

**A REVIEW ON SENNA: AN EXCELLENT PROPHETIC HERBAL MEDICINE****Mohammad Sadat A. Khan\***

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**ABSTRACT**

It is evident from the literature that 80% of the world's population depends on herbal drugs. Now-a-days, the herbs and herbal medicines are much effective for the treatment of varied disorders as they have minimal side effects as compared to the allopathic medicines. Cassia leaves and pods have been used in traditional or herbal medicine since ancient times. Ibn al-Qayyim described the plant Senna (السننا) as an excellent medicine in his work on Prophetic Medicine. There are a number of species of Senna used throughout the world for medicinal purposes. The pods and leaves contain anthraquinone glycosides that have a big laxative effect. Cassia angustifolia, which is commonly called Senna belongs to the family Leguminosae. It is a well-known laxative throughout the planet. It is an ayurvedic herb more popularly known as swarnapatri in Sanskrit. Senna is widely used for its numerous benefits. The plant is mainly valued for its cathartic properties and is especially useful in habitual constipation. The laxative principles sennoside A and sennoside B are isolated from leaves and pods of senna, which constitute important ingredients in purgative medicines. This prophetic herb is very beneficial for numerous health issues. The plant has been investigated for its various chemical constituents and pharmacological properties. The distribution, medicinal applications, chemical constituents and various aspects of senna are reviewed in this paper.

**KEYWORDS:** Senna, Prophetic medicine, Anthraquinone glycosides, Laxative.**INTRODUCTION**

Senna (botanical name Cassia angustifolia) is a plant best known for its medicinal properties. It comprises of dianthrone glycosides (compounds consisting of sugar molecules bound to other molecules), as well as mucilage (a thick, gluey substance), tannins and flavonoids. In addition to its use as a safe and effective laxative, senna also has many other health benefits. One of the glycosides present in senna, emodin has many herapeutic benefits including as an anti-inflammatory, antispasmodic, and the ability to inhibit or destroy viruses. These compounds have also shown to be effective in stimulating cellular regeneration, and detoxifying and cleansing. Senna is the active ingredient in many commercial laxatives. However, these laxatives also contain artificial sweeteners and should therefore be avoided. More natural, undiluted forms of senna are available at some health-food stores and it is also available in supplements and liquid extract form.<sup>[1]</sup> Senna is widely used for its numerous benefits. Scientifically, it is known as Cassia angustifolia, and belongs to family Leguminosae. There are a number of species of Senna used throughout the world for medicinal purposes. Indian senna is obtained from cultivated plants mainly in Asian country like South India and Pakistan. It was reported that the first variety of senna was found along the Nile River in Egypt and Sudan.<sup>[2]</sup> Cassia angustifolia (senna),

a native plant of Yemen, Somalia and Arabia and now cultivated in other parts of the planet, features a sort of medicinal uses in Unani as well as other traditional systems of medicine. Svarnapatri consists of dried leaves of Cassia angustifolia Vahl (Fam. Leguminosae), a little shrub, 60-75 cm high, found throughout the year, cultivated largely in Southern India, especially in districts of Tinnevely, Madurai and Tiruchirappally and has also been introduced in Mysore, adult, thick bluish colour leaves stripped off by hand, collected and dried in shade for 7-10 days, till assume a yellowish-green colour, graded and then packed into large bales.<sup>[3]</sup> Being a hardy species, it can be grown even in saline and rainfed conditions. Cultivation of senna doesn't require much expense on irrigation, manuring, pesticides, protection and other pre- and post-harvesting care. This makes the plant a perfect crop for arid regions where water provision, wasteland development, desertification control, dune stabilization are the main challenges.<sup>[4]</sup>

**Description**

Common Name: Senna, Alexandrian/Bomabay, Indian Senna, Tinnervelly Senna, Cassia Senna.

Synonyms: C. senna L.; C. acutifolia Delite; C. obovata Baker;

Hindi Name: Senna  
 Sanskrit Name: Swarnapatri  
 English Name: Indian Senna  
 Latin Name: *Cassia angustifolia* Vahl Pennel

Part Used: Pods, Stems and Leaves.  
 Habitat: Cultivated in dry lands of southern & western india, and indigenous to arabia.



Fig: 1. Plant of *Cassia angustifolia*.



Fig: 2. Leaves, Pods, Stems, Powder of Senna leaves.

#### Systemic Position

Kingdom: Plantae  
 Division: Magnoliophyta  
 Class: Magnoliopsida  
 Order: Fabales  
 Family: Fabaceae  
 Subfamily: Caesalpinioideae  
 Genus: *Cassia*  
 Species: *Angustifolia*

leaves, made up of 5–8 pairs of shortly stalked oval-lanceolate leaflets (2.5cm × 1.5cm) and produce successive flush of flowering shoots both in axillary and subterminal position 60–70 days after sowing. The flowers are large and brilliant yellow in colour, producing medium-sized pods (3.5cm–6.5cm × 1.5cm) after 90 days. They contain 5–8 yellowish, flat seeds.

Senna is an annual leguminous herb which is cultivated extensively in the southern parts of the country. Its pods and leaves are used in Ayurveda as well as in modern system of medicines. It remains in field for 110–130 days as an annual crop. The plant have compound

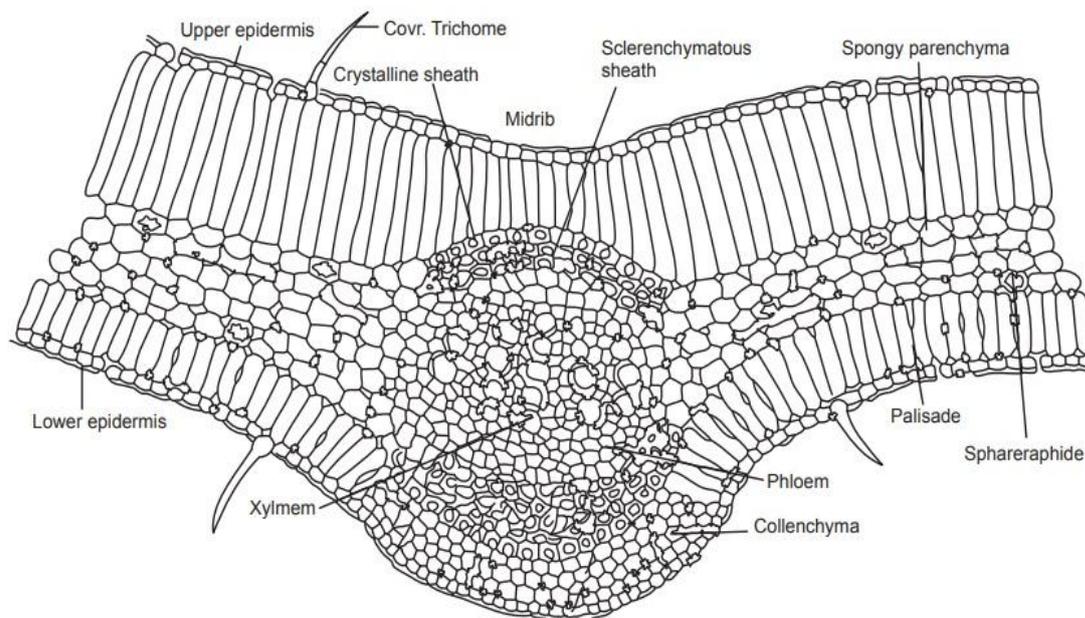


Fig. 3: T. S. of Senna leaf.

### Folklore and History

Senna was first used medicinally by Arabian physicians as far back as the 9th century A.D. It has long found use in traditional Arabic and European medicine as well, primarily as a cathartic. The leaves have been brewed and the tea administered for its strong laxative effect. Because it is often difficult to control the concentration of the active ingredients in the tea, an unpredictable effect may be obtained. Therefore, standardized commercial dosage forms have been developed, and these concentrates are available as liquids, powders and tablets in over-the-counter laxatives. The plant derives its name from the Arabic "sena" and from the Hebrew word "cassia," which means "peeled back," a reference to its peelable bark.<sup>[5]</sup> *C. angustifolia* was first discovered growing wild in and around the ancient and blessed city of Makkah, in the heart of the old province Hijaz. The plant grows in abundance and was first used as herbal medicine by the Holy Prophet Muhammad (Peace Be Upon Him).<sup>[6]</sup> The Holy Prophet Muhammad (Peace Be Upon Him) said; "If there is any remedy against death, it is Sana, the gladdened, the graceful one".<sup>[7]</sup> According to the "Magic and Medicine of Plants", in the 9th century CE, Caliph Harun al-Rashid sent for a famous Christian Arab physician, known to history as Mesue the Elder. Mesue brought Senna leaves, which are native to North and East Africa, and effectively cure the Caliph's constipation! After Mesue the Elder's visit, Senna was widely used in Baghdad as a laxative. Native Americans also recognised Senna's laxative power, but instead used it to treat fevers.<sup>[8]</sup>

### Evidence from the Qur'aan & Sunnah

Senna has been mentioned in the Sunnah of the Prophet. From Asmaa Bint Umais, She said: The Messenger said "with what do you relieve constipation?" she said: with

the shubrum. He said "(it is) hot and strong", she then said: I also relieve it with the Senna, so he said "if there was a thing (which) cures from death indeed it might be the Senna." [Ibn Maajah 3461; Shaykh Al-Albaani graded it daeef. The two Arnaoots mentioned that this hadeeth is strengthened by the subsequent narration.] The Prophet said "Upon you is that the Senna and therefore the Sanoot (cumin) for indeed within the two of them may be a cure for each disease except Saam" He was asked "O Messenger of Allah, what's Saam?" He said "Death" [Ibn Maajah 3457; Shaykh Al-Albaani graded it saheeh].<sup>[9]</sup>

### Chemical Composition

Senna leaves contain anthraquinone derivatives, which are present in both free and combined state. Senna contains dianthrone glycosides (1.5% to 3%). Two crystalline glucosides sennoside A & B have been reported from the leaves and pods. sennosides A and B (rhein dianthrone), and sennosides C and D (rhein aloemodin heterodianthrone). Numerous minor sennosides are identified, and every one appears to contribute to the laxative effect. The plant also contains free anthraquinones in small amounts including; rhein, aloemodin, chrysophanol, and their glycosides. Flavonols present include isorhamnetin and kaempferol. Glycosides 6-hydroxymusizin and tinnevellin are also found. Other constituents in senna include chrysophanic acid, 2-hydroxybenzoic acid, saponin, resin, mannitol, sodium potassium tartrate, and trace amounts of essential oil. Sennoside A & B are reported to have potent laxative action. Senna also contains a yellow flavonol colouring matter kaempferol. Senna is used for the treatment of constipation mostly in Eastern and Western countries.<sup>[10,11]</sup> The laxative activity of senna is due to the presence of two anthraquinone glycosides, i.e., sennoside A and sennoside B. *C. angustifolia* is also composed of

rhein-8-diglucoside, sennosides Cand D, rhein, rhein-8-glucoside, aloe-emodin and anthrone diglucoside, and naphthalene glycosides such as tinnevellin glycoside and 6-hydroxy musizin glycoside, flavonoid (kaempferol), phytosterols, resin, and calcium oxalate.<sup>[12,13]</sup> Carbohydrates in the plant include 2% polysaccharides

and approximately 10% mucilage, consisting of galactose, arabinose, rhamnose, and galacturonic acid. Other carbohydrates include mannose, fructose, glucose, pinitol, and sucrose. Senna's flavonols include isorhamnetin and kaempferol. Glycosides 6-hydroxymusizin and tinnevellin are also present.<sup>[14,15,16]</sup>

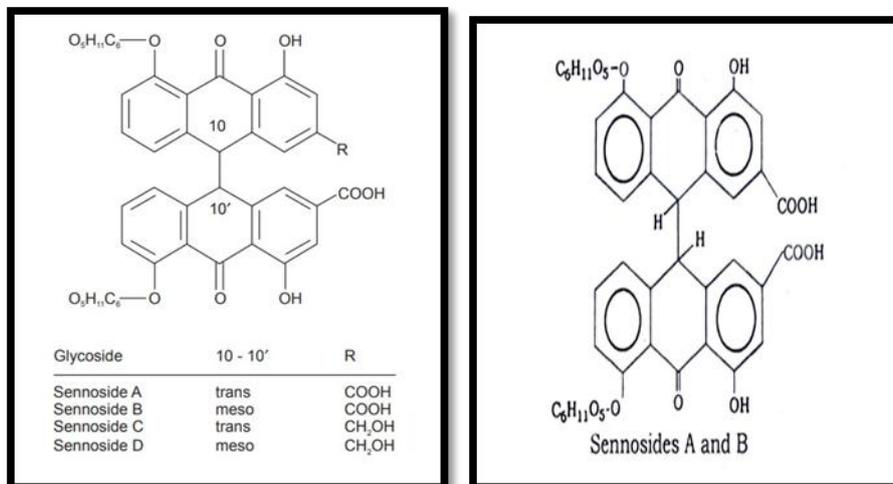


Fig. 4: Important Chemical constituents of Senna.

#### Medicinal Applications of Senna

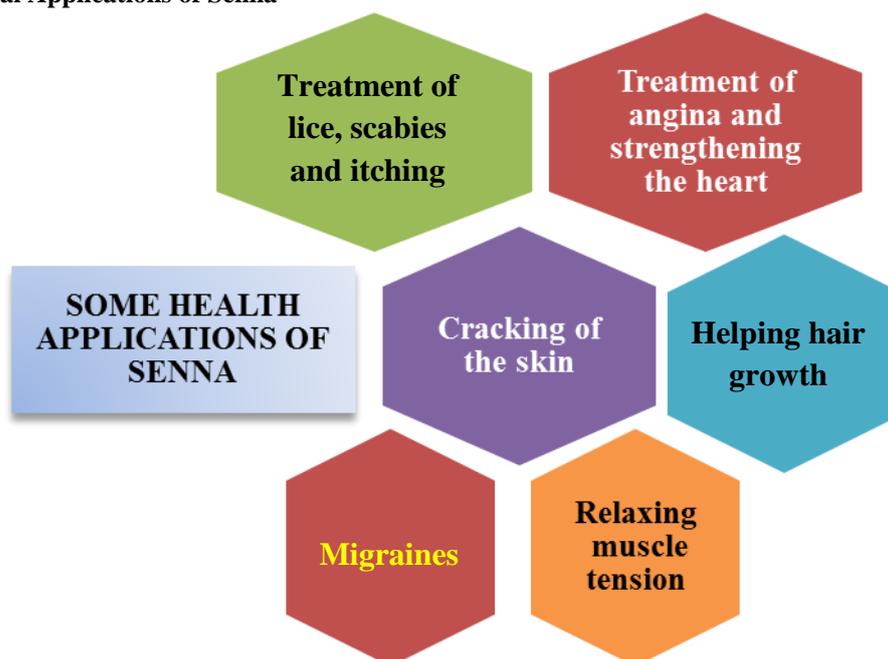


Fig. 5: Some health applications of Senna leaves.

#### Medical uses

According to Ibn Al-Qayyim, besides being a laxative, senna relaxes the muscle and improves the texture of hair; it also helps against lice, headache, rash and epilepsy. Senna can be used for the hair in the same way that Henna is applied. The difference is Senna does not colour the hair like Henna. It makes the hair thick and glossy and improves the health of the scalp. Today the leaves and pods of the Senna plant are important ingredients of laxatives sold in most pharmacies. It is a

well-known and accepted cure for constipation which begins to work 10-12 hours after ingestion. It detoxes the body and cleanses the colon. Sihab Al-Badry Yassin a researcher in Egypt compiled a chemical analysis proving the advantages of senna. In it he shows how senna cured a patient who had bacteria in the stomach that was preventing iron absorption in his body. He was treated with cupping and Senna as a detox to cleanse his stomach and colon. For further reading please refer to his book "Medicating with Senna, A prophetic way of

life.”<sup>[17]</sup> Senna is hot and dry in the first degree. The best senna is the Meccan variety, which is a blessed and a safe plant. Besides its use as mild laxative, senna's other benefits include purification of the yellow and black bile and is used in the in the treatment of angina of the heart (*angina pectoris*), black jaundice, hepatitis ,herpes simplex, cracking of the skin, migraine headache, hair loss, lice scabies, skin pimples, itching and epilepsy and for relaxing muscle tension.<sup>[18]</sup>

## What Are The Health Benefits of Senna?

### 1. May Help Relieve Constipation

The well-known use of this herb is as a laxative and a purgative. It is now known that the laxative effects of Senna are thanks to anthraquinone glycosides referred to as sennosides. These compounds stimulate intestinal contractions that lead to the rapid expulsion of waste matter. Senna can also be ready to soften the stool by assisting the massive intestine to soak up more water and adding bulk to faeces. This allows for bowel movements that are quick and smooth as waste passes through the massive intestine. Senna is employed as a stimulant laxative in traditional medicine. It can be found in various herbal remedies like Black draught, Diasenna, Daffy's Elixir, and herbal teas.<sup>[19]</sup>

### 2. May Treat Irritable Bowel Syndrome (IBS)

Irritable Bowel Syndrome or Disease (IBS or IBD) is characterized by chronic stomach ache. It is accompanied by abnormal bowel habits (diarrhea, constipation, or both). The pain often begins after eating and subsides after a bowel movement. The symptoms of IBS are bloating, the passage of mucus, and a feeling of incomplete emptying.<sup>[20]</sup> Due to its laxative property, senna might help manage the symptoms of irritable bowel syndrome (IBS). How senna achieves this is yet to be studied, but some experts speculate that since the herb induces colon contractions, it may force the stool to move out.<sup>[21,22]</sup>

### 3. Colon Cleanse

Senna is often used to clear the bowel before diagnostic tests such as colonoscopies. Cleansing the colon is believed to enhance nutrient uptake and support overall colon health.

### 4. Anti-Parasitic

Senna also works as an effective vermifuge to destroy parasites and expel worms from the intestinal tract. It works best when combined with other anthelmintic herbs (used within the treatment of roundworm), like ginger or fennel. These herbs increase regularity and reduce the prospect of bowel cramps thanks to Senna's strong action.

### 5. Digestive Health

In the case of indigestion, Senna contains natural enzymes that help to restore gastric juice secretions in the stomach. Senna, if utilized in the right dosage surely periods of your time, has shown potential in reducing

irritability within the intestines by improving overall digestion. Senna also contains the anti-inflammatory compound resveratrol which can help to soothe inflammation in the gastrointestinal tract.

### 6. Skin Health

Senna leaves contain essential oils and tannins that help to alleviate skin inflammation. With a strong antibacterial activity, they can be made into a compress which can be applied to wounds and burns. Acetone and ethanol compounds present in Senna can fight the microorganisms that cause acne. Senna also helps to scale back sebum production and increase cell regeneration and collagen production.

### 7. Typical Use

Senna Leaf/Pod Tea: Pour hot (not boiling) water over ½ to 2 grams (one-quarter teaspoon) of crushed Senna herb. Allow the tea to steep for 10 minutes and then strain.

Senna Leaf/Pod Tincture: Traditionally taken: 2-3ml taken 2-3 times per day, or as directed by a Herbal Practitioner.

## CONCLUSION

In present scenario the use of herbal medicine is growing as an alternate way to treat those diseases which have no cure in modern medicine or for which there is risk of side effects. In Unani Medicine the diseases are treated with herbal drugs like Senna leaves. The information contained in this review article is the comprehensive review carried out on Senna plant. The present work focuses on the taxonomic and pharmacognostic and medicinal characteristics of plant. Based on these facts, we can conclude that These crops generally are rich source of sennosides, glycosides and other nutrients and can provide a solution to the problem of malnutrition and other diseases to a great extent. It is considered one of the world's most useful crop as almost every part of the senna can be used.

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