

# Drug Review on Siddha Drug - *Thirikadugadhi Mandooram*

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## ABSTRACT

Siddha system is an oldest system of traditional medicine originating in ancient Tamilnadu in South India. In Siddha system, medicine includes the herbal products, inorganic substances and animal products that lead to different formulations ranging from low shelf life drug to high shelf life drug. *Thirikadugadhi Mandooram* is a poly herbo-mineral formulation used to treat Anaemia, Jaundice, Anasarca, Fever, Tuberculosis. This review describes the phytochemicals, pharmacological action and medicinal uses of the part of each ingredient used in this formulation. Ingredients of the formulation and their pharmacological action in various research studies are discussed in this review. The details were collected from different Siddha texts and electronic databases. In conclusion the results of the review revealed that the pharmacological action and the medicinal uses of drug were perfectly matched with each ingredients of formulation.

**Keywords:** Siddha system, *Thirikadugadhi Mandooram*, review

## INTRODUCTION

Siddha medicine is an oldest system of traditional medicine originating in ancient Tamilnadu in south India. Palm leaf manuscripts say that the Siddha system was 1<sup>st</sup> described by Lord Shiva to his wife Parvati. The concept of siddha medicine is based on 96 thathuvas. According to the siddha medicine system, diet and lifestyle plays a major role in health and in curing disease. This system believes that all objects in the universe including human body are composed of basic elements namely earth, water, fire, air and space.

In siddha medicine, there are 32 internal and 32 external medicinal preparations are available for the treatment. Mathirai (pills) is the one form of internal medicine in which powdered raw drugs are triturated with the juice of leaves or decoction, ghee or honey or types of milk. They are rolled into different size of pills dried and stored.

The drug review of *Thirikadugadhi Mandooram* is a poly herbo-mineral formulation gives evidence for its therapeutic actions mentioned in literatures. It has 15 ingredients among all only 2 metal drugs and other all from plant origin and detoxification process of all ingredients should be done before the preparation of final medicine. This review describes the phytochemicals, pharmacological action and medicinal uses of the part of each ingredient used in this formulation.

## MATERIALS AND METHODS

**Research design:** Drug review on literature

**Research type:** Literature review

**Research period:** 3 months

**Literature collected from:**

Thiyagarajan.K, GunapadamThadhu-Jeeva vaguppu (part – 2&3) published by Department of Indian medicine & Homeopathy, Chennai -106, pg no:200.

## INGREDIENTS OF DRUG:

Chukku (*Zingiber officinale*.Linn.)  
 Milagu (*Piper nigrum*.Linn.)  
 Thippili (*Piper longum*.Linn.)  
 Kadukkai (*Terminalia chebula*.Linn.)  
 Nellivattal (*Phyllanthus emblica*.Linn.)  
 Thandrikai (*Terminalia bellerica*.Linn.)  
 Elam (*Elettaria cardamomum*.Linn.)  
 Saadhikai (*Myristica fragrans*.Linn.)  
 Krambu (*Syzygium aromaticum*.Linn.)  
 Kattaathipoo (*Bauhinia tomentosa*.Linn.)  
 Thippilimoolam (*Piper longum*.Linn.)  
 Koraikizhangu (*Cyperus rotundus*.Linn.)  
 Sadamanjil (*Nardostachys grandiflora*.Linn.)  
 Karkadagasingi (*Rhus succedanea*.Linn.)  
 Mandooram (*Ferroso ferric oxide*)  
 Ayapodi (*Ferrum*)  
 Karisaalai juice - (*Eclipta prostrate*.Linn.)  
 – Q.S

## PREPARATION:

Equal quantities of the above ingredients are mixed together and the Mandooram powder is then added equal to the weight of all the chooranams. Half part of the Aya powder is then added and the ingredients are triturated with the juice of trailing eclipta (*Eclipta prostrata*). Pills are made into the size of a jujube (*Zizyphus jujube*) seed.

## DOSAGE:

Jujube sized seed

## ADJUVANT:

Sugar or honey

## INDICATIONS:

Paandu (Anaemia)  
 Sobai (Anasarca)  
 Kamaalai (Jaundice)  
 Suram (Fever)  
 Kshayam (Tuberculosis)

## RESULT

Table 1: Scientific & selected vernacular names, families of the medicinal ingredients

Botanical name	Tamil name	English name	Sanskrit Name	Family
<i>Zingiber officinalis</i>	Chukku	Dried ginger	Nagaram	Zingiberaceae
<i>Piper nigrum</i>	Milagu	Pepper	Maricha	Piperaceae
<i>Piper longum</i>	Thippili	Long pepper	Pippali	Piperaceae
<i>Terminalia chebula</i>	Kadukkai	Chebulic myrobalan	Pathya	Combretaceae
<i>Phyllanthus emblica</i>	Nellivattal	Indian gooseberry	Amalaki	Euphorbiaceae
<i>Terminalia bellerica</i>	Thandrikai	Belleric myrobalan	Vebeethaki	Combretaceae
<i>Elettaria cardamomum</i>	Elam	Cardamom seeds	Ela	Zingiberaceae
<i>Myristica fragrans</i>	Saadhikai	Nut meg	Jatphalam	Myrtaceae
<i>Syzygium aromaticum</i>	Krambu	Clove	Lavangam	Myrtaceae
<i>Bauhinia tomentosa</i>	Kattathipoo	Holy mountain ebony	Phalgu	Fabaceae
<i>Piper longum</i>	Thippilimoolam	Long pepper root	Pipaleemoola	Piperaceae
<i>Cyperus rotundus</i>	Koraikizhangu	Nut grass	Mutha	Cyperaceae
<i>Nardostachys grandiflora</i>	Sadamanjil	Valerina root	Jatmamsi	Valerianaceae
<i>Rhus succedanea</i>	Karkadagasingi	The galls	Karkatashring	Anacardiaceae
<i>Eclipta prostrata</i>	Karisaalai	Trailling eclipta	Bhringaraj, Kesaranja	Asteraceae

Table 2: Morphology, parts used & organoleptic characters of the herbal ingredients

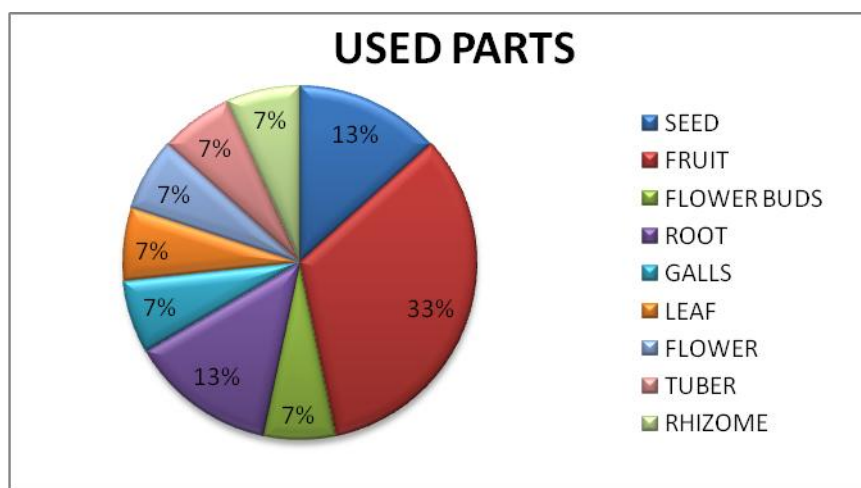
Botanical name	Morphology	Parts used	Taste	Potency	Bio availability
<i>Zingiber officinalis</i>	Herb	Tuber	Pungent	Hot	Pungent
<i>Piper nigrum</i>	Climber	Seed	Bitter, pungent	Hot	Pungent
<i>Piper longum</i>	Climber	Fruit	Sweet	Hot	Sweet
<i>Terminalia chebula</i>	Tree	Fruit	Astringent, little sweet, sour, pungent, bitter	Hot	Sweet
<i>Phyllanthus emblica</i>	Tree	Fruit	Sour, astringent, sweet.	Cool	Sweet
<i>Terminalia bellerica</i>	Tree	Fruit	Astringent	Hot	Sweet
<i>Elettaria cardamomum</i>	Herb	Seed	Pungent	Hot	Pungent
<i>Myristica fragrans</i>	Tree	Fruit	Pungent, astringent	Hot	Pungent
<i>Syzygium aromaticum</i>	Tree	Flower buds	Pungent	Hot	Pungent
<i>Bauhinia tomentosa</i>	Tree	Flower	Bitter, astringent	Hot	Pungent
<i>Piper longum</i>	Climber	Dried root	Pungent	Hot	Pungent
<i>Cyperus rotundus</i>	Herb	Tuber	Slightly bitter, sweet	Cool	Pungent
<i>Nardostachys grandiflora</i>	Herb	Root	Fresh piece- sweet, Dry piece- pungent	Hot	Pungent
<i>Rhus succedanea</i>	Tree	Galls	Astringent	Hot	Pungent
<i>Eclipta prostrata</i>	Herb	Whole plant	Bitter	Hot	Pungent

**Table 3: Information about metal & mineral drugs of ThirikadugadhiMandooram**

Tamil name	English name	Chemical name	Taste	Potency	Biotrans formations
Mandooram	Iron rust, impure oxide of Iron, Magnitite	<i>Ferroso ferric oxide</i>	Astringent	Hot	Pungent
Ayam	Iron	<i>Ferrum</i>	Astringent, mild sour, bitter	Hot	Pungent

**Table 4: Information about ingredients of Thirikadugadhi Mandooram**

Ingredients	Actions	Phyto chemistry	Medicinal uses in siddha
<i>Zingiber officinalis</i>	Stomachic, carminative, stimulant	Gingerdione, shogaols, gingerols, zingiberin	Indigestion, asthma, cough, anal diseases, diarrhoea, anaemia, ulcer
<i>Piper nigrum</i>	Acrid, carminative, anti- vadha, resolvent, rubefacient	Piperine, chavicine, piperidine, limonene, piperide, pipericide	Anaemia, diarrhoea, ulcer, cough, hemiplegia, piles, indigestion, jaundice
<i>Piper longum</i>	Stimulant, carminative	Piperine, piperonaline, piplasterol, sesame	Cough, asthma, tuberculosis, anaemia, head ache, kabha diseases, ulcer
<i>Terminalia chebula</i>	Laxative, tonic, stomachic, purgative, alterative	Chebulinic acid, chebulagic acid, chebulic acid, gallic acid, fatty acid, tannin	Eye diseases, cough, dysgeusia, liver diseases, vomit, ascites, fistula, TB, anaemia, ulcer, leprosy, jaundice
<i>Phyllanthus emblica</i>	Astringent, refrigerant, laxative, diuretic	Ascorbic acid, gallic acid, ellagic acid, tannins	Kabha diseases, sinusitis, gonorrhoea, vomit, psychiatric disorders
<i>Terminalia bellerica</i>	Astringent, expectorant, laxative, tonic	Gallic acid, ellagic acid, ethyl gallate, chebulagic acid, belleric acid, bellaricanin	Asthma, hypertension, gonorrhoea, pox diseases, tooth ache, cough, spider poison
<i>Elettaria cardamomum</i>	Stimulant, carminative, stomachic	Limonene, linalool, cineole, campesterol, methylacetate, geranyl acetate	Throat infection, cough, diarrhoea, spider poison, stomach pain, sinusitis
<i>Myristica fragrans</i>	Stimulant, carminative, narcotic, aromatic, aphrodisiac, tonic	Myricetin, elemicin, essential oils and fixed oil, methyleugenol	Diarrhoea, headache, asthma, cough, stomach pain, tooth ache
<i>Syzygium aromaticum</i>	Antispasmodic, carminative, stomachic	Caryophyllene oxide, eugenol, acetophenone, eugenol acetate, methyl palmitate	Throat infection, headache, vomit, diarrhoea, ear diseases, cataract
<i>Bauhinia tomentosa</i>	Anti- periodic, tonic	Flavone, flavono glycoside, flavonoids, triterpene, saponin	Diarrhoea, cough, gonorrhoea, hypertension, Sexually transmitted diseases
<i>Piper longum</i>	Stomachic	Piperine, piplastine, sesamin, piperlatine, futoamide	Cough, STD, fever, diarrhoea, sore throat, vadha diseases, cardiac arrest
<i>Cyperus rotundus</i>	Demulcent, vermifuge, astringent, stimulant, tonic, diuretic, diaphoretic, emmenagogue	Steroids, Phytosteroids, quinones, coumarine, cardiac glycosides	Diarrhoea, fever, hypertension, vomit, scorpion bite, TB, cough
<i>Nardostachys grandiflora</i>	Stimulant, anti- spasmotic, diuretic, expectorant	Jatamansin, angelicin, elemol, nardol, virolin, jatamansone	Spider poison, fever, diarrhoea, hypertension, cough, asthma, eclampsia
<i>Rhus succedanea</i>	Astringent, tonic nutritive, digestive, expectorant, stimulant, cholagogue	Tannin, palmitic acid, stearic acid, arachidic acid	Diarrhoea, cough, leucoderma
<i>Eclipta prostrata</i>	Cholagogue, tonic, alterative, emetic, purgative, hepato-tonic, deobstruent	Ecliphine, nicotine, tigmasterol, alkaloids, pentodecanic acid, 14- heptacosanal	Anaemia, jaundice, leprosy, oedema, tooth disease, cough, liver and spleen disorders, filariasis
<i>Ferroso ferric oxide</i>	Stomachic, tonic, alterative	-	Fever associated with bone disorders, severe anasarca & paleness, wheezing, dropsy due to abdomen enlargement, pallor, asthma, gonorrhoea, deranged kapha
<i>Ferrum</i>	Tonic, haemopoietic, appetite, stimulant	-	Anaemia, jaundice, leucoderma, obesity, dropsy, anorexia, peptic ulcer, spermatorrhoea, diarrhoea and dyspepsia.



**CHART 1: Used parts**

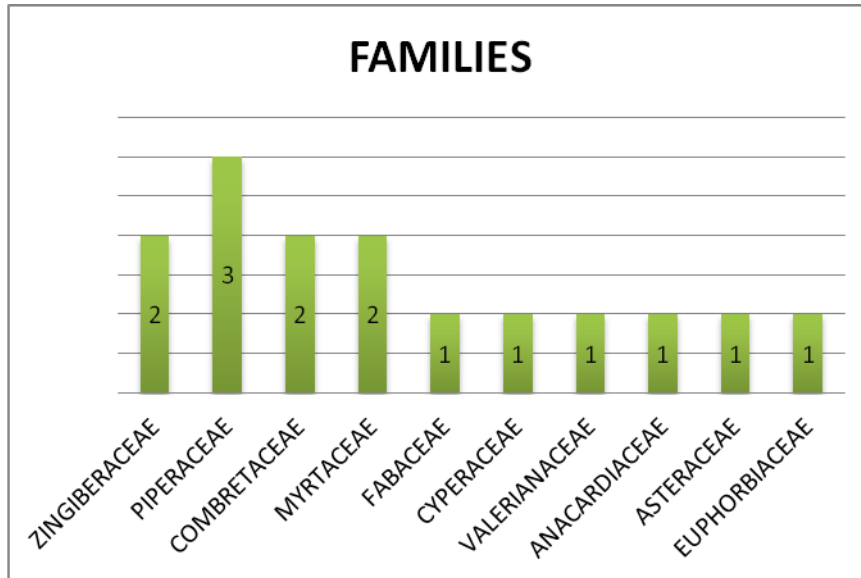


CHART 2: Families

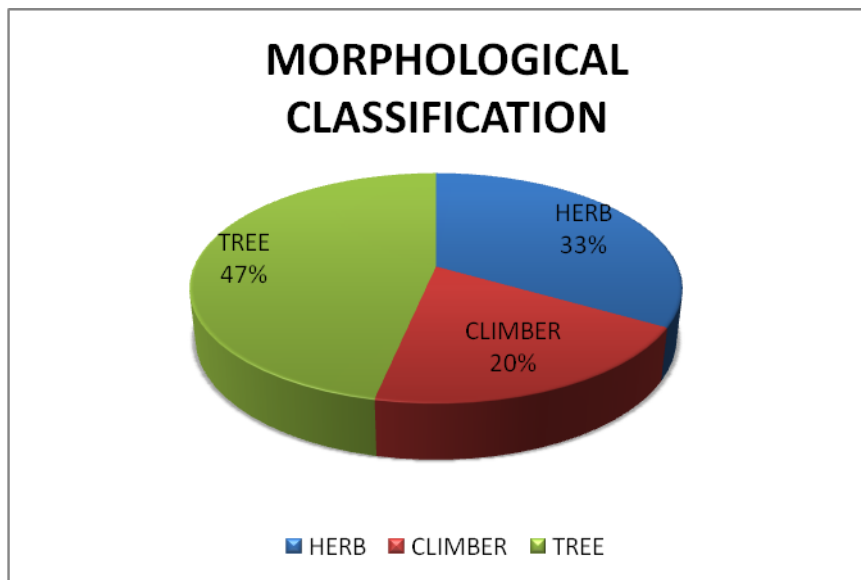


CHART 3: Morphological classification

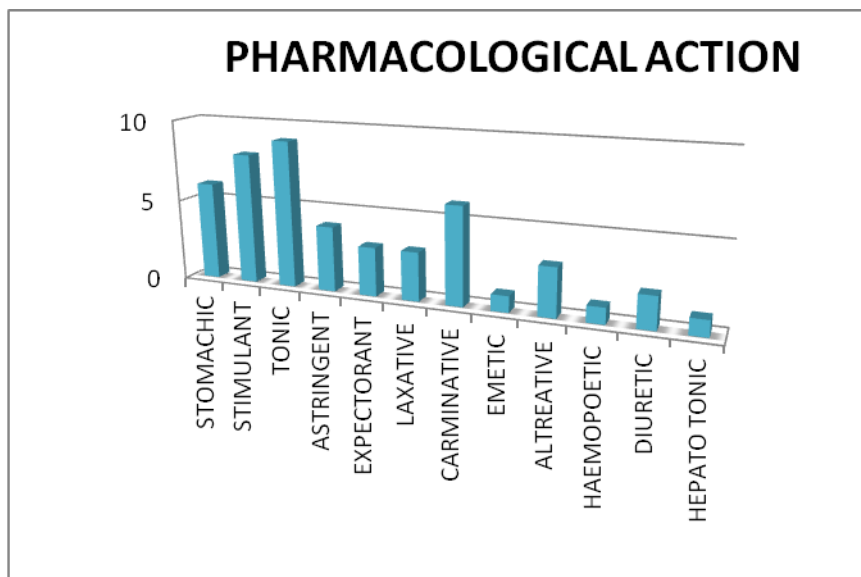


CHART 4: Pharmacological actions

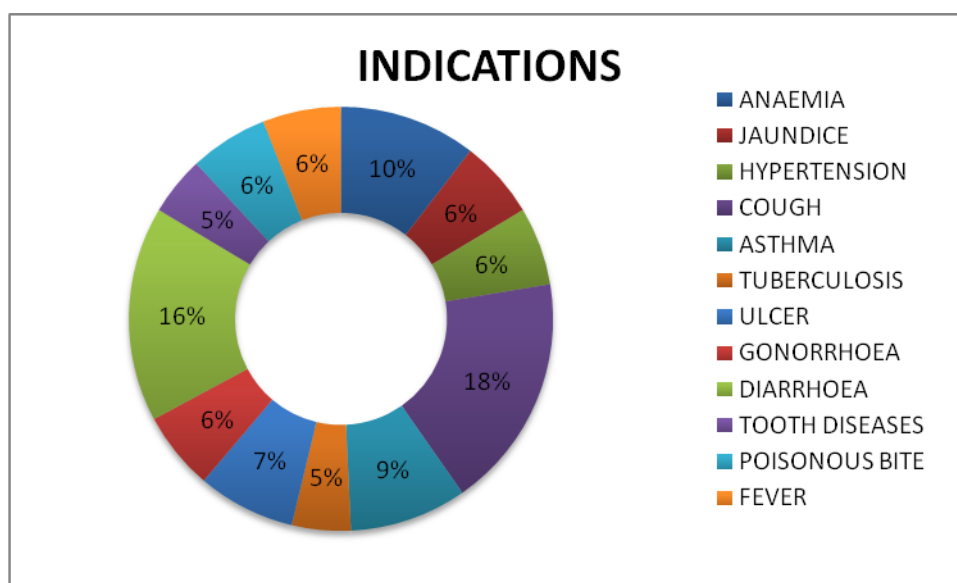


CHART 5: Indications

## DISCUSSION AND CONCLUSION

According to the review of literature of *Thirikadugadhi Mandooram*, the following topics were analysed such as parts used, family, morphology, pharmacological actions and indications of each ingredients.

In parts used - fruits were used in 33%, seeds & roots were used in each 13%, flower buds, flower, rhizome, tuber, leaf, galls were used in each 7%. In family, 3 ingredients coming under the Piperaceae family, Zingiberaceae (2), Combretaceae (2), Myrtaceae (2), Fabaceae (1), Cyperaceae (1), Anacardiaceae (1), Asteraceae (1), Euphorbiaceae (1) were used. In the whole ingredients 47% were tree, 33% of herbs, 20% of climbers. When consider the pharmacological actions - tonic (9), stimulant (8), stomachic (6), carminative (6), astringent (4), expectorant (3), laxative (3), alterative (3), diuretic (2), haemopoietic (1), hepato tonic (1), emetic (1). Finally based on the indications, the following results were find out from the text & researches- cough 18%, diarrhoea 17%, anaemia 11%, asthma 9%, ulcer 8%, jaundice 6%, hypertension 6%, poisonous bite 6%, fever 6%, gonorrhoea 6%, tooth diseases 5%, tuberculosis 4%.

In conclusion,

Based on the review, the pharmacological actions, organoleptic characters and chemical constituents of each

ingredients were perfectly matched with the indications of '*Thirikadugadhi Mandooram*' which mentioned in siddha text.

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