

## Phytochemical and pharmacological analysis of medicines which are used to treat “*Karppavaayu*” in Pararasasekaram - A literature survey

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**Abstract:** *Karppavaayu* is one of the most common gynaecologic complaint in young women hood. The symptoms and signs are described in the text book *PararasasekaramKarparogaNidhanam*. which is belongs to Sri Lanka and it is the only one Siddha authentic text where *Karppavaayu* was described with medicines. Menstruation is a normal cyclical physiological process which repeats every month. When menstruation is associated with pain, it is termed as *Karppavaayu*. It can be compared with dysmenorrhoea which is mentioned in modern medicine. Due to *Karppavaayu* many young women inability to do their day-to-day activities. It is decreasing efficiency and quality of young women. The present study, analysis of the phytochemical and pharmacological activities revealed the medicines which are prescribed in *Pararasasekaram* have significant role in the management of *Karppavaayu*. Though the results from literacy search are good, but further study will be evaluated through proper scientific parameters.

**Key words:** *Karppavaayu*, *Pararasasekaram*, dysmenorrhoea, menstruation

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### I. Introduction

*Karpparogam* is defined as the diseases which are arise in the uterus. According to *PararasasekaramKarparogaNidhanam*, there are nine *KarpparogankalandKarppavaayu* is a main disease among them. [9] *Karppavaayu* is the common disease entity found in women due to the undernourishment and fast phased lifestyle practices. [13] *Soothagavaayu*, *Soothagasoolai*, *Thoorasoolai*, *Soothagavayitruvali*, *Rathavaathapithagunmam*, *Soothagakuthu*, *Soosikavaayu* and *Soosikaasoolai* are the synonyms of *Karppavaayu* mentioned in Siddha literatures. *Pararasasekaram* is one of the Siddha authentic text books in Sri Lanka. There are no evidence of depiction of *Karpparogam* other than in *Pararasasekaram* in Siddha Medical system.

The following stanza in *PararasasekaramKarparoganidhanam* demonstrates *Karppavaayu* as:

“*Porumumutharanithanaiyadarthuppothamikavumvaliyundaik*

*Kuruthikalilyilvalitheerunkkolunkkerppamuravalikum*

*Varudiyiduppuththudaiyulaiyumayakkumalathaimikavirukum*

*Perukappanaikumutharathitpesunkkerpavaayuvithae*”

Meaning: Flatus collects and feels pain in the abdomen, pain relives after menstruation, if anyone conceive and abortion may be occurred if there is painful menstruation, ache in hip and thigh, faintness and constipation.

“*Vaeramidathupaakathinmindyvalikmaelerum*

*Saarunkkuruthithaniyathuthalaiyamenavaethalaithimrkum*

*Neraethiralunaapikelnitkunsaaikayathitsaarum*

*Naarikadukunsanthulaiyunalansaerutharunthanilvaliyae*”

Meaning: Pain starts in left side and spreads to upper part, bleeding during menstruation continues, tightness of head, flatus collects around the umbilicus, back pain and ache in joints.

According to Allopathic medicine, severe lower abdominal pain, cramps in lower abdomen and legs, nausea, vomiting, severe headache, dehydration, stress, anxiety, irritability, sometimes heavy bleeding, loss of appetite and constipation are the symptoms of dysmenorrhoea.

The objective of this literature study was to collect information of the Siddha drugs for treating *Karppavaayu*.

### II. Methodology

This is a Literature review. The authentic Siddha books available at the Library of the Unit of Siddha Medicine, University of Jaffna and other relevant publications were the research materials. *Karppavaayu* is

described in *PararasasekaramKarpparogaNidhanam*. Plant, mineral, animal origin drugs are prescribed for treating *Karppavaayu*. All the plant, mineral and animal origin ingredients were listed separately. The phytochemical and pharmacological actions or evidences were confirmed by consulting various traditional and scientific publications. Data were analyzed by using MS office word and Excel

### III. Results And Discussion

#### 3.1 Medicines for *Karppavaayu*

A total of 29 Siddha drugs were listed for treating *Karppavaayu*. There were in the following 10 forms:- (1) Kudineer (decoction), (2) Chooranam (powder), (3) Ennai (Medicated oil), (4) Nei (medicated ghee), (5) Kulikai (tablet), (6) Paspam, (7) Kayam (8) Kali (9) Kuzhambu (semi liquid form of medicine), (10) Paethi (purgative) (see figure – I)

**Figure – I**

No	Type	Name of the medicine
1.	Oil	<i>Ulliyamanakennai - I</i>
		<i>Ulliyamanakennai - II</i>
		<i>Savarkaraennai</i>
		<i>Virechanaennai</i>
2.	Ghee	<i>Thenkainei - I</i>
		<i>Thenkainei - II</i>
		<i>Thenkainei - other</i>
		<i>Naruvilinei</i>
		<i>Punugunei</i>
3.	<i>Paspam</i>	<i>Manjalpaspam</i>
		<i>Kaanthapaspam</i>
		<i>Vaelarukupaspam</i>
4.	<i>Chooranam</i>	<i>Chandrakaanthachooranam</i>
5.	<i>Kulikai</i>	<i>Katpoorakulikai</i>
6.	<i>Kayam</i>	<i>Kerpavaayukayam - I</i>
		<i>Kerpavaayukayam - II</i>
		<i>Kerpavaayukuthukkukayam</i>
		<i>Kerpavaayuthuvalaikadukkukayam</i>
		<i>Kerpavaayuundai</i>
		<i>Vaepillaikayam - I</i>
	<i>Vaepillaikayam - II</i>	
7.	<i>Kali</i>	<i>Kerpavaayu kali</i>
		<i>Vilvamvaer kali</i>
8.	<i>Kuzhambu</i>	<i>Kerpavaayukuzhambu</i>
		<i>Ullikuzhambu</i>
9.	<i>Paethi</i>	<i>Kerpavaayupaethi</i>
10.	Decoction	<i>Kerpavaayukudineer</i>
		<i>Kerpavaayukudineer - other</i>
		<i>Kerpavaayukudineer - other</i>

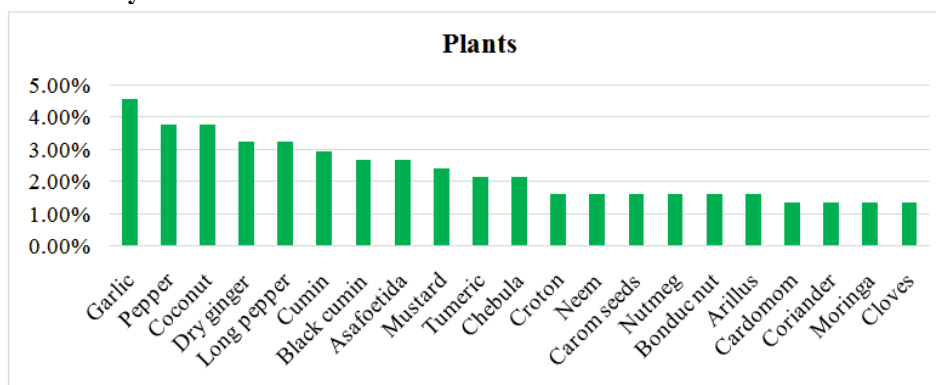
The treatment is focused on purgatives and some antispasmodic drugs and restore the body-mind system.

#### 3.2 Details of herbs, mineral and animal products included in preparation of medicine

No	Ingredients	Total no
1.	Plants	139
2.	Minerals	19
3.	Animal products	8

Out of 29 medicines, totally 139 plants, 19 minerals and 8 animal products are used in medicinal preparation.

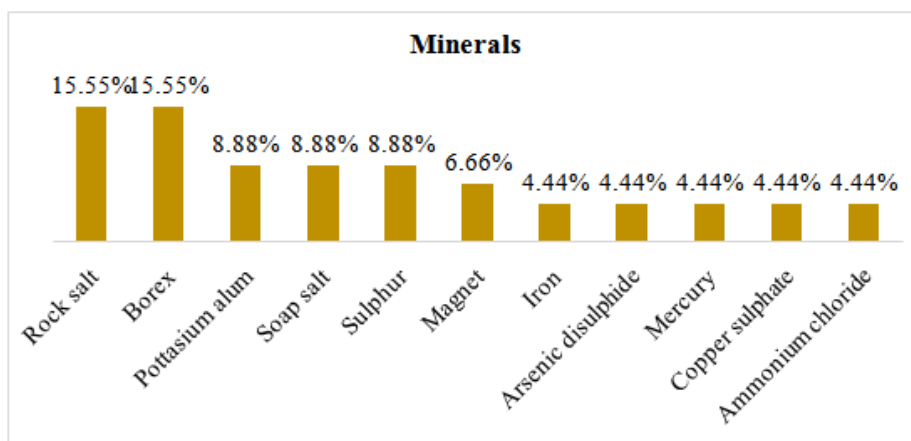
### 3.3 List of plants mainly used in medicine



Ginger (4.56%) is mostly noted in the above medicines. Pepper and coconut used in 3.76%, dry ginger and long pepper used in 3.22% and cumin used in 2.95% of the medicines.

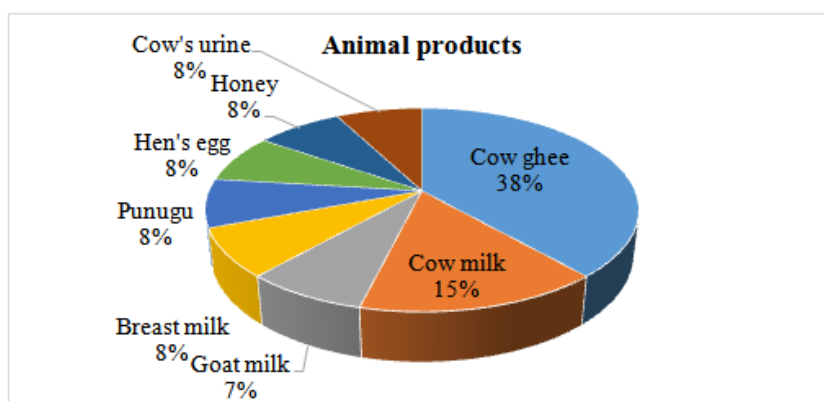
Ginger (4.56%) is mostly noted in the above medicines. Pepper and coconut used in 3.76%, dry ginger and long pepper used in 3.22% and cumin used in 2.95% of the medicines.

### 3.4 List of minerals used in medicine



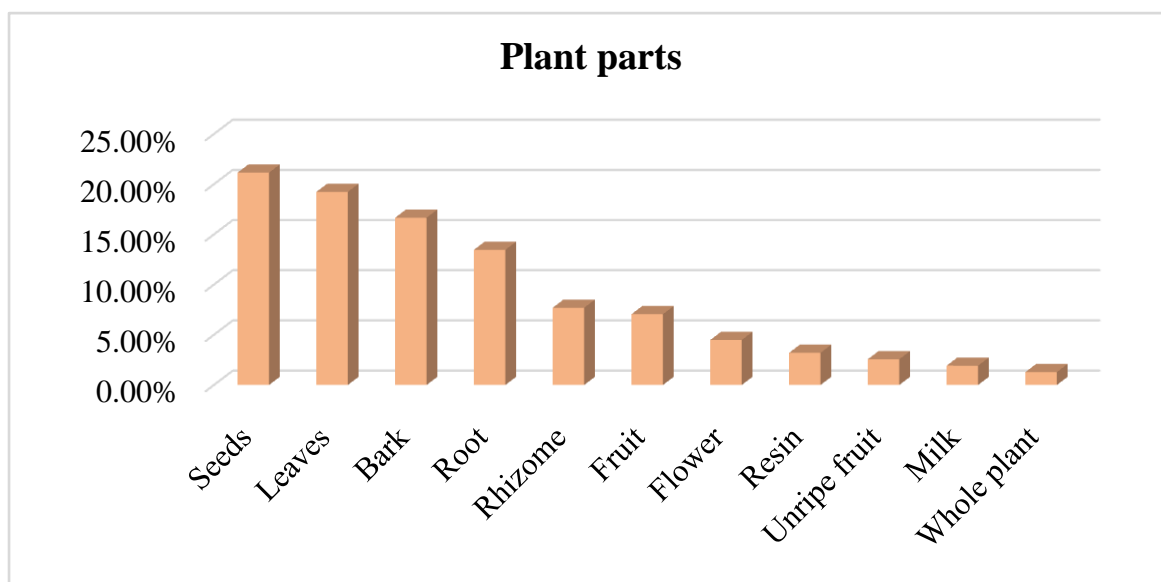
Rock salt and borex (15.55%) is mostly noted in the above medicines. Pottasium alum, soap salt and sulphur used in 8.88%, and magnet used in 6.66% of the medicines.

### 3.5 List of animal products used in medicine



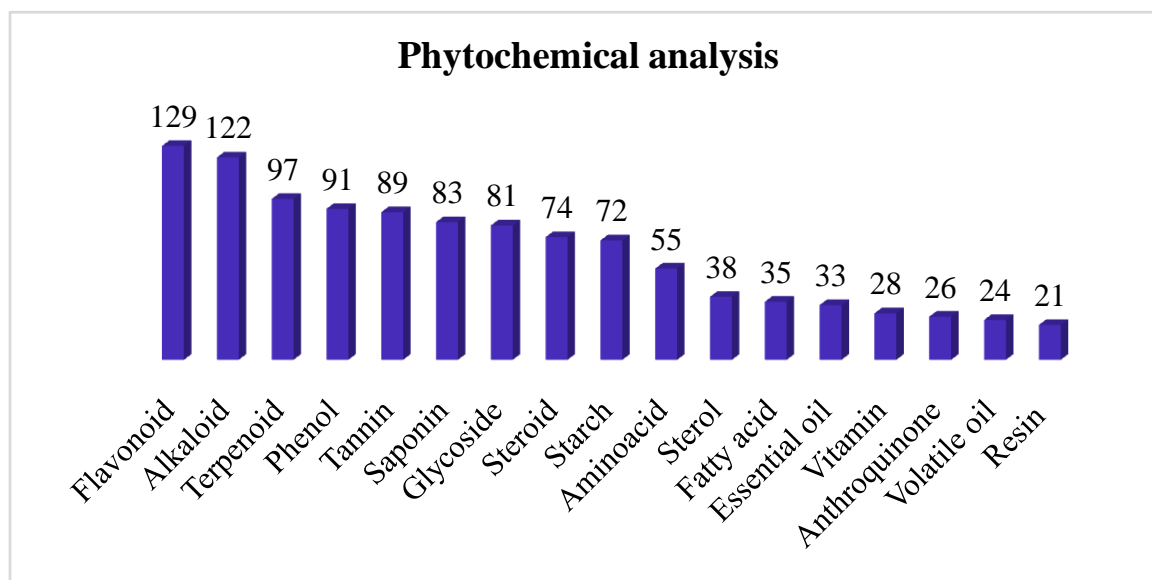
Cow ghee (38.46%) is mostly noted in the above medicines. Cow milk used in 15.38%, and honey, punugu, breast milk, hen's egg and cow's urine used in 7.69% of the medicines.

### 3.6 The parts of the plant used in medicine



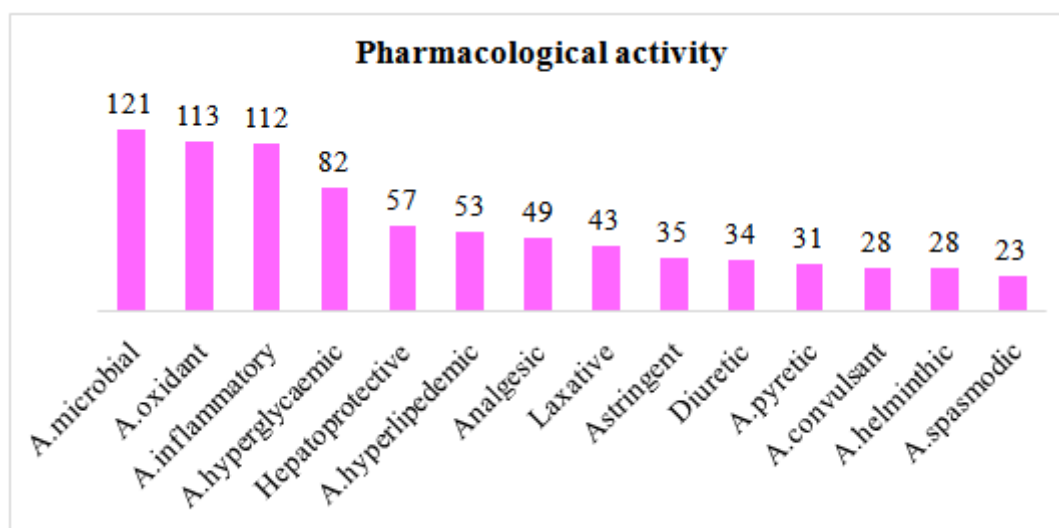
Seeds (21.15%) used in most of the medicines. Leaves (19.23%), bark (16.66%) and root (13.46%) used in the medicines.

### 3.7 Phytochemical analysis of the medicines



Out of 166 materials used to prepare medicine 129 materials have flavonoid, 122 have alkaloid, 97 have terpenoid and 91 have phenols.

### 3.8 Pharmacological actions of the medicine



Most (121) of the products have anti-microbial activity. 113 materials have antioxidant, 112 have anti-inflammatory, 82 have antihyperglycaemic and 57 have hepatoprotective activities.

### IV. Conclusion

This work serves as a curtain raiser to document such speciality medicines prescribed for *Karppavaayu*. According to Siddha principles *Pitha* and *Vathadosha* are disturbed from equilibrium. Herbal medicines which are prescribed in *Pararasasekaram KarparogaNidhanam* without causing side effects. The prepared medicines have the pharmacological properties of pacifies *Vatha* and *Pitha*. This documented work prepared from the literary evidence of *Karppavaayu*. It will be evaluated through proper scientific parameters and research.

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