ( <i>Pseudarthria viscida</i> ) Kurumthotti ( <i>Sida retusa</i> ) Chukku ( <i>Zingiber officinale</i> ) Thazhuthama ( <i>Boerhavia diffusa</i> ) Jeerakam ( <i>Cuminum cyminum</i> ) Elakkaya ( <i>Elattaria cardamomum</i> ) Nagapoovu ( <i>Messua ferrea</i> ) Ayamodakam ( <i>Tachyspermum ammi</i> ) Kothampalayari ( <i>Coriandrum sativum</i> )	Njavarayari ( <i>Oryza sativa</i> ) Uluva ( <i>Trigonella foenum</i> ) Vizhalari ( <i>Embelia ribes</i> ) Elathari ( <i>Elattaria cardamomum</i> ) Jathikka ( <i>Myristica fragrans</i> ) Perum Jeerakam (Fennel seeds) Putharichunda ( <i>Solanum nigrum</i> ) Orila ( <i>Desmodium gangeticum</i> ) Moovila ( <i>Pseudarthria viscida</i> )

## DISCUSSION

Kerala has been recognised all over the world for its unique ethnic practises. The study provided an insight into the rationale of *Karkidaka kanji*. In *Varsharitu*, there will be decreased *Jatharagni* and *Sharirabala*. Hence the seasonal adaptations are carried out for *Tridoshashamana* and *Deepana*. While analysing the ingredients it was observed that majority of them are *Agnideepana* and *Pachana* in nature. This may be the principle behind adopting *Karkidaka Kanji* by traditional practitioners of Kerala.

The main ingredients are rice, pulses, *Medhika*, *Ajamoda*, *Jeeraka*, coconut cooked in juice of medicinal herbs called "*Dasapushpa*". Though these were the prime ingredients used for the gruel, the recipe was different in different regions. The local availability of the drugs played a significant role in making of the recipe in various parts. The analysis of ingredients and their properties showed that this is an example of *Ritucharya* modified according to *Desa* and *Satmya*.

Not only the practise of *Karkidakachikitsa* and *Karkidaka kanji* but there are innumerable such practises which are followed in different places which should be brought into the limelight. Such studies and documentations can go a long way in understanding the biodiversity of various regions and it can also provide leads for further explorations and scientific researches. This study thus also highlights the importance of documenting the ethnic practises for further reference.

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