

Ashoka - Miracle Medicinal Tree

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SUMMARY

In Ayurveda, Ashoka tree is known for its spiritual qualities as well as its many health benefits to the body. Ashoka Tree barks leave primarily beneficial for treating menstrual problems in women including Dysmenorrhea, abdominal pain and uterine spasms. Ashoka tree bark has an abundant amount of tannins, flavonoids, and glycosides that altogether work as a uterine tonic. The Ashoka tree roots and seeds of Ashoka treat skin conditions including acne, psoriasis and dermatitis.

INTRODUCTION

Saraca asoca (Roxb.), De. wild or *Saraca indica* is one of the most ancient tree of India, frequently known as a “Ashok briksh”, or “Ashoka” belonging to family Caesalpinaceae means “without sorrow” or which that gives no grief. Ashoka tree has been mentioned in some of the oldest Indian text apart from Ayurveda. Across India, Ashoka tree is believed to be sacred and apart from Ramayana, Ashoka tree is mentioned in Buddhism and Jainism as well. Charaka Samhita which is believed to have been composed in 1000 BC describes about Ashoka tree and its medicinal benefits. The Ashoka is valued for its attractive foliage and fragrant flowers. It is a beautiful, small, erect evergreen tree, with deep green leaves growing in dense clusters. Its flowering season is around February to April. The Ashoka flowers come in heavy, lush bunches and are bright yellow which turns red before wilting.

Ashoka is one of the most significant Ayurvedic drug for the treatment of several feminine disorders especially in menorrhagia. Its bark for keeping a woman healthy and youthful. The natives and traditional healers of Chhattisgarh use Sita-Ashoka (the name given to *Saraca asoca*) mainly in treatment of gynecological disorders. Its bark is bitter, astringent and sweet in taste. It has stimulating effect on endometrial and the ovarian tissue. It is useful in internal bleeding, hemorrhoids, ulcers, uterine affections, menorrhagia especially due to uterine fibroids, meno-metrorrhagia, leucorrhoea and pimples. The plant possess several medicinal value and widely used in Ayurvedic formulation for treat number of disease like to treat painful conditions, improves complexion of the body, improves digestion and assimilation, alleviates excessive thirst, to kills all infectious agents, in blood disease, inflammation.

Habitat

It is found all over Indian subcontinent. The tree is believed to have originated in the Western Ghats and Deccan plateau. It can also be found in central and Eastern Himalayas. It is known to grow at an altitude of 750 m above the sea level. The plant grows to a height of about 9m in length. The plant generally grows in fertile and semi-fertile areas across India. The tree belongs to Caesalpinaceae family. This is a perennial plant which can range from dark green to greyish green in colour. The lenticels are circular and ridged opposing. The seeds generally are reddish brown with fibres.

Morphological characteristics:



Tree



Flower



Bark

Leaves: It is a paripinnate, alternate, distichous and 7-30 cm long and its petiole 0.1-0.6 cm long and opposite leaflets, 4-6 pairs, narrow elliptic-oblong or lanceolate, and its apex acute to acuminate, base acute to rounded or subcordate, glabrous, midrib raised above and tertiary nerves reticulate.

Bark: The bark is dark brown or grey or almost black with warty surface. Stem bark are rough and uneven due to the presence of rounded or projecting lenticles and channelled, smooth with circular lenticles and transversely ridged.

Flowers: It is inflorescence dense corymbs, orange colour and sometimes white and fragrant. **Fruits:** It is a pod, flat, oblong and apiculate.

Traditional Uses

Saraca asoca has been greatly used as traditional medicine for women related problems, such as leucorrhoea, menorrhagia, dysfunctional uterine bleeding, and bleeding haemorrhoids etc. It is also effectively used in Ayurveda for clearing congestion from the Medas Dhatus and Mamsa, especially when there may be leucorrhoea, endometriosis, cysts, and fibroids from excess kapha and ama in the Artava Srotas. The Ashoka herb also has a nourishing effect on the circulatory system, thereby making it an effective remedy in arrhythmia and cardiac weakness. The Ashoka herb also helps in encouraging urine flow and thus helps in treating conditions that cause painful urination. The Ashoka herb benefits the endometrium and uterine muscles and this makes it effective as a uterine tonic for irregular menstrual cycles and miscarriage. The specific analgesic properties present in Ashoka can be used to calm the nerves when they have been aggravated by the vata. The Ashoka herb is also said to improve the complexion of skin. This herb can be used to obtain relief from burning sensations on the skin. It also helps to get rid of the toxins from the body. The Ashoka herb is also effective in purifying the blood naturally and in preventing skin allergies.

Phytochemistry :

S.no	Plant part	Phytoconstituent
1.	Flower	Oleic acids, sitosterol, quercetin, kaempferol, quercetin, apigenin- 7-O-p-D-glucoside, Pelargonidin- 3, 5- diglucoside, cyanidin-3, 5- diglucoside, palmitic, stearic, linolenic, leucocyanidin and gallic acid.
2.	Bark	Procyanidin, epicatechin, 11'- deoxyprocyanidin B, catechin, leucopelargonidin and leucocyanidin.
3.	Dried bark	Glycosides, lyoniside, nudiposide, 5-methoxy- 9- β - xylopyranosyl, isolariciresinol, and schizandriside, and three flavonoids, epicatechin, epiafzelechin-(4 β →8)-epicatechin and procyanidin B2, together with β - sitosterol glucoside
4.	Seed and Pod	Oleic, linoleic, palmitic and stearic acids, catechol, (-) epicatechol and leucocyanidin.

Some of the beneficial properties of Ashoka are

Uterine tonic

Ashoka has positive health effect on the ovaries and the inner lining of the uterus. It has estrogenic activity, hence balances the female hormones and is used in various health conditions of women like regulating menstrual cycle, menorrhagia, premenstrual syndrome, abnormal uterine bleeding etc.

Stops excessive menstrual flow

Dried bark of Ashoka is used in India as a uterine tonic. It is also used as an astringent, which helps to reduce the excessive menstrual flow or heavy bleeding, and is also used in the menstrual cycle irregularities.

Anti-inflammatory

Studies have shown that Ashoka is known to have anti-inflammatory activity, such that its action is comparable to the conventional diclofenac. It helps reduce dysmenorrhoea or period pain or abdominal pain during periods.

Analgesic

The analgesic property of Ashoka, helps relieve the menstrual pain and cramps. It stimulates the uterine functions and reduces the contractions, and strengthens the uterus.

Antioxidant

Studies have shown that the extracts of Ashoka bark, high in phenolic content possess antioxidant property helps reduce oxidative stress on ovaries and uterus.

Other than these, Ashoka is also a cardioprotective, has immunomodulatory activity. It also possesses anti-diabetic, antiulcer, antipyretic, antifungal and dermato protective property. Ashoka is an important medicinal plant for women's health because of its immense health benefits.

CONCLUSION

The medicinal importance of the tree as discussed above evidently prove that *Saraca asoca* is one of the most promising botanical which possess a lot of therapeutic values. Several mechanisms are likely to account for the observed pharmacological effects, the most important being the antimicrobial, antidiabetic, anthelmintic, CNS depressant, antimenorrhagic, uterine tonic, analgesic, anti-inflammatory, antiulcer, anticancer, larvicidal, antioxytocin activity. In future the standardization and stabilization studies on *Saraca asoca* can be carried out which can help in proving it to be a promising source in pharmaceutical industry.

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