



IJAYUSH
International Journal of AYUSH
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
<http://internationaljournal.org.in/journal/index.php/ijayush/>

International Journal
Panacea
Research library
ISSN: 2349 7025

ReviewArticle

Volume 9 Issue 4

Oct – Dec 2020

**A SCIENTIFIC REVIEW ON INGREDIENTS OF *SATHURMUGACHOORANAM*
– A SIDDHA HERBAL FORMULATION**

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ABSTRACT

The Siddha system of medicine is practiced mainly in south India which includes drugs of herbal, mineral/metal and animal origin. The two major division of Siddha medicines are internal and external medicine. *Chooranam* is one among the 32 internal medicines in Siddha and it has a shelf life of three months. *SathurmugaChooranam* is one of the Siddha medicines which are mentioned in ancient siddha literature used to cure various ailments. It has specific indication to cure major diseases like *Soolai, Kushtam, Vishangal, Megam, Kunmam, Paandu, Vaayu* etc. Through this scientific review, the *SathurmugaChooranam* have antioxidant and anti-inflammatory, anti-diabetic, anti-ulcer, anti-diarrhoeal, anti-cancer and hepato-protective activity. This review is strengthening the therapeutic uses of *SathurmugaChooranam*.

Keywords: *SathurmugaChooranam, Veliparuththi, NilapanaiKizhangu, Senkottai, ThannerVittanKizhangu*

INTRODUCTION

The Siddha system of medicine is one of the ancient systems. The unique nature of this system is its continuous service to humanity for more than 5000 years in combating diseases in maintaining its physical, mental, normal health⁽¹⁾. The recent interest in traditional medicine has taken up great dimensions in changing the health care scenario across the globe. The Siddha system of medicine is practiced mainly in south India which includes drugs of herbal, mineral/metal and animal origin. The two major divisions of Siddha medicines are internal and external medicine. *Chooranam* is one among the 32 internal medicines in Siddha and it has a shelf life of three months. Siddha, a traditional system of medicine is now attracting people because of their efficacy in curing diseases. *SathurmugaChooranam* is one of the Siddha medicines which is mentioned in ancient Siddha literature used to cure various ailments. It has specific indications to cure major diseases like *Soolai* (Acute pain), *Kushtam* (Skin diseases), *Vishangal* (Poisonings), *Megam* (Urinary tract diseases), *Gunmam* (Peptic ulcer), and *Paandu* (Anaemia). Through this literature review, we discussed about various activities already done on the ingredients of *SathurmugaChooranam*⁽²⁾.

MATERIALS AND METHODS

Ingredients:-

<i>Veliparuththi</i>	- one part
<i>Nilapanaikizhangu</i>	- one part
<i>Senkottai</i>	- one part
<i>Thanneervittankizhangu</i>	- three parts
<i>Sarkarai</i>	- six parts

Preparation:

Take the purified *Semicarpusanacardium* (*Senkottai*) nut pieces along with purified *Pergulariadaemia* (*Veliparuththi*) *Curculigoorchioides* (*Nilapanaikizhangu*) and make fine powder of it then add purified *Asparagusracemosus* (*Thanneervittankizhangu*) as equal ratio and make as fine powder mix it with above powder form. Then add equal amount of sugar and store the medicine.

Review on Pharmacological activities of *SathurmugaChooranam*

Senkottai: Semicarpusanacardium

Anti-inflammatory Activity: This study show that *Semicarpusanacardium* extract has anti-inflammatory activity against early phase (acute paw oedema); late phase (cotton pellet granuloma) of inflammation and adjuvant arthritis and it is concluded by VanuRamkumarRamprasathet.al⁽³⁾

Anti-Diabetic Activity: The stem barks of the plant *S. anacardium* have anti-diabetic activities. This may be due to the presence of hypoglycaemic saponins, triterpenes, flavanoids and tannins was concluded by M. A. Ali et.al⁽⁴⁾

Anti-Oxidant Activity: Antioxidant activity of the aqueous extract of nuts of medicinal plant SA in AKR mouse liver during development of lymphoma. Administration of the aqueousextract of SA to lymphoma-transplanted mouse leads to increase in the activities of antioxidant enzymes, whereas LDH activity is brought down significantly indicating a decrease in carcinogenesis was concluded by Mona Semalty et.al⁽⁵⁾

Anti-Arthritic Activity: The SA preparations are mainly used for irregular ties caused during arthritis and to cure arthritis. Apart from this, *S.anacardium* also possesses a capability to modulate the accumulation of neutrophils and brings down the increased levels of lysosomal enzymes in adjuvant induced arthritis rats. All these observations indicated that *S.anacardium* nut milk extract is a good therapeutic agent for the arthritis was concluded by MansoriaPoornimaet.al⁽⁶⁾.

Anti-Microbial Activity: Alcoholic and oil extracts of *S.anacardium* dry nuts have antimicrobial activity against Gram-positive and Gram-negative bacteria was concluded by MansoriaPoornimaet.al.⁽⁶⁾

Anti-Carcinogenic Activity: *Semicarpusanacardium* has been under investigated for its anti-tumor properties. A variety of marking nut preparations had been used in clinical practice and encouraging results have been reported, particularly for cancer of the esophagus, liver, urinary bladder and leukemia. The investigation of pericarp oil revealed its anticancer activity. The flavonoids present in the *S.anacardium* nut have the ability to prevent various cancers was concluded by MansoriaPoornima et.al⁽⁶⁾.

Veliparuthi: Pergulariadaemia

Anti-Inflammatory Activity : Chloroform extract and petroleum ether extract of *Pergulariadaemia* showed the presence of glycosides,alkaloids,phytosterols, saponins, flavonoids,etc have significant anti-inflammatory and analgesic activity was concluded by S.Venkatramanet,al⁽⁷⁾

Anti-Diabetic Activity: The results of the present study indicate that the plant extract was found to reduce the blood glucose level in STZ-induced diabetic rats. It, also brought about regeneration of β -cells of the pancreas and increased insulin levels was concluded by P.Vinoth Kumaret, al⁽⁸⁾

Antioxidant Activity: The methanol extract of *Pergulariadaemia* showed significant antioxidant activity by having antioxidant compounds such as alkaloids, triterpenes, tannins, flavonoidsetc. It reduce the free radical formation was concluded by ArasanElayarajaet,al⁽⁹⁾

Anti-Epileptic Activity: In in vivo studies, oral administration of the extract resulted in reduction in the severity of seizures and cognitive impairment. The study of AchE activity and oxidative stress markers revealed that *P. daemia* extract may mediate its anti-epileptogenic effects at least partly through its antioxidant properties. In in-vitro studies *P. daemia* protected cells against death induced by L-glutamate. This effect may be mediated by anti-apoptotic pathways. Taken together, these findings indicate that *P.daemia* has anti-epileptogenic and a neuroprotective effect was concluded by Antoine k. kandedaet.al.⁽¹⁰⁾

Thaneervittankizhangu: Asparagus racemosus

Anti-diabetic Activity: The plant of the *Asparagus racemosus* has been used for food and medicinal purposes. Our result suggest the inhibitory effects on α -amylase and β -glycosidase and contains a high amount of Phytochemical constituents (i.e., total flavonoids and triterpenoids content) Thus, the plant extract of the *Asparagus racemosus* may be used in the management of type 2 diabetes mellitus was concluded by R.Vadivelanet.al⁽¹¹⁾

Anti-Oxidant Activity: The crude and purified extracts indicated protection against radiation induced loss of protein thiols and inactivation of superoxide dismutase. Racemofuranandasparagamine, A from chloroform extracts showed

antioxidant activity against DPPH. Anti-oxidant study was carried out on the basis of scavenging activity of the stable DPPH (1, 1-diphenyl-2-picrylhydrazyl) free radical. The antioxidant property observed was due to their redox property of the phenolic compounds present in the ethanolic root extract and it was concluded by Ramit Singla et.al⁽¹²⁾

Anti-Cancer Activity: The Anti-cancer activity of chloroform and methanol extract of *Asparagus racemosus* through in vitro and in vivo models, it reveals the root extract of the plant which contains shatavari IV fraction exhibits significant activity against cancer cells and it was concluded by Shankar k. Mitra et.al,⁽¹³⁾.

Immunological Activity: Studied the effect of *Asparagus racemosus* root extract in augmentation of humeral and cell mediated immune response providing better protection level against infections. khanna et.al⁽¹⁴⁾

Antidiarrhoeal Activity: The action of prostaglandin caused the diarrhoea in the test subjects, hence it can be said that the action of this can be to prevent the biosynthesis of prostaglandin which in turn inhibits the diarrhoeal effect and it was concluded by Venkatesan et al.⁽¹⁵⁾

Nilapanai Kizhangu: Curculigo orchoides

Anti-Inflammatory Activity: The anti-inflammatory activity is due to presence of phyto-constituents such as alkaloids, polyphenolic compounds (flavonoids), tannins and sterols, to name a few. The methanolic extract of *C. orchoides* root tubers shows good anti-inflammatory activity and it can be attributed to the presences of tannins. Tannins are reported to inhibit the prostaglandin synthesis was concluded by Anuj Kumar Agrahari et.al⁽¹⁶⁾

Anti-Diabetic Activity: Alloxan causes diabetes by rapid depletion of β -cells, by DNA alkylation and accumulation of cytotoxic free radicals that is suggested to result from initial islet inflammation, followed by infiltration of activated macrophages and lymphocyte in the inflammatory focus. It showed significant hypoglycaemic action in alloxan induced hyperglycaemic rats was concluded by A Elumalai et.al⁽¹⁷⁾

Antioxidant Activity: The ethanolic root extract of *Curculigo orchoides* possess significant free radical, reducing power, anti-oxidant activity was concluded by K. V. Ratnam et.al⁽¹⁸⁾

CONCLUSION:

Through this literature review we concluded that the *SathurmugaChooranam* have the antioxidant and anti-inflammatory, anti-diabetic, antiulcer, anti-diarrhoeal, anti-cancer, hepato-protective and anti-epileptic activity. These activities are most relevant to the diseases which are mentioned for *SathurmugaChooranam*, like *Soolai, Kushtam, Vishangal, Megam, Kunmam, Paandu and Vaayu*. These scientific supports strengthen the therapeutic uses of *SathurmugaChooranam* mentioned in Siddha Literature.

REFERENCE:

1. History of Siddha medicine; pg.no-1; N.Kandswamypillai; Second edition—1998; Department of Indian medicine and Homeopathy Chennai -600106.
2. Theraiyar Vaidhiya Kaviyam, Pg. No- 60; First edition-2012; Department of Indian medicine & Homoeopathy, Chennai-106.
3. Vanu Ramkumar Ramprasath, A. Palanivelu Shanthi, et.al: Anti-inflammatory Effect of *Semicarpus anacardium* Linn. Nut Extract in Acute and Chronic Inflammatory Conditions. 2004, 12(27), page no 2028-2031.
4. M.A. Ali, M. C. Sultana et.al: antidiabetic activity of ethanolic extract of *Semicarpus anacardium* Stem barks in normal and alloxan induced diabetic rats, 2012, 3(8), page no 2680-2685.
5. Mona Semalty, Ajay Semalty, et.al: *Semicarpus anacardium* Linn.: A review 2010, 4(7), page no 88-94.
6. Mansoria Poornima Sharma Anita et.al: *Semecarpus anacardium*: A REVIEW I AMJ: Volume 1; Issue 6; Nov–Dec 2013.
7. S. Venkatraman et.al: Anti-inflammatory, analgesic, antipyretic activity of *Pergularia daemia* forsk, 2010, 1(4), pages no 371-375.
8. P. Vinoth Kumar, N. Ramesh: Anti-hyperglycaemic activity of *Pergularia daemia* (Forssk.) Chiov 2014, 3(1), page no 29-34.
9. Arasan Elayaraja¹, Subbaiah Muthupandi, et, al: In vitro Antioxidant and Antibacterial Activity of Plant Extracts of *Pergularia extensa* Chiov .2015, 7(3). page no 510-512.
10. Antonine a kandeda et.al: Antiepileptogenic and Neuroprotective Effects of *Pergularia daemia* on Pilocarpine Model of Epilepsy. 30 June 2017.

11. R.vadivelan, R.Gopala Krishnan et.al: ant diabetic potential of asparagus racemosus wild leaf extract through inhibition of alpha amylase and alpha glucosidase. 2019, 9(1), page no 1-4.
12. RamitSingla and VikasJaitak: Shatavari (*Asparagus racemosus* wild): a review on its cultivation, morphology, phyto-chemistry and pharmacological importance .2014, 5(3) pageno 742-757.
13. Shankar K. Mitra et,al, Shatavarin with the anti cancer activity from the root of *Asparagus racemosus*,2012,44(6),732-736.
14. PoojaShaha and AnuragBellankimath Pharmacological Profile of *Asparagus racemosus*: A Review, 2017) 6 (11): 1215-1223.
15. Venkatesan N.,Thiyagarajan, V. Narayanan, S. Arul, A.Raja, S., Kumar, S.G.V. Rajarajan, T.Perianayagam J.B, 2005. –Anti-diarrhoeal potential of *Asparagus racemosus* wild root extracts in laboratory animals, Journal of Pharmacology and Pharmaceutical Sciences, Vol 8, Page No - 39–45.
16. Anuj Kumar Agrahari, Sanjaya Kumar Panda et.al: Studies on the Anti-Inflammatory Properties of *Curculigo Orchioides* Gaertn. Root Tubers.2010, 1(8), Page no: 139-143.
17. A. Elumalai, Dr. SarathChandiranIrisappan et.al:A study on hypoglycaemic activity of methanolic root extract of *Curculigo orchioides*.2013,1(9),pageno 899-902.
18. K. V. Ratnam, K. Ravishankar and P. Priyabhandavi evaluation of invitro antioxidant activity of ethanolic root extract of *curculigo orchioides*, 2013, 3(2), pageno 364-369.