

Scientific Evaluation of Sarakondrai (Cassia Fistula L) Leaf Extract for the Treatment of Padarthamarai (Tinea) – A Review

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ABSTRACT

Padarthamarai, comparable to Tinea in modern medicine, is a common superficial fungal infection affecting the skin. Traditional Siddha literature mentions Sarakondrai (Cassia fistula L.) as an effective remedy for various skin disorders. The present review aims to compile and analyze available scientific and traditional evidence regarding the antifungal potential of Cassia fistula leaf extract in the management of Padarthamarai. Literature related to Siddha concepts, plant description, phytochemical constituents, and pharmacological activities of C. fistula leaves were collected from classical texts and scientific publications. The review indicates that C. fistula leaves contain bioactive compounds such as tannins, flavonoids, saponins, and anthraquinones, which possess antimicrobial and antifungal properties. Various in-vitro studies have demonstrated inhibitory activity of leaf extracts against fungal organisms. However, detailed toxicological and clinical studies are limited. This review concludes that Cassia fistula leaf extract shows promising antifungal potential and can be considered for further experimental and clinical evaluation after proper safety studies.

Keywords: Antifungal activity, Cassia fistula, Padarthamarai, Sarakondrai, Siddha medicine, Tinea.

INTRODUCTION

Fungal infections of the skin are commonly encountered health problems worldwide. In Siddha medicine, such conditions are classified under Padarthamarai, which is characterized by itching, discoloration, scaling, and discomfort of the skin [4]. Modern medicine identifies these conditions as Tinea or dermatophytosis caused by fungal organisms. Sarakondrai (Cassia fistula L.) is one such medicinal plant widely used in Siddha medicine for treating skin diseases. The leaves are traditionally applied externally in the form of paste or decoction [4]. This review attempts to scientifically evaluate the traditional claims of Cassia fistula leaf extract in treating Padarthamarai.

Aim And Objectives

To review and evaluate the scientific evidence supporting the use of Cassia fistula leaf extract in the treatment of Padarthamarai (Tinea).

MATERIALS AND METHODS

This review is based on a collection of information from Siddha classical texts, textbooks, and published scientific research articles. Data related to phytochemical analysis, antifungal activity, and pharmacological properties of Cassia fistula leaf extracts were collected from journals and review articles. Only studies relevant to leaf extracts and skin-related pharmacological activities were considered.

REVIEW OF LITERATURE

Siddha Aspect

In Siddha system of medicine, Sarakondrai is indicated for padarthamarai, itching, skin discoloration, and inflammatory skin conditions. The plant is believed to possess cooling, purifying, and antimicrobial properties. External application of leaf paste is commonly advised for fungal and inflammatory skin disorders [4].

Plant Description

Botanical name: *Cassia fistula* L.

Family: Fabaceae

Common name: Golden shower tree

Habit: Medium-sized deciduous tree

Parts used: Leaves, bark, flowers, fruits [1,2].



Fig.no:1 - *Cassia fistula*

Chemical Constituents

Phytochemical studies (Hydroalcoholic extract) of *Cassia fistula* leaves have reported the presence of:

Tannins, Flavonoids, Saponins, Anthraquinones, Steroids, Glycosides.

These compounds are known to contribute to antimicrobial, antifungal, and anti-inflammatory activities [1,2,3].

Pharmacological Activities

Various studies have reported the following pharmacological properties of *Cassia fistula* leaf extracts:

Antifungal activity against fungal strains such as *Candida albicans* and *Aspergillus* species

Antibacterial activity, Anti-inflammatory activity, Antioxidant properties

The antifungal activity is mainly attributed to flavonoids, tannins, and anthraquinone derivatives present in the leaves [3,5].

Table. No:1 - Phytochemical constituents (hydroalcoholic extract) of cassia fistula leaves and their pharmacological activities

Phytochemical	Reported activity	Relevance to Padarthamarai
Tannins	Antifungal, astringent	Antifungal
Flavonoids	Reduces fungal growth	Antimicrobial
Saponins	Antimicrobial, anti-inflammatory	Disrupts fungal membrane
Anthraquinones	Reduces itching & inflammation	Traditional skin use

RESULTS AND DISCUSSION

The reviewed studies indicate that Cassia fistula leaf extracts exhibit antifungal activity. Different solvent extracts showed variable inhibitory effects on fungal growth, suggesting that extraction method plays an important role. Although direct studies on dermatophytes causing Tinea are limited, the observed antifungal activity against other fungi supports the traditional use of Sarakondrai in Padarthamarai [4,5].

CONCLUSION

This review suggests that Cassia fistula leaf extract possesses promising antifungal properties supported by traditional Siddha usage and preliminary scientific studies. However, the available evidence is mainly based on in-vitro studies. Further research including toxicological studies, standardization of extracts, and clinical trials is necessary before recommending its therapeutic use in Padarthamarai. This preliminary review provides a foundation for future experimental and clinical studies.

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REFERENCES

1. Kirtikar KR, Basu BD. Indian medicinal plants. Vol. II. Dehradun: International Book Distributors; 1999.
2. Nadkarni KM. Indian materia medica. 3rd ed. Vol. I–II. Mumbai: Popular Prakashan; 1976.
3. Kokate CK, Gokhale SB. Practical pharmacognosy. 12th ed. Pune: Nirali Prakashan; 2008.
4. Murugesu Mudhaliyar K. Gunapadam – Mooligai Vaguppu. Chennai: Directorate of Indian Medicine and Homeopathy, Government of Tamil Nadu.
5. Bhalodia NR, Shukla VJ. Antibacterial and antifungal activities from leaf extracts of Cassia fistula L.: an ethnomedicinal plant. J Adv Pharm Technol Res. 2011;2(2):104–109.