

## **A Literature Review of the Poly Herbal Formulation (*Uththaamani Nei*) which is Commonly Used in *Seriya Maantham* in Siddha Medical System**

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### **Abstract.**

A poly herbal preparation (*Uththaamani Nei*) which is used for treating all types of Maantham for children in Siddha Medicine. Based on references, the preparation method of *Uththaamani Nei*, which is mentioned in the Siddha Book of Kuzhanthai Maruthuvam (Balavagadam) is commonly practiced in the health services of the Siddha medical system in India. Therefore, this preliminary step was taken to provide documentary evidence for the therapeutic effects of the ingredients which are used to the preparation of *Uththaamani Nei*. Data for the review of 7 ingredients were collected from relevant research sources from January 2021 to April 2022. Data entry form was prepared based on the characteristics of the ingredients such as families, morphology, parts used, siddha properties and pharmacological actions. Among these ingredients, all were identified as 6 herbal(85%), and 1 animal product(15%). These herbal ingredients are belonging to 6 families which are different families, Asclepiadaceae (16.7%), Umbelliferae (16.7%), Piperacea (16.7%), Zingiberaceae (16.7%), Araceae (16.7%) and Amaryllidaceae (16.7%). Based on the growth habit, these plant materials were classified as 4

herbs(67%) and 2 climbers(33%) were used in *Uththaamani Nei* preparation. Among 6 ingredients, siddha properties such as 5 pungent taste (83%), 6 hot potency (100%) and 6 pungent efficacy(100%); 6 carminative (100%), 6 stomachic (100%) and 6 stimulant (100%) actions were found. Finally this study provides the clear information for the therapeutic effects, further scientific studies for *Uththaamani Nei* and each medicinal ingredient should be performed in future.

Key words: *Seriya Maantham, Uththaamani Nei, Herbal and animal product.*

## INTRODUCTION

### BACKGROUND

The origin of Siddha System of Medicine is attributed to Lord Shiva, who was handed it down to his wife Parvathi (Shakti) who in turn passed on the sacred knowledge to ‘*siddhars*’ such as *Agasthiyar, Thirumoolar* through Lord *Muruga*. *Siddhars* who were considered the greatest scientists in ancient times and were men of highly cultured, intellectual and spiritual faculties combined with supernatural powers. Siddas means the refined monotheistic creed. Siddhars means perfected or realized saints. Siddhars implies an expert in occultism, alchemy and so on with magic or divine power. Siddhars also connotes the same however exhibiting such powers with mind. Siddhars analyzed relationship between the Soul and body. Each and every Siddhar’s goal is reaching the lotus like flower feet. Therefore they maintain the proper dietary and behavioral patterns. This proper dietary and behavioral patterns helps to live without disease in their lifespan. Therefore they properly done the *Pranaayamam, Astanga yogam* and *Astamaa chiththy* etc. Even though, Siddars said Ygam and Gnanam for maintain wellbeing of the body, but artificial nature, food and behavioral patterns will derangements the Nature of the body, Subsequently disease will arise. So Siddhars analyzed and told for cure the disease.

All Siddhars was more likely have been Tamils. As we all know, Saint Bohar was from other country, but he also knew the Tamil as Legendary language. Also he formulated the medicine preparation for diseases by quotation in Legendary Tamil language. Among those who have been so taught, Peadiatrics is most important. Pothu Maruththuvam is for treats the adults. While adults suffered from the disease, they told the signs and symptoms of the conditions of the illness. But Kuzhanthai Maruththuvam is most important, that’s why if children affected by the diseases, Doctor will diagnosed as per affected children’s cry, expression, especially their facial expressions. It is more challenge regarding medication of

paediatric diseases. But Siddhars already analyzed and told treatments and management protocol for that kind of cases. In one word they are expertised in Siddha Medicine. For an Example, Agasthiyar Pillai thamizh, Thanvandri balavagadam, Kumpa muni balavagadam etc.

Proper diet is most important role in Growth and development of the children. Even though, our ancestors recommended Breastfeed until 6months, but some people are continued until two and half years old of children. According to WHO, it is emphasize the exclusive Breastfeeding until 6months of child. Therefore mothers have to maintain the proper diet. If it is improper, it will influenced breastfeeding. If child intake this kind of breast milk, *Maantham* will arise<sup>(1),(2),(3)</sup>.

*Maantham* is one the *Agakaarananoigal* and common disease in pediatrics age group. *Maantham* is also called as "*Mantham*". *Mantham* means suppression of *Agni* that is caused *Ajeernam* which lead to suppression of Anatomical malformation and Physiological dysfunction, that is called *Maantham* and book of Kuzhanthai Maruththuvam Balavagadam says *Maantham* is affect not only the Anatomical malformation or Physiological dysfunction, but also it is affects the four *Antha Karanam* (*Manam, Puththi, Siththam, Agangaram*). Various Siddha pediatrics text classified different types of *Maantham*. In book of Balavagadam classified mentioned about twenty one types of *Maantham* and book of Pararasasegaram, says twenty one types of *Maantham*. Each Literatures has specific treatment for each and every *Maantham*. ***Seriya Maantham*** is one of the *Maantham* commonest Gastro Intestinal Tract problem which leads to improper digestion and absorption. *Seriya Maantham* is due to indigestion. Abdominal pain with blotting or abdominal distension, foul smelling colloidal form of stool passage, frequency of milky diarrhoea, child is always crying, child feels discomfort, baby sleep in one side, headache, lethargy, blotting the body, fever, cold and clammy skin, vomiting and sadness in baby's general appearance are sign and symptoms of the *Seriya Maantham*. Gastro Enteritis is one of the Gastro Intestinal tract diseases in modern aspect. Sign and symptoms of the Gastro Enteritis are abdominal discomfort, Abdominal cramps, abdominal pain, headache, vomiting, diarrhoea, dehydration, lethargy, shaking chill, fainting, weakness, and mild or moderate fever<sup>(1),(2),(3)</sup>. Majority of signs and symptoms of *Seriya maantham* and Gastro enteritis are same.

*Seriya Maantham* is one of the harmful problems in Children. Only if *Seiya Maantham* properly soved, the mother and child sleep harms. Therefore treatment and management are most important to *Seriya Maantham*. Siddha medicines can be categorized into two classes. Thirty two Internal medicine and Thirty two external medicines. In Siddha Paediatrics *Nei is*

commonly used as Internal medicine. *Uththamaani nei* is one the effective medicine for *Maantham*. It may give to all types of *Maantham*. *Nei* is applying on the tongue. Hence in this study researchers have selected a Siddha drug preparation of 1.5 millilitre "*Uththamaani nei*" (internal) as a trial drug on two times; morning and night towards the cases of *Seriya Mangham*<sup>(1)</sup>.

## JUSTIFICATION

*Seriya Mantham* is one the *Agakaarananoigal* and commonest Gastro Intestinal Tract disease and specially correlates with Gastro Enteritis in paediatrics age group therefore the researcher has taken, Clinical evaluation of the effect of "*Uththamaani nei*" for the treatment of "*Seriya Maantham*" as Internal medicine from Book of Balavagadam for treating this disease.

## Methods:

It is a narrative literature review related study of the ingredients which are used to prepare the *Uththaamani Nei*. The data acquired from all existing sources such as old and new editions of fifth Siddha Medical text books from Libraries at Government Siddha Medical College and Hospital, Palayamkottai, Tirunelveli, electronic books, Siddha medicine related web sites as TKN Siddha Ayurveda *Vaidhyashala*, research articles and other websites during the period from the January 2021 to April 2022. The search for review was limited to publications and or studies in the Tamil and English language only. Data were collecting form was prepared based on the specific objectives related to the basic characteristics of the medicinal ingredients of the *Uththaamani Nei* preparation, which was mentioned in the textbook of Book of Kuzhanthai Maruththuvam (Balavagadam). Based on this book, the *Uththaamani Nei*, which is prepared with the usage of six herbal materials and one animal product.

## Research Drug- *Uththaamani nei*

S.NO	NAME	QUANTITY
1.	<i>Uththamaani</i>	5gram
2.	<i>Oomam</i>	40gram
3.	<i>Vettilai kaampu</i>	5gram

4.	<i>Thol seevina sukku</i>	4gram
5.	<i>Sudda vasampu</i>	4gram
6.	<i>Vellai poondu</i>	4gram
7.	Ghee	1.3litre

### Method of preparation:

These ingredients are grind with hot water. Then the mixture of paste is mixed with 1.3 litre of ghee and boils it, then filter it. Then take that in a correct texture then it is filtered and stored in a glass container.

Dosage: 1.5 ml twice a day (Morning and Evening) internally, before meal.

Duration: 7 days.

Indication: *Seriya Maantham*

Mode of administration: Oral

Reference Book: “Kuzhanthai Maruthuvam (Balavagadam)”, Murugesu Muthaliyaar K.S, Pon Guru Sironmani.,: 5<sup>th</sup> Edition, Department of Indian Medicine and Homeopathy, Chennai; 2016, p73.

### Results

Table 1: *Classification of the Medicinal Ingredients*

S.NO	NAME	CLASSIFICATION
1.	<i>Uththamaani</i>	Herbal product
2.	<i>Oomam</i>	Herbal product
3.	<i>Vettilai kaampu</i>	Herbal product
4.	<i>Thol seevina sukku</i>	

		Herbal product
5.	<i>Sudda vasampu</i>	Herbal product
6.	<i>Vellai poondu</i>	Herbal product
7.	Ghee	Animal product

Based on this review, 6 (85%) herbal and 1 (15%) animal are used to prepare *Uththaamani Nei*, which was mentioned in the book of Kuzhanthai Maruththuvam (Balavagadam) which are summarized in Table 1.

### ***Scientific and Vernacular names and family of the Medicinal ingredients***

The scientific and selected vernacular names of the plants, metal and minerals are summarized in Table 2.

S.NO	NAME	BOTANICAL NAME	ENGLISH NAME	SANSKRIT NAME
1.	<i>Uththamaani</i>	<i>Daemia extensa</i>	Trellis-vine	<i>Phala-antaka</i>
2.	<i>Oomam</i>	<i>Carum copticum</i>	Lovage	<i>Yavani</i>
3.	<i>Vettilai kaampu</i>	<i>Piper betel</i>	Betel leaf	<i>Nagavalli</i>
4.	<i>Thol seevina sukku</i>	<i>Zingiber officinale</i>	Dry ginger	<i>Ardrakam</i>
5.	<i>Sudda vasampu</i>	<i>Acorus calamus</i>	Sweet flag	<i>Vacha</i>
6.	<i>Vellai poondu</i>	<i>Allium sativum</i>	Garlic	<i>Lasuna</i>

**Table 2.**

***Morphology of the Herbal ingredients, parts used and family.***

<b>Herbal Ingredients</b>	<b>Morphology</b>	<b>Percentage</b>	<b>Parts used</b>	<b>Family</b>
<i>Uththaamani</i>	Climber	33.33%	Leaf	Asclepiadaceae
<i>Oomam</i>	Herb	66.66%	Dry fruit	Umbelliferae
<i>Vettilai</i>	Climber	33.33%	Petioles	Piperacea
<i>Sukku</i>	Herb	66.66%	Rhizome	Zingiberaceae
<i>Vasampu</i>	Herb	66.66%	Root	Araceae
<i>Vellai poondu</i>	Herb	66.66%	Bulb	Amaryllidaceae

**Table:3**

Based on this review of herbal ingredients were classified to be 4 (67%) herbs and 2 (33%) climbers.

Figure 2 denotes the parts of herbal ingredients which are used to prepare the *Uththaamani Nei*. Based on this figure, the parts used to prepare *Uththaamani Nei* were Rhizomes 2 species (33%), leaf 1 species (16%), Dry fruit 1 species (16%), Petioles 1 species (16%) and Bulb 1 species (16%).

***According to the Family Distribution of the Herbal ingredients***

The family of the 6 herbal ingredients are given below in Table 3. Total 6 herbal ingredients from different different families, Asclepiadaceae (16.7%), Umbelliferae (16.7%), Piperacea (16.7%), Zingiberaceae (16.7%), Araceae (16.7%) and Amaryllidaceae (16.7%).

***Organoleptic characters and its medicinal uses***

S.NO	NAME	ORGANOLEPTIC CHARACTERS	MEDICINAL USE
1.	<i>Uththamaani</i>	Taste: Bitter Character: Hot Division: Pungent	It cures <i>Kapha</i> diseases. It cures abdominal diseases like abdominal dyspepsia. It is promotes the digestion and appetite
2.	<i>Oomam</i>	Taste: Pungent Character: Hot Division: Pungent	It cures abdominal diseases like abdominal dyspepsia, Abdominal distension and diarrhoea
3.	<i>Vettilai kaampu</i>	Taste: Pungent Character: Hot Division: Pungent	It cures <i>Kapha</i> diseases. It cures <i>Tri dosha</i> . It is used in abdominal diseases and respiratory disease.
4.	<i>Thol seevina sukku</i>	Taste: Pungent Character: Hot Division: Pungent	It cures <i>Kapha</i> diseases. It is used in abdominal diseases like abdominal pain and distention and vomiting. It promotes the appetite. Also used in respiratory disease.
5.	<i>Sudda vasampu</i>	Taste: Pungent Character: Hot Division: Pungent	It cures <i>Kapha</i> diseases like abdominal diseases, abdominal dyspepsia, diarrhea and fever. It cures the Scabies.
6.	<i>Vellai poondu</i>	Taste: Pungent Character: Hot Division: Pungent	It cures <i>Kapha</i> diseases. It cures <i>Tri dosha</i> . It is used in abdominal diseases like abdominal pain and flatulence, distention.

			It is used in ear diseases and respiratory disease like headache, heaviness in the head, chronic cough.
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**Table 4**

*Siddha properties of the medicinal ingredients*

<b>Taste</b>	<b>Frequency</b>	<b>Percentage</b>
Pungent	5	83%
Bitter	1	17%
<b>Potency</b>	<b>Frequency</b>	<b>Percentage</b>
Hot	6	100%
<b>Efficacy</b>	<b>Frequency</b>	<b>Percentage</b>
Pungent	6	100%

**Table 5**

Table 5 show, within these medicinal ingredients that highly have Siddha properties such as pungent taste 5 (83%), all herbal ingredients that have hot potency 6 (100%) and all herbal ingredients that have pungent efficacy 6 (100%). Further, those ingredients have bitter taste. A Siddha property refers to evaluation of the medicinal ingredients by taste, character, potency, class/ efficacy and action.

*Pharmacological Actions of the Medicinal ingredient*

**Table 6**

<b>S.NO</b>	<b>Pharmacological action</b>	<b>Frequency</b>	<b>Percentage</b>
1	Carminative	6	100%
2	Stomachic	6	100%
3	Stimulant	6	100%
4	Sialogogue	4	67%
5	Astringent	3	50%
6	Antiseptic	3	50%
7	Tonic	3	50%
8	Aphrodisiac	2	33%
9	Febrifuge	2	33%
10	Expectorant	2	33%
11	Lactagogue	2	33%
12	Anthelmintic	2	33%

13	Anti periodic	1	17%
14	Disinfectant	1	17%
15	Diuretic	1	17%
16	Alterative	1	17%
17	Digestive	1	17%
18	Rubifacient	1	17%
19	Anti spasmodic	1	17%
20	Germicide	1	17%

Pharmacological Actions of the Medicinal ingredients Based on Table 6, pharmacological actions such as carminative, stomachic and stimulant 6(100%) were highly present in these medicinal ingredients of *Uththaamani Nei*.

## **Discussion**

### ***Classification of the Medicinal Ingredients***

The resources of Siddha medicine are classified into three major divisions; namely, herbal and animal materials (21).

### ***Scientific and Vernacular names of the Medicinal ingredients***

A commonly the botanical name conforming to the International Code of Nomenclature for Plants and generally, the botanical name has at least two words. The first word denotes the genus and the second word is the species name for the particular plant. These words form the species identifier for the plant. The third word is to be added to the botanical name to identify a distinct variety within the species. Botanical names are universal. The botanical name is unique to a specific plant. No other plant in the world will have the same botanical name (22). This scientific name is most important to the identification of the particular plant wherever in the world it is found, grown or studied. Therefore, the botanical or chemical name is important to correct ingredient identification. Harish Singh, 2008, mentioned in his research article that the local names to play an important role in ethno-botanical study and easy parameter for scientific identification of the taxa.

### ***Family Distribution of the Herbal ingredients***

Based on the common external features of plants such as visible details of the leaves, fruits and other parts, these plants can be grouped together as a family. It is important to users for the correct identification of the plant (23). Present review also encompasses more common families for the herbal ingredients to the preparation of *Uththaamani Nei*.

## **Morphology of the Herbal ingredients**

Plant morphology is the study of the physical form and external structure of plant and it is useful in the visual identification of plants. Based on the size, nature of the stem and life span, and growth habit, plants are broadly categorized into three groups such as herbs, shrubs and trees. In addition to these, two more types need some support to grow. They are specifically called climbers and creepers (24, 25). Present results are emphasis the commonest morphology of the herbal ingredients which are used to prepare the *Uththaamani Nei*.

## **Parts of the Herbal ingredients**

Many parts of a plant can be used for culinary or medicinal purposes. Medicinal properties can be derived from different parts of a plant such as leaves, roots, bark, fruit, seeds, flowers, bulb, wood, essential oil, fatty oil, gum, resin, rhizome and tuber. These different parts of a plant have contained different active principles that are toxic or non-toxic. An active ingredient also differs from different parts of a plant. Therefore, a part of the plant is edible, while another part of the same plant is toxic (26-29). This review denoted that the seeds and roots are more used in the *Uththaamani Nei* preparation.

## **Siddha properties of the medicinal ingredients**

In Siddha Pharmacology, each raw drug or crude drug is classified in to taste, character, potency, class/efficacy (bio transformation) and action according to the five basic elements as earth, water, fire, air and space. These classifications are commonly known as Siddha Properties (32). According to Siddha Science, the six tastes of food or plant materials are also composed of five basic elements. Every taste is constituted by the combination of two basic elements. The dynamics of Siddha preparations are based on taste parameters as sweet (air and space), sour (earth and fire), salty (water and fire), pungent (spicy) (air and fire), bitter (air and space) and astringent (earth and air). The siddha drug will exhibit the properties of taste due to its dominance (11, 18, 30 - 32). Therefore, taste is playing an important role in the maintenance of equilibrium between basic humors, which are disturbed in disease conditions (4, 5). Taste is traditionally valued as an important ethno-pharmacological category, and correlate with certain therapeutic activities (36). Further, Dragos and Glica have suggested that phytochemical taste is more relevant than chemical class for ethnopharmacological activity prediction (36, 37). Siddha Pharmacology defines twenty-one characters of drugs like lightness, heaviness, dryness, etc. which are comparable to physical properties of the drugs (11). Potency is defined

as an active constituent of the siddha drug. This constituent is responsible for the pharmacological activity of the medicinal plant. Commonly the siddha drugs have cold and hot potency based on the presence of Fire or Water element in them (32). Hot potency neutralizes the affected the vital humors of vatham and kabham while cold potency neutralizes the affected humor of pitham (11, 30). Class (bio transformation) is said to be the post absorptive taste (efficacy), which is also considered being an important aspect (17, 30). It is a concept explaining the assimilation of six tastes in the digestive tract into three primary tastes namely Sweet, Sour and Pungent. Mostly Sweet and Salt becomes Sweet, Sour remains Sour, Bitter, Pungent and Astringent becomes Pungent (35). Based on these results, the efficacy of *Uththaamani Nei* may be depending on the pungent taste, hot potency and pungent efficacy.

### **Pharmacological Actions of the Medicinal ingredients**

The pharmacological action is a function of drug, which mentions the outcome effect of the drug like tonic, carminative, stimulant, diuretic, etc. An ingredient can have more than one action (18, 30). Herbal clinicians should have an excellent knowledge about the primary actions of plants and specific indications. The first step to use medicinal herbs successfully is to understand the actions of each herb and how they work to treat an individual patient's symptoms (33). Researchers found that the *Uththaamani Nei* has highly shown carminative and stimulant actions.

### **Conclusion**

A poly herbal preparation *Uththaamani Nei* is commonly used for treating gastrointestinal disorders in the Siddha medical system. Based on the literature references and pharmacological actions of the ingredients, the preparation method of '*Uththaamani Nei*' which is mentioned in the Book of of Kuzhanthai Maruththuvam (Balavagadam) and which is commonly used for gastrointestinal disorders in children. Therefore, this preliminary step was taken to provide documentary evidence for the therapeutic effects of the ingredients which are used to the preparation of *Uththaamani Nei*. However, there is a need for further extensive scientific studies for *Uththaamani Nei* and each medicinal ingredient should be performed to prove in the future.

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