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Review Article

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#### A REVIEW ON SARACA INDICA

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#### **ABSTRACT**

Saraca indiaca has been regarded a one of the most plants utilized from antiquity till date. Saraca asoca (Roxb.) De Wilde is a small evergreen tree, belongs to the family, Caesalpiniaceae is commonly known as Asoka, Sita Asoka and Haempushpam. All the plant parts are considered to contain medicinal properties. Leaves of Saraca indica are known to contain carbohydrates, proteins, tannins and saponins and shows antibacterial activity Barks and Flowers contain glycosides, steroids, saponins, carbohydrates and tannins. The flowers are also regarded as medicinally important plant part uterine infections as menorrhagia and other types of uterine disorders. It is used in a bleeding pile.

**KEYWORDS:** Saraca asoca (Roxb.) De Wilde is a small evergreen tree, belongs to the family, Caesalpiniaceae is commonly known as

Asoka, Sita Asoka and Haempushpam.

#### **INTRODUCTION**

The demand for herbal products increases in all over the world and major pharmaceutical companies are recently conducting research on medicinal plants on large scale for their potential medicinal values. Medicinal plants have been used for the treatment of various ailments throughout the world before the onset of modern synthetic drugs. *Saraca indica* is a rain-forest tree. It is established all over India, mostly in Himalaya, Kerala, and Bengal and

whole south region.

The Ashoka is valued for its attractive and small fragment flowers. It is a beautiful, small, erect evergreen tree, with deep green leaves growing in thick clusters. It is flowering season around February to April. The Ashoka flowers come in heavy, rich bunches and are bright yellow which turns red before drooping.

Its unique conveyance was in the critical ranges of the Deccan flatland, as well as the center segment of the Western Ghats in the western coastal zone of the Indian subcontinent. As a wild tree, the Ashoka is a unprotected species. It is getting to be rarer in its characteristic territory, but disconnected wild Saraca indica trees are still to be found in the foothills of the central and eastern Himalayas, in scattered areas of the northern fields of India as well as on the west coast of the subcontinent close Mumbai.

#### Classification

: Plantae Kingdom

Division : Magnoliophyta

: Mgnoliopsida Class

Order : Fabales

Family : Caesalpinaceae

Genus : Saraca **Species** : indica

#### **Chemical Constituents**

Its bark of plant contain epicatechin, procyanidin p2, 11'-deoxyprocyanidin B, catechin, 24methyl-cholesta-5-en-3p-ol, 24-ethycholesta-5, 22-dien-33-ol, leucopelargonidin-3-O-p-Dglucoside, leucopelargonidin and leucocyanidin. The bloom portion of plant contain Oleic, linoleic, palmitic and stearic acids, P-sitosterol, quercetin, kaempferol-3-0-P-D-glucoside, quercetin-3-0-P-D-glucoside, apigenin-7-0-p-D-glucoside, pelargonidin-3,5diglucoside, cyanidin-3,5-diglucoside, palmitic, stearic, linolenic, linoleic, p and y sitosterols, leucocyanidin and gallic corrosive. Seed and Unit contains oleic, linoleic, palmitic and stearic acids, catechol, (-) epicatechol and leucocyanidin. Five lignan glycosides, lyoniside, 5-methoxy-9-β-xylopyranosyl-(–)-isolariciresinol, nudiposide, icariside E3. and schizandriside, and three flavonoids, (-)-epicatechin, epiafzelechin- $(4\beta \rightarrow 8)$ -epicatechin and procyanidin B2, together with  $\beta$ -sitosterol glucoside, were confined from dried bark.

#### Pharmacological activity

#### **Anti-inflammatory Activity**

The ethanolic extract of Saraca indica leaves find out the anti-inflammatory activity. The leaves of Saraca indica determination of the anti-inflammatory activities against Carrageenan induce paw edema in animal is most suitable test procedure to screen anti-inflammatory activity. Ethanolic extract of the Ashoka reduce the paw edema significantly.

#### **Anti-helminthic Activity**

The leaves of S. indica show anthelmintic activity. The methanolic and ethanolic extracts of S. indica displayed anthelmintic activity in a dose dependent manner. Analgesic and Antipyretic Activities S. indica leaves extract show sanalgesic activity. Anti-hyperglycemic and Antioxident Activities S. asoca (Roxb.) de Wilde leaves show of antihyperglycemic and antioxidant activities.

#### **Antidiabetic activity**

Hypoglycemic impact of the methanolic bark extricates of Saraca indica Linn in typical and streptozotocin initiated diabetic rats was assessed. At dosage of 400mg/kg through verbal route the extricate has appeared a critical hypoglycemic action.

#### **CNS**

The takes off of Ashoka were illustrated to have an anti-depressant action upon the central nervous.

**Pain relieving and Anti-pyretic Exercises:** Ashoka clears out extricate appears pain relieving activity.

#### Cardio protective activity

Cardio protective activity of alcoholic extract of Saraca indica bark was investigated against Cyclophosphamide induced cardio toxicity. Treatment with Saraca indica significantly.

Uses of Asoka in Ayurveda. [28-32]

Some of its uses as described in various Ayurvedic texts are.

- 1. Cold water decoction or cold water extract milk decoction of asoka taken in the morning for the treatment of asragdara.
- 2. Decoction of bark of asoka in milk for the treatment of severe uterine bleeding.
- 3. Powdered bark of asoka with honey for the treatment of pradara (discharges per vaginum)

or asragdara (menorrhagia).

- 4. Asokarishta is indicated for the treatment of hemorrhage, hemorrhoids, anorexia, edema, fever, etc.
- 5. Asokaghrita is indicated for the treatment of backache, pain of uterine origin, and anemia.
- 6. In dysuria and anuria due to stone, seeds of asoka may be used with cold water.
- 7. Asoka is a good uterine tonic and keeps the menstruation clear. In pregnancy Asokaghrita does not cause abortion.
- 8. Asoka bark decoction and Asoka ghrita indicated for the treatment of dysmenorrhea.
- 9. Local application -Medicinal ghrita prepared with herbs having asoka as a chief ingredient is used for the treatment of gulma (localized abdominal tumor/swelling/lump) especially kaphaja gulma (swellings/lump having kapha predominance).
- 10. Enteral use -Asoka in combination with other medicines is recommended for the treatment of various diseases such as kaphaja gulma, kapha vata janya vibandha (constipation due to kapha vata vitiation), kustha (skin diseases), pliha (splenic enlargement), udara roga (peritonitis), and yoni roga (genito-urinary disorders).
- 11. Asoka is also indicated for the treatment of cough.
- 12. It can be used to reduce meda (fatty tissues in body) and kapha.

#### **CONCLUSION**

The medicinal importance of the Ashoka tree as discussed above evidently prove that ashoka is one of the most important medicinal plant which possess a lot of therapeutic values specially for female disorders. The stem bark is chiefly used in medicines and it has been reported to contain chemicals such as glycoside, flavanoids, tannins, saponins, esters and primary alcohols. Saraca indica has been greatly used as traditional medicine for women related problems, such as menorrhagia, leucorrhoea, bleeding hemorrhoids, dysfunctional uterine bleeding etc.

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