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A LITERARY REVIEW ON *SHYONAK (OROXYLUM INDICUM)*

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ABSTRACT

Ayurveda is a comprehensive system of natural health care that originated in the ancient Vedic times of India. Its primary emphasis is on prevention of disease and maintenance of health. It also provides treatment for disease. Oroxylem indicum is a multipurpose plant. Many text books in Ayurveda describe its morphology, habitat, *ras panchak* and its therapeutic uses which mainly focuses on its anti-inflammatory, antiulcer, hepatoprotective, anticancer, antioxidant, photocytotoxic, antiproliferative, antiarthritic, antimicrobial, antimutagenic and immunostimulant properties.

KEYWORDS: Ayureda, Shyonak, Shothhara, Dashmool

INTRODUCTION

Oroxylum indicum, popularly known as Sonapatha, belonging to the family Bignoniaceae or Trumpet Creeper family, is a medicinally important plant that was used traditionally for thousands of years. All parts of the tree are used in indigenous medicine. In English, it is also known as 'Tree of Damocles' and 'Shyonak', 'Bhut-vriksha' in Hindi. Particularly, the plant is known as Midnight Horror in Malaysia because the flowers open at night, emitting a powerful stink to attract bats, which help in pollination. The plant is sometimes referred to as a broken bones tree because, when the flowers and leaves dry and fall off, their accumulation beneath the tree resembles the pile of broken bones. It reduces the Vata and Kapha doshas. Shyonak is one of the content of Dashmool dravya.

AIM

To study complete literary and therapeutic review of *Shyonak* (Oroxylem indicum).

METHODOLOGY

A systematic methodology was followed to go through the literary data. Study was done of Bruhatrayee and Laghutrayee. Nighantus and refrences books of Dravya guna.

Basonym

"Shyonam shophinmkti gachhti heetayeti"

Shyonak is efficacious drug in case of Oedema.

VERNACULAR NAMES

Sanskrit – Bhut-vriksh, Dirgvrinta, Kutannat, Manduk(the flower) patrorna, Putivriksh

Hindi - Sonapatha

English – Broken bones plant, Indian calosanthes, Indian Trumpet, Indian trumpet flower, Midnight horror, Oroxylem

Urdu - Sonapatha

Telugu – Dundilumu, Gumpena, Pampini

Kannad – Tigudu, Tattuna

Marathi- Tentoo

Gujrati - Tentoo

Tamil – Peruvgai, Cori-konnai, Palai-y-utaicci, Putapuspam

Nepaleese - Tatelo

Assamese – Kering, Bhatghila

Bengali - Sonagachh

Punjabi – Tatpaling, Talvarphali

Taxonomical Classification

Kingdom - Plantae

Division - Mangoliophyta

Class - Mangoliopsida

Order - Lamiales

Family - Bignoneaceae

Genus - Oroxylum

Species - indicum

Binominal name – *Oroxylum indicum* Vent

Gana – Shothhar, Sheetprashaman, Anuvasanopag (Charak); Brihatpanchmool, Rodhradi, Veertarvadi (Sushrut) Rodhradi, Veertarvadi (Vagbhat)

CHEMICAL CONSTITUENTS PRESENT IN DIFFERENT PARTS OF SHYONAK

The plant contains flavanoides like chrysin, oroxylin, and baicalein as active components.

Tabel 1: Ayurvedic Properties.

Rasa	*Kashay; Madhur, Tikta*
Guna	*Laghu, Ruksha*
Veerya	*Ushna*
Vipaka	*Katu*
Doshkarma	*Kaphavatahara*

Tabel 2: Position(Varg) of Shyonak In Different Literature.

Acharya Charak	*Shothar, Sheeta prashamana, Anuvasanopaga*
Acharya Sushrut	*Rodhradi Virtarvadi, Brhatpanchmula*
Kaydev Nighantu	*Aushadhi Varg*
Dhanvantri Nighantu	*Guduchyadi Varg*
Bhavprakash Nighantu	*Guduchyadi Varg*
Raj Nighantu	*Prabhdradi Varg*
Nighantu Aadarsh	*Patalaadi Varg*

Tabel 3: Synonyms.

Names	**Meaning**
Dirghvrunt	Petiole of *Shyonak* leaves is very long
Patrorn	*Shyonak* leaves have hairs
Shonak	Flowers of *Shyonak* are red in colour.
Putivruksh	The flowers of *Shyonak* have got very bad odour.
Shuknash	Parrots won't sit on this tree because of foetid odour.
Pruthushimb	*Shyonak* fruit is very big pod.
Nat	*Shyonak* fruits are hanging in tree and looks like dancing.
Tuntuk	Fruits will move and cause sounds.
Kutannat	Fruits are bent and move, so appears like dancing.
Katambhar	Protects one's body from *vatadi vikara*.
Shoshan	*Shyonak* dries up the water content.

MORPHOLOGY

1. **Habit-** Small tree grows upto 20 to 40 ft. in height.
2. **Bark-** Light brown, soft with green juice and often with numerous corky lenticules.
3. **Leaves-** Compound, very large, 100cm tp 150 cm long, 2 to 3 pinnate with opposite pinnae, rhachis are very stout, cylindric, leaflets are 2 to 4 pairs, 6 to 12 cm long and 4 to

10 cm wide, ovate or elliptic, acuminate, glabrous, base is rounded, petiolules of the lateral leaflets 6 to 15 mm long.

4. **Inflorescence-** Raceme, 30 to 60 cm long or even more.
5. **Flowers**- Numerous, fetid, pedicels are 0.5 to 3 cm ong, calyx is 2.5 cm long, leathery, oblong campanulate. Corolla is usually purple in colour, reaching upto 10 cm long, fleshy stamens arw 5 filaments cottony at the base.
6. **Fruit**- Capsule, 30 to 90 cm long, 5 to 9 cm wide, straight, flat, tapering at both the ends, 8 m thicik.
7. **Seeds**- Numerous, 6 cm long, winged all round except at the base.

DISTRIBUTION OF PLANT

Shyonak is commonly found all over especially in foot hills of tropical India.

Tabel 4: Showing the synonyms according to the various classical texts.

	Dha .Ni.	*Ma.Ni.*	*Ka Ni*	*Ra Ni*	*Bhav Ni*
Patrorn	-	-	-	-	+
Shonak	-	-	-	-	-
Putivruksh	-	-	-	-	-
Shuknash	+	+	+	+	+
Pruthushimb	+	+	+	+	+
Nat	-	-	-	-	+
Tuntuk	+	+	+	+	+
Kutannat	+	+	+	+	+
Katambhar	+	+	+	+	+
Shoshan	-	-	-	-	+
Dirghvrunt	+	-	+	-	+
Katvang	+	+	+	+	+
Bhutvruksh	-	+	+	-	-
Bhallook	+	+	+	+	-
Priyjivak	+	+	+	+	-
Arlu	+	+	+	+	+
Phalguvrunt	+	-	+	+	-
Mayurjangh	+	-	-	+	-
Jambuk	+	-	-		-

TRADITIONAL MEDICINAL AND ETHNOMEDICINAL USE

Since humankind's evolution, natural goods have been essential to their healthcare, and they still are today, in the most cutting-edge, cutting-edge therapeutic period. Farmers have used the Sonapatha's sword-shaped fruits or twigs to kill crabs in the rice fields. To eliminate maggots from cattle wounds, use the stem bark of the Sonapatha plant. Thailand serves its

flowers and fruits as vegetables. In addition, it is utilised for tannins, dyes, and wood. Since Sonapatha has unusual appearances, it is planted as an attractive plant. Since ancient times, sonapatha has been utilised to cure a variety of human illnesses. In both traditional medicine and Ayurveda, Sonapatha is utilised in a variety of ways to treat people. It is one of the most vital components of Brahma Rasayana, Dashmularishta, Dhanawantara Ghrita, Amritarishta, Narayana Taila, Dantyadyarista, and Chyavanprasha. Sonapatha is categorised by Ayurveda as anuvasanogapa(used as oil enema), shothara (anti-inflammatory), and sheetha prashamana (relieves cough and cold) . Sonapatha is astringent, bitter, aphrodisiac, tonic, cooling, easy to digest, dry, pungent, hot in potency, and an appetite stimulant according to Ayurveda. Asthma, bronchitis, fevers, diarrhoea, dysentery, vomiting, biliousness, inflammation, leukoderma, skin conditions, rheumatoid arthritis, and wound healing are all treated with sonapatha.

Additionally, it is used to deworm the stomach and cure anal problems. Other properties of sonapatha roots include aphrodisiac, antidiabetic, astringent, antiarthritic, carminative, diaphoretic, constipating, anthelmintic, febrifuges, diuretic, digestive, and expectorant.

Sonapatha root bark paste prepared with sesame oil (Sesamum indicum) is a digestive tonic, while the seeds are given orally to treat hypertension and throat issues. Sonapatha root bark is used to treat stomatitis, TB, and nasopharyngeal carcinoma.

Sonapatha seeds have purgative and digestive properties, and their paste is used topically to cure boils and sores.

In order to help women become pregnant, the powdered seeds are administered.

Tonsillitis is treated by applying a paste comprised of crushed seeds and fire soot to the neck. Inflammations, skin conditions, sprains, and rheumatism are treated with a poultice produced from Sonapatha bark, while burns and wounds are treated with powdered bark and paste, respectively.

Stomach problems can also be treated using the stem bark of sonapatha.

The leaves are used to heal ulcers, headaches, and enlarged spleens in addition to snakebites. Sonapatha fruits are used to increase appetite, heal throat infections, bronchitis, heart conditions, leukoderma, and piles.

Therpeutic indications

Various parts of the plant are used in Ayurveda and folk medicine for the treatment of different ailments such as cancer, diarrhea, fever, ulcer, Heart disease and jaundice.

Parts used

1. Root bark
2. Stem bark
3. Leaves
4. Flowers

Posology

Churna- 1-3 gm

Kwath- 20-40 ml

Formulations

1. Shyonak put pak in Atisara, udar vikara.
2. Dashmoola kashay in Shotha, Shwasa.
3. Dashmoola Ghrit in Vataja kasa.
4. Dashmoolarisht in Grahani, Aruchi.

Latest Researches

Recent *in vivo* and *in vitro* studies have indicated its anti-inflammatory, antiulcer, hepatoprotective, anticancer, antioxidant, photocytotoxic, antiproliferative, antiarthritic, antimicrobial, antimutagenic and immunostimulant properties.

1. The present investigation was carried out to evaluate the anti-arthritic activity of different extracts of root bark of Oroxylum indicum against adjuvant induced arthritis in rats. The relative percentage inhibition potential of paw volume in rates treated with various extracts of Oroxylum indicum was found to be ethyl aceta extract (67.69%) >chlororm extract (64.61%) >n-butanol extract (58.46%) respectively. The hematological parameters like RBC count, hemoglobin content showed significant increase while there was a significant decrease in total WBC count and ESR in all the groups of animals pretreated with root bark extracts. The biochemical parameters such as catalase, glutathione contents showed a significant increase while the lipid peroxide and Cathepsin-D content decreased significantly only in case of ethyl acetate pretreated rats when compared to others. Kamati M, Chandra RH, Veereshan C.

Kishan B. Antiarthritic activity of root bark of Oroxylum indicum (L.) vent against adjuvant-induced arthritis. Pharmacognosy Res, 2013 Apr; 5(2): 121-8. doi: 10.4103/0974-8490.110543.

2. An attempt has been made to study the anti-inflammatory activity of both root bark and stem bark kashaya (Decoction) experimentally. Results showed significant anti-inflammatory activity of root bark and stem bark decoction Dravyaguna Vijñāna Doshi K, llanchezhian R, Acharya R, Patel BR, Ravishankar B. Anti inflammatory activity of root bark and stem bark of Shyonaka. J Ayurveda integer Med, 2012 Oct; 3(4): 194-7. doi: 10.4103/0975-9476.104434.

3. The antibacterial activity of alcoholic extracts of stem and root were carried out separately using agar well diffusion method and found that the stem extract has more antibacterial activity especially against organisms causing diarrhoea than root extract. This further validates therapeutic indications mentioned in Ayurveda. Radhika LG, Meena CV, Peter, S, Rajesh KS, Rosamma MP, Phytochemical and antimicrobial study of Oroxylum indicum. Anc Sci Life, 2011 Apr; 30(4): 114-20.

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5. Chemical investigation of the stem bark of Oroxylum indicm resulted in the isolation and characterizatin of two new flavonoid glycosides (1,2), along with seven known compounds (3-9), Hari Babu T, Manjulatha K, Suresh Kumar G, Hymavathi A, Tiwari AK, Purohit M, Madhusudana Rao J, Suresh Babu K., Gastroprotective flavonoid constituents from Oroxylum indicum Vent Bioorg Med Chem Lett, 2010 Jan 1; 20(1): 117-20. doi: 10.1016/j.bmcl.2009 11.024. Epub 2009 Nove 12.

6. In vitro immuno-stimulatory and anticancer activities of Oroxylum indicum (L.) Kurz.: An evidence for substitution of aerial parts for conservation DeekshaRai[a]H.N.Aswatha Ram[b]K.Neeraj Patel[c]U.V.Babu[c]L.M.Sharath Kumar[c]R.Kannan[c].

CONTROVERSY

Dalhana consider Arlu (Alianthes excelsa) as a type of Shyonak. But these two are different plants.

DISCUSSION

Shyonak being Tikta (Bitter) in rasa improves taste in the person, detoxifies, kills germs and worms, relieves unconsciousness, strengthens and stabilizes body, digestive and carminative cleanses and detoxifies body. Its Kashaya (Astringent) rasa pacifies kapha and pitta in body, and is instrumental in wound healing, dries up moisture (due to its air and solid elements), useful in bleeding disorder. Its Katu vipak is ruksha and laghu in guna which thus enhances v subsides kapha and kleda present in wounds and oral cavity thus facilitating wound healing and relieves dental caries. The veerya of shyonak being Ushna is chiefly the cause of action like, kasaghna, shwashara, jwarhara brought by dravya.

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