



Siddha Herbo-Mineral Formulation of Vaalai Rasa Mezhu – A Review

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ABSTRACT

The ancient Siddha medical method promotes human health on all levels- physical, mental, and spiritual. The ancient, spiritual saints of South India known as Siddhars are the ones who devised this philosophy. This medicinal formulation is made up of ingredients from animals, minerals, along herbal origins that have been pharmaceutically processed to produce therapeutic effects. *Vaalai Rasa Mezhu* (VRM) is one such Herbo Mineral formulation which consists of *Rasam* (Hydrargyrum), *Veeram* (Hydrargyrum perchloride), *Pooram* (Hydrargyrum subchloride), *Elam* (*Elettaria cardamomum*), *Kirambu* (*Syzygium aromaticum*), *Varagarisi* (*Paspalum scrobiculatum*). To validate the traditional claims about the medicinal value of VRM, the present review focuses on the composition and traditional uses of the Herbo-mineral formulations of the Siddha system of medicine in VRM as well as the scientific analysis of its pharmacological actions of the ingredients of VRM, on Siddha mineral preparations.

Keywords: Siddha medicine, *Vaalai Rasa Mezhu*, Herbo-mineral formulations, Traditional medicines, Literature review.

INTRODUCTION

The Siddha system was created by the ancient, spiritual, supernatural saints known as Siddhars in Tamil Nadu and other parts of South India. The ingredients used in Siddha medicine formulations come from animal, mineral, or herbal sources and are treated pharmaceutically to produce medicinal effects.¹ Medicines in the Siddha system are divided into external medicines (*Pura marunthu*) and internal medicines (*Agamarundhu*). Every kind has thirty-two forms. The system has produced a wealth of rare and valuable drug knowledge, wherein the usage of *Jeeva porutkal* (animals), *Thaathu* (metals and minerals), and *Mooligai* (herbs) is strongly encouraged.² Although these metals are not in their elemental state, the Herbo mineral preparations fundamentally include minerals and metals as vital components of the formulations. Because they are in a compound form, they will not have the same fate in the body as heavy metals in elemental form. The final form is ultimately in charge of the activity, altering the qualities, following the reaction with various organic and inorganic components derived from herbal sources.³ In the Siddha system, many formulations contain metals and Minerals. One such Herbo mineral formulation is *Vaalai Rasa Mezhu* indicated for *Soolai* (Throbbing pain), *Mudakku vaatham* (Arthritis), *Kandamaalai* (Cervical lymphadenitis), *Pauttiram* (Fistula), *Ariyappu* (Lymphnode related neoplasia).⁴ In this review, the ingredients of the VRM *Rasam* (Hydrargyrum), *Veeram* (Hydrargyrum perchloride), *Pooram* (Hydrargyrum subchloride), *Elam* (*Elettaria cardamomum*), *Kirambu* (*Syzygium aromaticum*), *Varagarisi* (*Paspalum scrobiculatum*) were explained by its characteristic features, chemical composition, therapeutic effects in Siddha system, research data about these ingredients.

MATERIALS AND METHODS

Selection of the test drugs

The test drug "*Vaalai Rasa Mezhu*" is one of the Herbo mineral formulations for arthritis and tumor which is indicated in the Siddha literature *Siddha marunthu sei perumuraigal*

Collection of Raw drug

The raw drug was purchased in a Country shop in Chennai and authenticated by a botanist and from the Department of Gunapadam, National Institute of Siddha, Chennai (certified No. NISMB6652024, GUN/AUT/07/24). (Table:1)

Table 1: Ingredients of *Vaalai Rasa Mezhu*

S. No	Ingredients	Botanical Name/ Chemical Name	Quantity
1.	Purified <i>Veeram</i>	Hydrargyrum perchloride	10gm
2.	Purified <i>Vaalai rasam</i>	Hydrargyrum	10gm
3.	Purified <i>Pooram</i>	Hydrargyrum subchloride	10gm
4.	<i>Elam</i>	<i>Elettaria cardamomum</i>	10gm
5.	<i>Kirambu</i>	<i>Syzygium Aromaticum</i>	10gm
6.	<i>Varagarisi</i>	<i>Paspalum scrobiculatum</i>	35gm



Preparation of *Vaalai Rasa Mezhu*

First, *Rasam* is triturated with the juice of betel leaves till they completely blend. Next, *Veeram* and *Pooram* are added to it. Then Clove (*Kirambu*) and Cardamom (*Elam*) are shallow fried, powdered, and added to the above mixture along with *Varagarisi* flour and triturated. A small amount of castor oil is added and triturated till it reaches a waxy consistency. Then the medicine is stored in an air-tight container.

SIDDHA ASPECT OF THE LITERATURE⁵⁻⁶

Rasam (Hydrargyrum)

Mercury is coming under the classification of '*Pancha Sootham*'. According to *Dasangu nigandu*, it has numerous meanings, including *Sootham*, *Punniyam*, *Bharatham*, *Inimai*, *Sivasathi*, *Kesari*, etc.

Taste: six tastes- dominated by sweet

Potency: Hot and Cold, *Rasam* is the chief element. It promotes health, shields the body, and treats illnesses that impact the body.

Action: Alterative, Nutrient, Laxative, Diuretic, Silagogue, Anti-syphilitic, Deobstruent.

General property: Proper use of *Rasam* as medicine, cures the disease of eye, syphilis, *Gunmam* (eight types of ulcers), *Soolai* (Throbbing pain), *Perum pun* (Chronic ulcer), *Puttru* (Cancer).

Special properties of Rasam: *Rasam* unlike other drugs, is useful in the treatment of diseases caused by both heat and cold. but in the other drugs, if a drug is useful in a disease caused by heat, it will aggravate the disease by cold.

Veeram (Hydrargyrum perchloride)

Mercury perchloride, also known as mercury chloride. In Western nations, perchloride of mercury was originally applied as a treatment for sexual disorders in the middle of the eighteenth century. However, India has been using mercury perchloride for centuries to treat a variety of illnesses.

Synonyms: *Meenachimynthan*, *Sarakku*, *Chunnam*, *Parangi Pasanam*, *Kotchiveeram*, *Poovindhusevagan*, *Sarathin sathru*, and *Parimithru*.

Taste: Bitter and salty

Potency: Hot

Action: Alterative, Anti-biotic, Anti-septic, Caustic

General Property: The following conditions are treated with *Savveeram* Both males and females might get stomach ulcers, leprosy, severe *vadha* disorders, morbid flesh growth, throbbing pain-related illnesses, venereal infections, and bubo in the groin as a result of strong sexual intercourse. Additionally, this is for a variety of eye conditions.

Pooram (Hydrargyrum subchloride - Calomel)

Even though the calomel is not mentioned in the list of 64 *paadanans*, it is considered one among them by medical practitioners. It is prepared by the combination of *Rasam* and Salt.

Taste: salty

Potency: Hot

Action: Laxative, Tonic, Antiseptic, Diuretic

General properties: It is used in the treatment of Gastric ulcers due to the disorder of *vatha* humor, *Kamalai* (Jaundice), *Kalleeral veekkam* (Hepatomegaly) *Pitha thodam*, *Keelvatham* (Arthritis), *Malabantham* (Constipation).

Elam (*Elettaria cardamomum*)

Botanical Description: Herbaceous perennial plant, growing to a height of 2–5 m; leaves are 30–35 cm long and 7–10 cm wide; they are lance-shaped, acuminate, and dark green. The plant produces 34 inflorescences, each of which is a panicle that emerges from the enlarged base of tillers. The peduncle is long and cane-like, with nodes and internodes. flowers are white with an irregular, bisexual, oval labellum that is indistinctly three-lobed, and the central lip is streaked with pink 35; The flower has three uneven lobes, with the largest one on the posterior side; the anthers have two lobes; the calyx is tubular, split about ¼ of its length on one side, and it is shortly three toothed. stigma funnel-shaped, with cilia encircling a tiny opening; ovary inferior, many ovules in each carpel, trilobular, and axial placentation.

Part used: Seed

Taste: Pungent

Potency: Hot

Action: Stimulant, Carminative, Stomachic, Diuretic, Astringent, Aphrodisiac

General properties: Traditionally, it is used for controlling asthma, teeth and gum infections, digestive and kidney disorders, cataracts, cardiac disorders, nausea, and diarrhea, diuretics.

Kirambu (*Syzygium Aromaticum*)

Botanical Description: Rich loamy soils are ideal for growing clove trees in tropical regions with humid climates. The midlands of Kerala feature red soils where clove trees have grown well. The ideal climate for clove cultivation is found in Tamil Nadu's hilly regions at higher elevations of the Western Ghats, where rainfall is evenly distributed (150–130 cm annually) and the temperature is milder. Furthermore, because clove plants can't endure prolonged periods of waterlogging, cultivating fields need to have a strong drainage system.

Part used: Flower

Taste: Pungent



Potency: Hot**Action:** Antispasmodic, Carminative, Stomachic, Local anesthetic, Rubefacient, Nutritive**General properties:** It is used for Snake bites, asthma, cough, piles, and diarrhea.**Varagarisi (*Paspalum scrobiculatum*)****Part used:** Seed**Taste:** Pungent**Potency:** Hot**Action:** Cholagogue**SCIENTIFIC EVIDENCE OF DRUG REVIEW****Table 2:** Scientific review of herbal drugs

Botanical Name	Family Name	Chemical Constituents	Pharmacological Activity in animal models
<i>Elettaria cardamomum</i>	Zingiberaceae	1, 8-cineole, α -terpineol, 4-terpineol, α -pinene. ⁷	Analgesic and Anti-Inflammatory activity, ⁸ Anti-cancer activity, ⁹ Anti-microbial activity. ¹⁰
<i>Syzygium aromaticum</i>	Myrtaceae	hydroxyphenyl propene, hydroxybenzoic acids, hydroxycinnamic acids, and flavonoids. ¹¹	Anti-Inflammatory, Antiviral activity, Antioxidant activity, Antimicrobial activity, Hepatoprotective activity. ¹²
<i>Paspalum scrobiculatum</i>	Poaceae	Tannins and Phenolic compounds	Anti-inflammatory activity, ¹³ Antihyperlipidemic activity. ¹⁴

Table 3: Scientific Review of Minerals ingredients in various formulation

Medicine	Ingredients present in VRM	Pharmacological study
<i>Rasa Mezhugu</i>	<i>Rasam</i>	1. Freud's adjuvant-induced arthritis model was used to assess the anti-arthritic activity in albino rats. ¹⁵
<i>Rathinagara Rasamezhugu</i>	<i>Rasam</i>	1. Evaluation of Anti-Inflammatory Activity of <i>Rathinagara rasa Mezhugu</i> by Carrageenan induced hind paw edema method in Wistar Albino Rats. ¹⁶
<i>Veera Mezhugu</i>	<i>Rasam</i> <i>Veeram</i> <i>Pooram</i>	1. Invitro cytotoxicity study of EAC cell line 2. In vitro antioxidant studies employing chemical methods such as DPPH and reducing capacity assays were carried out as per Blois (1958) and Oyaizu (1986). ¹⁷
<i>Poora Parpam</i>	<i>Pooram</i>	1. Anti-inflammatory activity of carrageenan-induced paw edema method in Wister albino rats, 2. Analgesic activity of Hot plate method in Swiss albino mice. 3. Antipyretic activity of induced yeast in albino rats. ¹⁸
<i>Gowri Chindamani Chendooram</i>	<i>Rasam</i>	1. Invitro anti-cancer activity of <i>Gowrichindamani Chendooram</i> against Human HeLa cell line used by cell viability. ¹⁹ 2. Clinical Evaluation of Siddha Drug <i>Gowri Chinthamani Chendooram</i> in the Management of Osteoarthritis. ²⁰
<i>Kaalakodi Rasam</i>	<i>Rasam</i>	1. Analgesic activity of <i>Kaalakodi Rasam</i> against Acetic acid-induced writhing response in Swiss albino rice 2. Anti-inflammatory activity of Kaalakodi rasam using carrageen-induced paw-edema in rats. ²¹
<i>Kaalamega Narayana Chendooram</i>	<i>Rasam</i>	1. Invitro anti-cancer activity of <i>Kalamegaa Narayana Chendooram</i> against human KB oral cell line using cell viability and apoptosis 2. Anti-microbial activity by agar well diffusion method. ²²
<i>Bhramasthiram</i>	<i>Veeram</i>	Invitro anti-cancer and anti-tumor activity of Bhramasthiram Against Human KB oral cell line and HeLa cell line using MTT assay by cell viability and anti-oxidant activity. ²³
<i>Rasa karpooa Kuligai</i>	<i>Pooram</i>	Invitro anticancer activity of <i>Rasakarpooa kuligai</i> against HeLa cell line using cell viability assay. ²⁴
<i>Rasa Parpam</i>	<i>Rasam</i>	Invitro anticancer activity of <i>Rasa Parpam</i> against Human HeLa cell line using cell viability and Apoptosis. ²⁵



<i>Pancha paasana Chendhuram</i>	<i>Pooram</i>	A study on the anticancer activity of a Siddha formulation <i>Pancha Paasana Chendhuram</i> (PPC) with <i>pooram</i> as one of its constituents on MCF-7 Cells revealed dose-dependent inhibition of MCF-7 cell proliferation along with inducing nuclear damage in cancer cells. ²⁶
<i>Veera rasa pathangam and panchamuga chendhuram</i>	<i>Veeram Rasam</i>	anti-cancer activity of Siddha drugs <i>Veera Rasa Padhangam</i> (VRP) and <i>Panchamuga Chendhuram</i> (PMC) containing <i>Veeram</i> and both <i>Veeram</i> and <i>Lingam</i> respectively with the standard drug taxol using Cell Viability Assay. The <i>in vitro</i> study demonstrated that Siddha drugs VRP and PMC the standard drug Taxol. ²⁷

CONCLUSION

After vast experimental tests executed by numerous researchers, the Herbo-mineral constituents of this formulation have considerable analgesic, anti-inflammatory, anti-cancer, and anti-oxidant actions. Before being prescribed to patients, this formulation must undergo preclinical assessments to determine the safety and higher effectiveness of Herbo-mineral medicine.

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