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Phytochemicals Evaluation of Aragwadha Patra W.S.R. to Utility in Skin Disorders



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ABSTRACT

Introduction: Aragwadha (*Cassia fistula*) is a medicinal plant used in the Indian system of Medicines. In Ayurveda Charaka and Sushruta described Aragwadha in the use of the treatment of different skin diseases (Kusta). The phytochemicals current in the leaf of *Cassia fistula* possesses Anti-fungal, Antibacterial, and Antiulcer activity. **Aim & Objective:** Review of published articles on Aragwadha patra from 2010 to 2019. **Materials & Methods:** Classical texts, Articles published on Aragwadha Patra from available database. **Result and Discussion:** Pharmacological actions of Aragwadha Patra. **Conclusion:** Aragwadha has several medicinal values for the treatments in several types of skin diseases, fever, and abdominal disorders. It has anti-inflammatory, anti-bacterial, anti-fungal, and anti-tumor activity.



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INTRODUCTION-

Aragwada is one drug mentioned in all systems of medicines. It is commonly known as golden shower, Indian labor num, Rajvruksha. In Ayurveda, different parts of Aragwada are used in several conditions. Acharya's explained several methods of usage according to indications like lepa, udavartana, Kwatha. Aargawada patra has indicated in Vrana shotha, Granthi shotha, Vata rakta, Amavata, Sandhivata, Kandū, Jwara^a, Hridroga^a, Raktapitta^a, Shoola^a, Kustha^a, Gulma^b, Vrana^b, Kachchhu^b etc. Acharya's have also classified Aragwadha under various groups.

Acharya Charaka organized Aragwadha in the group of Kushtaghna, Kandughna, Phalini Varga, Tikta Skanda, Virechana dravya, etc. Acharaya Susruta Aragvadadi Gana, Syamadi Gana, Adhobhagahara, and Acharaya Vagbhatta have been mentioned only in Aragvadadi gana.

AIMS AND OBJECTIVES:

Review of published articles on Aragwadha Patra from 2010 to 2019.

MATERIALS AND METHODS:

b-Acharya kaidev described the importance of leaf of aragwadha for the drying of Kapha and Meda. Leave is also beneficial for the purgation of Mala and Dosha.

Source of Collections have been done from published articles from available databases.

1-A study conducted by Chauhan.P1 et. al, entitled "phyto-pharmacological properties of different parts of Aragwada. The author explains Ayurvedic concepts, Microscopic and Macroscopic morphology. The author stated that leaves extract of cassia fistula with acetone diethyl ether and methanol shows antifungal activity against *Candida albicans*. Leaves extractions of cassia fistula have been taken using the solvents like chloroform, ethanol, methanol, petroleum ether, and water. Extraction by these solvents showed antibacterial activity against *E.coli*, *K.aerogens*, and *P.aerogense* bacteria. Among these extractions, maximum activity was to find out in the ethanolic solvent. According to these findings, the leaf extracts have broad-spectrum activity and may be treated in several infectious diseases.

The author Concluded Cassia fistula is a potential plant and a rich source of tannins, flavonoids, and glycosides. It has therapeutic potential in diseases like skin disorders and has antibacterial, antifungal, and wound healing properties.

2- A study conducted by Pavan Kumar et.al², entitled “Medicinal properties of Aragvadha (*Cassia fistula* Linn.)” and described the medicinal properties of a different part of Aragvadha and explored the pharmacological potential of the drug.

The author says that Anthraquinone derivatives, tannins, free rhein, rhein glycosides, Sennoside-A, and Sennoside-B are present in leaves of cassia fistula. Cassia fistula is used in the management of infected dermal wounds without using synthetic antibiotics. The presence of anthraquinone in Cassia fistula may have the best action in skin disorders. Leaves of Cassia fistula have Antibacterial activity against *S aureus*, *S albus*, *S flexure*, *S Typhi* A, and B.

The author Concluded that the drug Cassia fistula has several medicinal properties like antibacterial, antifungal, and skin disorders.

3- A study conducted by Dr. Manish Sharma et.al³, entitled “An Overview of Botanicals and Therapeutic Aspects of Aragvadha(*Cassia Fistula* Linn).” The author explains chemical constituents present in a different part of the Cassia fistula plant. Aragvadha leaves contain anthraquinone, tannins, Senosides A and B, Rhein, and its glucosides.

In general, the leaf paste of cassia fistula useful for itching and several skin disorders.

The leaves contain flavonoids that might be work as antimicrobial activities.

The author concluded that the leaf of Cassia fistula has several phytochemicals for various therapeutic actions. Therapeutical actions like antibacterial, wound healing, anti-itching, anti-parasitic.3- A study conducted by Dr. Manish Sharma et.al³, entitled “An Overview of Botanicals and Therapeutic Aspects of Aragvadha (*Cassia fistula* Linn).” The author explains chemical constituents present in a different part of the Cassia fistula plant. Aragvadha leaves contain anthraquinone, tannins, Senosides A and B, Rhein, and its glucosides.

In general, the leaves paste of cassia fistula is used for itching and several skin disorders.

The leaves contain flavonoids that might be work as antimicrobial activities.

The author concluded that the leaves of *Cassia fistula* have several phytochemicals responsible for various therapeutic actions. These actions like antibacterial, wound healing, anti-itching, anti-parasitic.

4-A study conducted by Tewari Ramesh Chandra et.al⁴, entitled “Phytochemistry and Pharmacological Activities of *Aragwadha*.” The author has explained the vernacular name, botanical description, classical references, distributions, macroscopic features, identification, substitute, chemical composition, pharmacological activities, medicinal uses, etc. The aqueous extract of leaves identified two sennoside A and sennoside B. The chemical composition of the Leaf has free rhein, rhein glycosides, and rich in tannins.

Pharmacological Action - 90% ethanolic extract of leaves showed antioxidant property next to the stem bark. The ethanolic leave extract of *cassia fistula* showed antiulcer activity against pylorus ligation-induced gastric ulcer.

RESULTS:

Reference	Varga
Charaka Samhita	KUSHTAGHNA, KANDUGHNA, PHALINI VARGA, TIKTA SKANDA, VIRECHANA DRAVYA.
SUSRUTA SAMHITA	ARAGVADADIGANA, SYAMADIGANA, ADHOBHAGAHARA.
ASHTANGA HRUDAYA	ARAGVADADIGANA
BHAVAPRAKASHA NIGHANTU	HARITAKYADI VARGA
PRIYA NIGHANTU	HARITAKYADI VARGA
DHANVANTRI NIGHANTU	GUDUCHYADI VARGA
ASHTANGA NIGANTU	ARAGVADADIGANA
KAIYYADEVA NIGHANTU	AUSHADI VARGA

Rasapanchaka of patra-

Classical texts	Rasa	Guna	Virya	Vipaka	DOSHAGHNATA
Charaka Samhita	Madhura	Mrudu			
SUSRUTA SAMHITA	Tikta	-			
BHAVAPRAKASHA	Madhura	Guru, Grahi			
RAJNIGHANTU	Madhura, Tikta	-			
DHANVANTRI NIGHANTU	Tikta				
MADANPAL NIGHANTU	Madhura				
KAIYYADEVA NIGHANTU	Tikta	Guru, Grahi			

DISCUSSION

There are four articles found on pharmacological actions of the leaf of *Cassia fistula*. Two research articles explained the pharmacological properties of different media used for the extraction of *Cassia fistula* leaf. The author in the first article explained various solvents for the extraction method and studied their pharmacological actions. Acetone diethyl ether and methanol extraction of *Cassia fistula* leaf show antifungal activity against *Candida albicans*. The author explained four different solvents for the extraction of *Cassia fistula* leaves like chloroform, ethanol, methanol, petroleum ether, and water. All these solvents extraction showed antibacterial activity against *E.coli*, *K.aerogens*, *Protious vulgaris*, and *P.aerogense* bacteria. Ethanolic extraction showed maximum antibacterial activity. The author of the second and third articles explained phytochemicals and their action on the body. The fourth article concluded that 90% Ethanolic extraction of *Cassia fistula* leaf has Antioxidant and possesses anti-ulcer properties.

In classics, Acharya's explained Dadru as one of the types of *Kustha* that can be co-related with Fungal skin disorders. Acharya Sushruta has mentioned lepa (paste) as the treatment of *kushtha*, as it is a type of *sadhana* (purification). Lepa pacifies provoked *sthanika dosha* by

local application. Aragvadha patra has kushthagna (anti kushtha), kandughna (anti-itching), kriminashaka (antimicrobial), and rakta shodhaka (blood purifier) properties as a result of its act on several types of kushtha by its Rasa- Panchak. Argavada possesses Madhura Rasa, Guru, Mridu & Snighdha guna, Sheeta virya, Madhura vipaka, and Rochana karma. Ayurveda explains the chemical structure by the name of rasa and vipaka, whereas pharmacological actions by guna and veerya of a drug.

Kushtha is a tridoshajanya vyadhi that cannot be manifest with a single dosha involvement. The sapta dravyas of kushtha are tridoshas, twaka, rakta, mamsa, and Ambu. According to Acharya Charaka, nidaan sevan influence prakopa of tridosha and vitiated doshas will get ashraya in Twaka, Rakta, Mansa, and Ambu create the kushta roga.

Aragvadha is tridosha shamaka and pacifies prakopita tridoshas and maintains Samata.

Aragvadha possesses shita veerya, Rakta shodhaka, and helps to resolve rakta dusti with which Kushta subsides. Acharya's mentioned kandughna, kushtaghna, which directly shows the role of Aaragvadha in Kushta.

The abreast leaf of Cassia fistula possesses anti-bacterial, anti-fungal properties, anti-itching properties, wound healing, and anti-inflammatory activities.

Aragwadha is a rich source of tannins, flavonoids, glycosides, linoleic, oleic, stearic acid. Leaf of cassia fistula mainly contains oxalic acids, tannins, oxy- anthraquinones, anthraquinones derivatives.

Anti-bacterial and anti-Fungal activities help against pathogen-causing skin disorders. Anti-itching, anti-inflammatory activities help to reduce symptoms and pathogenesis. Wound healing property refers to a living organism's replacement of destroyed and damaged tissue by newly produced tissue.

CONCLUSION:

Many research studies concluded that Aragwadha (Cassia fistula) is responsible for various therapeutical actions like antibacterials, antifungal, wound healing, anti-ulcer, and anti-itching properties.

Leaves extraction of cassia fistula is more effective for itching, oozing, pain, burning, and cracking of the skins.

REFERENCES:

- 1-Chauhan P., Tiwari R C., Bhutiani R and Ahamad F.Study of Aragvadha (Cassia fistula) with particular reference to phytopharmacological properties: An overview, Environment Conservation Journal, Received on 29.11.2018, Revised on 28.03.2019 Accepted on 14.04.2019 page-133 to 138.
- 2-Pavan Kumar .S, Murali Krishna C, Bhuvanesh Kumar Sharma, Rajashekharan R, Prasad G.P, Narayana A.Medicinal properties of Aragvadha (Cassia fistula Linn.) International Journal of Ayurveda Medicine, Published on 2010 vol-1 Issue-3,page 129 to 133.
- 3-Dr Manish Sharma, Dr. Jagdish Mohan Onkar, and Dr. Omprakash Sharma. An Overview of Botanicals and Therapeutic Aspects of Aragvadha (Cassia Fistula Linn) World Journal of Pharmaceutical and Medical Research, Received on 10.01.2019, Revised on 30.01.2019 Accepted on 21.02.2019 volume 5 Issue 3 page-82 to 87.
- 4.Tewari Ramesh Chandra, Chaubesh Suresh, Kour Gagan Deep, Kumar Naveen, Phytochemistry and Pharmacological activity of Aragwadgha (Cassia fistula)- A Review, International Journal of Ayurveda and Pharma Research, Received on 29 - 04-2015, Revised on 19-05-2015, Accepted on 28-05-2015, Volume-3, Issue-5, Page no- 13-19.
5. Shri Bhava Mishra, Bhavaprakasa edited by Shri Brahmasankara Mishra and Shri Rupalalaji Vaisya, 11th Edition, Varnasi, Chaukhambha Sanskrit sansthana, 2004, Haritkyadi Varga, verse 148-150 , p- 68-69.
6. Vaidya Kaiyadev Pandit, Kaiyadev Nighantu, Edited by Prof . Priyavarta Sharma and Dr. Guru Prasada Sharma, Reprint Edition, 2009, Varnasi, Chaukhambha Orientalia, Aoushadhi varga, Verse 944, P- 174..
7. Vaidya Kaiyadev Pandit, Kaiyadev Nighantu, Edited by Prof . Priyavarta Sharma and Dr. Guru Prasada Sharma, Reprint Edition, 2009, Varnasi, Chaukhambha Orientalia, Aoushadhi varga, Verse 945 -946, P- 174-1775.

