Review Article

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A REVIEW ON SIDDHA FORMULATION NAAKU POOCHI KUDINEER CHOORANAM FOR THE MANAGEMENT OF KUDAL KIRUMI

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ABSTRACT

Naaku Poochi Kudineer Chooranam (NPKC) is a classical Siddha polyherbal formulation traditionally prescribed for the management of pediatric worm infestations (Kudal Kirumi Noi). This review compiles evidence from Siddha texts and modern studies regarding pharmacognosy, phytochemistry, and pharmacology. The formulation contains *Butea monosperma*, *Nigella sativa*, *Embelia ribes*, *Trachyspermum ammi*, *Operculina turpethum*, and *Cassia senna*, each with documented anthelmintic, carminative, digestive, anti-inflammatory, and antimicrobial actions. Modern studies show that compounds such as embelin, thymol, nigellone, and sennosides expel helminths, improve digestion, modulate immunity, and reduce inflammation. Siddha literature indicates the formulation is safe in pediatrics when used in proper dosage. This review highlights the convergence of Siddha tradition and modern validation, underscoring NPKC's therapeutic potential against intestinal worms.

Keywords: Naaku Poochi Kudineer Chooranam, Siddha medicine, anthelmintic, phytochemistry, pharmacology, pediatric worm infestation

INTRODUCTION

Intestinal helminths are a global health problem, particularly in children, causing anemia, malnutrition, and growth retardation[1]. Synthetic anthelmintics like albendazole are widely used, but resistance and reinfection are challenges. In Siddha, Kudal Kirumi Noi is well described, and several polyherbal remedies are used. Among them, NPKC is a classical preparation indicated for intestinal worms, containing *Butea monosperma*, *Nigella sativa*, *Embelia ribes*, *Trachyspermum ammi*, *Operculina turpethum*, and *Cassia senna*[2–5].

Ingredients (As per Siddha Formulary of India Part I[1])
Butea monosperma (Palaasu vithai)
Nigella sativa (Karun seeragam)
Embelia ribes (Vaay vidangam)
Trachyspermum ammi (Omam)
Operculina turpethum (Sivathai ver)
Cassia angustifolia (Nilavarai elai / Senna)
Foeniculum vulgare (Sombu)
Picrorhiza kurroa (Kadugu rohini)

Purification of Trial Drug

The seeds of *Butea monosperma* are soaked in water, the seed coat removed, dried, and powdered. *Nigella sativa* and *Embelia ribes* are sun-dried and roasted until golden brown. *Trachyspermum ammi* is soaked in lime water (sunna neer) for 3 hours, dried, and roasted. *Operculina turpethum* root is stripped of inner veins and boiled in milk. *Cassia angustifolia* leaves are dried, powdered, and steamed with milk. *Foeniculum vulgare* is cleaned and sun-dried. *Picrorhiza kurroa* is soaked in neem or Vitex leaf extract, then sun-dried. The coarsely powdered ingredients are decocted in water (1 L reduced to 250 mL).

Omam

Karuncheeragam

Kadugurohini

Palasu Vithai

Nilavarai

Vaai Vidangam

Sivathai Ver

Sombu

Pharmacological Activities

Ingredient (Tamil/English/Latin)	Key Chemical Constituents	Major Pharmacological Activities	Proposed Role in NPKC
Palasu vithai / *Butea monosperma*	Flavonoids: butein, butrin, isobutrin; coreopsin/isocoreopsin; triterpenes	Anti-inflammatory, antioxidant; mast-cell modulation	Mitigate mucosal inflammation and pruritus
Karun seeragam / *Nigella sativa*	Thymoquinone, p-cymene, thymohydroquinone	Antimicrobial, anti-inflammatory, immunomodulatory, gastroprotective	Support host response; symptom control
Vāy vidangam / *Embelia ribes*	Embelin (benzoquinone), volatile oils, flavonoids	Anthelmintic, antimicrobial; antioxidant	Lead anthelmintic component
Omam / *Trachyspermum ammi*	Thymol, carvacrol, γ-terpinene, p-cymene	Carminative, antispasmodic, antimicrobial; gastroprotective	Relieve colic/flatulence
Sivathai ver / *Operculina turpethum*	Resin glycosides: turpethin; turpethinic acids; jalapine/ convolvulin	Purgative/cathartic; anti-inflammatory	Facilitate expulsion of parasites
Nilavarai / *Cassia angustifolia* (Senna)	Anthraquinone glycosides: sennosides A and B	Stimulant laxative (colon-specific)	Promote clearance of worms
Sombu / *Foeniculum vulgare*	Anethole, fenchone, estragole (minor), limonene	Carminative, antispasmodic, antimicrobial; galactagogue	Reduce cramping and gas
Kadugu rohini / *Picrorhiza kurroa*	Picroside I and II (kutkoside); apocynin	Hepatoprotective, anti-immuno modulatory	Support liver function

Evidence Base

Preclinical studies (TANUVAS, 2017) demonstrated that NPKC showed comparable efficacy to albendazole and ivermectin in Syphacia infections[14].

A recent case report documented successful resolution of cutaneous larva migrans with NPKC use[15].

Mechanistic Rationale

- Killing parasites: embelin (*Embelia ribes*), thymol (*Trachyspermum ammi*)
- Expelling parasites: laxatives (*Cassia angustifolia, Operculina turpethum*).
- Gut support: carminatives (*Foeniculum vulgare*), anti-inflammatory (*Butea monosperma, Nigella sativa*), hepatoprotection (*Picrorhiza kurroa*).

Safety and Cautions

Strong laxatives may cause cramps or diarrhea. Caution in pediatric use, dehydration, and pregnancy. Possible drug interactions must be considered. Quality control (microbial load, heavy metals, aflatoxins, pesticides) is essential.

DISCUSSION

The review of NPKC highlights how Siddha pharmacology integrates with modern science. Each herb contributes synergistically — *Embelia ribes* and *Butea monosperma* provide anthelmintic activity, *Nigella sativa* and *Trachyspermum ammi* add antimicrobial and digestive support, while *Operculina turpethum* and *Cassia angustifolia* expel parasites[2–11]. These align with Siddha's holistic rationale of treating both worms and associated symptoms.

Despite promising evidence, clinical validation is scarce. Further standardization and controlled trials are needed to establish pediatric safety, effective dosage, and long-term outcomes[12–13].

CONCLUSION

Naaku Poochi Kudineer Chooranam is a classical Siddha remedy for Kudal Kirumi. Its polyherbal synergy ensures parasite expulsion, digestive support, and symptom relief. Traditional and pharmacological evidence is strong, but clinical studies are essential for wider acceptance.

REFERENCES

1. Government of India. Siddha Formulary of India. Part I. New Delhi: Ministry of Health and Family Welfare; 1992.
2. Bairwa R, Aggarwal A, Sharma S. *Trachyspermum ammi* (Ajwain): A review on its traditional uses, phytochemistry and pharmacology. Pharmacogn Rev. 2012;6(11):56–60.
3. Ahmad A, Husain A, Mujeeb M, *et al.* A review on therapeutic potential of *Nigella sativa* and its active constituent thymoquinone. Asian Pac J Trop Biomed. 2013;3(5):337–352.
4. Alberts A, Arjuman A, Nair V, *et al. Nigella sativa*: A comprehensive review of its therapeutic potential and phytochemistry. Biomed Rep. 2024;13(1):e2009.
5. Badgujar SB, Patel VV, Bandivdekar AH. *Foeniculum vulgare* Mill: A review of its botany, phytochemistry and pharmacology. Biomed Res Int. 2014;2014:842674. doi:10.1155/2014/842674.
6. Alam F, Singh KB, *et al*. Review on pharmacology and phytochemistry of *Embelia ribes* (Vidanga). Pharmacogn J. 2023;15(1):1–10.
7. Bhandari PR, Kamdod MA. Embelin (2,5-dihydroxy-3-undecyl-p-benzoquinone): pharmacology and therapeutic potential — a review. J Young Pharm. 2012;4(2):112–121.
8. Naseri M, *et al.* Thymol-rich ajwain (*Trachyspermum ammi*) essential oil: composition and bioactivities. Ind Crops Prod. 2022;180:114761.
9. Singh D, Gupta A, Ved A. *Operculina turpethum* (L.) Silva Manso as a medicinal plant: A review on ethnobotany, phytochemistry and pharmacology. Pharmacogn Rev. 2017;11(22):158–166.
10. Gupta A, *et al*. Ameliorative effects of *Operculina turpethum* and its isolated stigma on toxicant exposure in rats. Evid Based Complement Alternat Med. 2014;2014:614207.
11. Bradley C. Senna (*Cassia angustifolia* Vahl.): A comprehensive review of pharmacology and toxicology. J Herb Med. 2023;39:100658.
12. Ahmad S, Almeleebia TM, *et al*. Pharmacological and clinical efficacy of *Picrorhiza kurroa* and its active principles: a review. Front Pharmacol. 2022;13:1023456. doi:10.3389/fphar.2022.1023456.
13. Kumari R, Thapa A, *et al.* Chemical composition and antioxidant properties of *Picrorhiza kurroa*. Ind Crops Prod. 2014;60:100–107.
14. Sundar B, Harikrishnan TJ, *et al.* Efficacy of an indigenous Siddha anthelmintic medicine NPKKC vs albendazole and ivermectin in Syphacia chemotherapy of laboratory rats and mice colonies. J Entomol Zool Stud. 2017;5(6):1908–1913.
15. Singh SKCM, *et al.* Case report: Naaku Poochi Kudineer for cutaneous larva migrans. Cureus. 2025;17(3):eXXXXX.

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