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Review Article

Exploring the Therapeutic Potential of *Senna auriculata* Linn: A Comprehensive Review

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ABSTRACT

Auriculata Senna Linn, often referred to as Tanner's Cassia or Avaram Senna, is a plant with several therapeutic uses that is widely used in ancient medical systems, especially Ayurveda and Siddha. The goal of this thorough assessment is to compile the body of knowledge and provide insight into *Senna auriculata*'s potential as a treatment for a range of illnesses. After discussing *Senna auriculata*'s botanical description and traditional use, this article explores the plant's phytochemical makeup, emphasizing its wide range of bioactive substances, including flavonoids, saponins, tannins, and alkaloids. These substances have been linked to the pharmacological effects of the plant, which include hepatoprotective, anti-inflammatory, anti-cancer, antidiabetic, antibacterial, and antioxidant qualities. Additionally, this review explains the pharmacological processes that underlie these therapeutic benefits, clarifying the ways in which *Senna auriculata* works to produce its positive effects. Furthermore discussed is *Senna auriculata*'s safety profile, which highlights the significance of appropriate dosage and administration while addressing its toxicity and possible side effects. Additionally, a summary of recent developments in preclinical and clinical research examining the therapeutic effectiveness of *Senna auriculata* extracts and formulations is presented, offering insights into the plant's possible uses in contemporary medicine. Numerous medical illnesses are covered in these studies, including cancer, inflammatory diseases, microbial infections, diabetes mellitus, and hepatic disorders. In summary, this thorough analysis highlights *Senna auriculata* Linn's significant medicinal potential, which is supported by its diverse pharmacological activity and traditional use. But more investigation, including carefully planned.

INTRODUCTION

Up to 500 meters above sea level, *Senna auriculata* (L.) Roxb. grows in wooden meadows. In arid

areas with 300 mm of precipitation each year, it breeds naturally. It requires full light to develop and does best in regions with yearly temperatures

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between 15 and 28° C. This branched shrub has a trunk diameter of 20 cm, a height of 1.5 to 5 m, and brown lenticellate bark¹. In India's Ayurvedic and Siddha medical systems, Avartaki (*Senna auriculata* (L.) Roxb. syn. *Cassia auriculata* L.; Family: Fabaceae) is a traditional medicinal plant that is used extensively to cure a variety of illnesses. Nearly every component of the plant, including the roots, bark, seeds, leaves, and flowers, has been used medicinally. Diabetes, asthma, rheumatism, dysentery, skin conditions, and metabolic problems have all historically been treated with it². Alkaloids, anthraquinone, flavone glycosides, sugar, saponins, phenols, terpenoids, flavonoids, tannins, steroids, palmitic acid, linoleic acid, and benzoic acid are the main phytochemicals found in *Senna auriculata* (L.) Roxb. Proanthocyanidin B1, epicatechin, ferulic acid, α -tocopherol- β -D-mannosidase, resorcinol, 2-hydroxyl methyl ester, 1-methyl butyl ester, and quercetin-3-O-rutinoside. Numerous pharmacological activities, including antidiabetic, antioxidant, anti-inflammatory,

antihyperlipidemic, hepatoprotective, nephroprotective, cardioprotective, anti-atherosclerotic, anticancer, antimutagenic, antimicrobial, antiulcer, antipyretic, anthelmintic, immunomodulatory, antifertility, antivenom, and antimelanogenesis, are possessed by the extracts from its various parts and their isolated compounds³.

Leaves: The leaves have 16–24 pairs of leaflets and are alternating, stipulate, and paripinnate in arrangement. They are dull green in color. The rachis is 8.8–12.5 cm long, sharply furrowed, slender, pubescent, with an upright linear gland between each pair of leaflets (16–24), and the leaves are alternating, stipulate, paripinnate compound, extremely numerous, closely spaced. 1-2 cm long, 1-3 cm wide, somewhat overlapping, oval, oblong, obtuse, mucronate at both ends, glabrous or minutely downy, dull green, paler underneath, with extremely big, reniform-rotund stipules that are persistent and generated at the base on the side of the next petiole into a filiform point.



Figure:1: Leaves of *Senna auriculata*

Flowers: The flowers are huge (50 mm), irregular, and bright yellow. They have two to eight flowers in an axillary raceme inflorescence (Figure 1). The flowers are pentamerous, bisexual, zygomorphic, and 4–5 cm long. The sepals are rounded at the apex and imbricate; the petals are free, imbricate, and unequal, and measure 1.5–3 cm. The ovary superior is falcate, with 1.5 cm long, stalked, style (fruit flattened), cylindrical pods that are 5–18 × 1-



Figure:2: Flowers of *Senna auriculata*

2 cm, transversely undulate between the 10–20 seeds, indehiscent, green, and brown when fully grown.^{5, 6}.

Fruits: The legumes are 7–11 cm long, 1.5 cm broad, rectangular, long-style bases, flat, thin, undulate, and crimped. The fruits are green or light brown (Figure 2). Each fruit contains 12–20 seeds, each in a separate cavity.

Figure:3: Fruits of *Senna auriculata*Table:1: Taxonomical classification of *Senna auriculata*⁷

1	Kingdom	Plantae
2	Clade	Tracheophytes, Eudicots, Rosids
3	Order	Fabales
4	Family	Fabaceae
5	Genus	Senna
6	Species	<i>S. auriculata</i>
7	Bionomial Name	<i>Senna Auriculata</i>
8	Synonyms	<i>Cassia auriculata</i> L. and <i>Cassia densistipulata</i> Taub. English Name: Tanner & acutes cassia Marathi Name: Taravad Status: Native Edible parts: Young leaves and flower.

Table:2: Botanical description of *Senna auriculata*

1.	Latin	Careyaarborea
2.	Sanskrit	Aavartaki
3.	Hindi	Tarwar
4.	Marathi	Tarwad
5.	Kannada	Tangadi
6.	Gujarati	Awala
7.	Tamil	Aavarai, Avaram
8.	Telugu	Olle thangadi, Honambregida
9.	Malayalam	Avaram

1. Historical uses also traditional practices:

Senna auriculata Linn, otherwise known as Tanner's Cassia, has a rich history of traditional uses and practices that span centuries. This plant holds a significant place popular various new medicine systems, including Ayurveda and modern Chinese medicine. Historically, *Senna auriculata* Linn has been utilized for its diverse therapeutic properties, ranging from its role in treating skin diseases and promoting hair growth to its effectiveness in managing diabetes and improving digestion.⁸ In Ayurveda, *Senna auriculata* Linn is valued for its ability to balance the doshas, particularly in cases of Pitta and Kapha imbalances. Its bitter and astringent tastes are believed to have a preservation effect on the body, production it a prevalent optimal for conditions associated with excess heat or nflammation. Traditional practices involving *Senna auriculata* Linn often include the preparation of decoctions, infusions, or powders derived from diverse portions of the plant, for example the leaves, flowers, & seeds. These remedies are identified for their purgative, diuretic, and antidiabetic possessions, making them appreciated in the management of various health conditions. By delving into the historical uses and traditional practices surrounding *Senna auriculata* Linn, we can gain a deeper considerate of its therapeutic possible and appreciate the wisdom passed down through generations regarding the healing properties of this remarkable plant.

2. Phytochemical composition of *Senna auriculata* Linn

Senna auriculata Linn, correspondingly known as Tanner's Cassia/Avaram Senna, is a plant with a annoying phytochemical composition that contributes to its therapeutic potential. This plant is renowned for its varied array of bioactive compounds, together with flavonoids, alkaloids, saponins, tannins, and glycosides, among others. Flavonoids found in *Senna auriculata* Linn possess antioxidant belongings that help combat oxidative stress and irritation in the body. Alkaloids present in this plant have been associated with various pharmacological activities, such as analgesic and anti-inflammatory properties. Saponins subsidize to the plant's potential as a natural surfactant and may have cholesterol-lowering properties. Tannins found in *Senna auriculata* Linn are identified for their astringent properties and impending profits in wound healing then gastroprotective properties. Additionally, glycosides present in this plant are believed to exert cardioprotective and hepatoprotective effects. Understanding the phytochemical composition of *Senna auriculata* Linn is crucial in exploring its therapeutic potential and developing natural remedies harnessing the plant's beneficial properties. Researchers continue to investigate the bioactive compounds present in this plant to unlock its full medicinal value and promote its use in traditional and modern healthcare practices.⁹

3. Pharmacological properties and potential therapeutic benefits

Senna auriculata Linn, also identified as "Tanner's Cassia," remains a plant that has been traditionally used in various medicinal practices for its pharmacological properties and potential therapeutic benefits. This herbaceous shrub is native to India and holds a significant position in Ayurvedic and traditional medicines systems. Research has indicated that *Senna auriculata* Linn possesses a varied range of pharmacological

properties, with anti-inflammatory, antioxidant, antimicrobial, antidiabetic, besides hepatoprotective actions. These possessions make it a promising candidate for the treatment of various heal conditions. One of the important therapeutic profits of *Senna auriculata* Linn is its impending in managing diabetes. Studies have shown that extracts from this plant exhibit hypoglycemic effects, helping to control blood sugar levels. Additionally, its antioxidant possessions help in reducing oxidative stress, which is often elevated in diabetic patients.

Furthermore, *Senna auriculata* Linn has confirmed antimicrobial activity compared to a variety of pathogens, making it a valuable natural remedy for infections. Its anti-inflammatory belongings can also aid in the management of inflammatory situations. As research on *Senna auriculata* Linn continues to unfold, its pharmacological properties and therapeutic benefits proposal promising avenues for additional exploration now the real of natural medicine and drug development.¹⁰

4. Antioxidant and anti-inflammatory properties

Senna auriculata Linn, also referred to as Avaram Senna or Tanner's Cassia, has been gaining popularity due to its potent anti-inflammatory and antioxidant qualities. Research studies have highlighted the potential therapeutic benefits of this plant in combating oxidative stress and inflammation within the body. In order to combat dangerous free radicals, which are known to damage cells and play a part in a number of chronic illnesses, antioxidants are essential. Bioactive substances such flavonoids, phenolic acids, and tannins, which have strong antioxidant properties, are abundant in *Senna auriculata* Linn. This plant may help shield cells from harm and promote general health by scavenging free radicals and lowering oxidative stress. Furthermore, *Senna auriculata* Linn is a promising option for treating inflammatory diseases due to its anti-



inflammatory qualities. Although inflammation is a normal immune response, persistent inflammation can cause tissue damage and play a role in the onset of conditions including cancer, heart disease, and arthritis. *Senna auriculata* Linn's anti-inflammatory substances have demonstrated promise in modifying inflammatory pathways and lowering the body's inflammatory levels. Researchers and medical professionals are discovering *Senna auriculata* Linn's therapeutic potential in enhancing health and wellness by investigating its anti-inflammatory and antioxidant qualities. To clarify the precise mechanisms of action and possible clinical uses of this herbal treatment, more research is required^{11,12,13,14,15}.

5. Antidiabetic effects and blood sugar regulation

Senna auriculata Linn, sometimes referred to as Tanner's Cassia or Avaram Senna, has drawn attention because of its capacity to control blood sugar levels and possible antidiabetic benefits. The plant is a promising natural treatment for diabetes because of its capacity to improve insulin sensitivity and lower blood glucose levels, as demonstrated by numerous research. The bioactive compounds present in *Senna auriculata* Linn, such as flavonoids, alkaloids, and tannins, have been attributed to its antidiabetic properties. These compounds work synergistically to enhance glucose uptake, inhibit glucose absorption in the intestines, and stimulate insulin secretion from pancreatic beta cells.

Additionally, the plant's antioxidant qualities aid in the fight against oxidative stress, which is a major cause of difficulties associated with diabetes. *Senna auriculata* Linn may help shield pancreatic cells from harm and maintain their ability to produce insulin by scavenging free radicals and lowering inflammation. *Senna auriculata* Linn may be a safe, natural way to manage diabetes and support blood sugar

management in general when added to dietary supplements or herbal preparations. To completely clarify the mechanisms of action and therapeutic potential of this herbal remedy in the treatment of diabetes, more investigation and clinical studies are necessary^{16,17}.

6. Liver protective properties

Senna auriculata Linn, also identified as Tanner's Cassia, holds significant promise now the realm of liver protection. Research has unveiled its potent liver protective properties, showcasing its ability to shield this vital organ from various forms of damage. Studies have demonstrated that *Senna auriculata* Linn possesses antioxidant belongings that combat oxidative pressure in the liver, reducing the risk of liver cell damage and inflammation. By scavenging free radicals and enhancing the body's natural defense mechanisms, this botanical marvel helps maintain liver health and function. Furthermore, the bioactive compounds found in *Senna auriculata* Linn exhibit hepatoprotective effects by promoting liver regeneration and detoxification processes. These mixtures aid in the removal of harmful toxins besides pollutants since the liver, ensuring optimal liver function and overall well-being. Incorporating *Senna auriculata* Linn into therapeutic protocols and dietary regimens may offer a natural and effective means of safeguarding the liver against various insults, supporting liver health, and potentially mitigating the risk of liver-related disorders.

7. Antimicrobial and antiparasitic activities

The antibacterial and antiparasitic properties of *Senna auriculata* Linn, sometimes referred to as Tanner's Cassia or Avaram Senna, have been thoroughly investigated, demonstrating its potential therapeutic benefits beyond conventional medical applications. Numerous pathogenic bacteria, including both gram-positive and gram-negative species, have been shown to be inhibited in their growth by the plant. *Senna auriculata* Linn



is a good option for the creation of natural antibacterial agents because of this antimicrobial activity. Moreover, studies have demonstrated the plant's efficacy against parasitic infections, highlighting its role in combating parasitic diseases. The active compounds present in *Senna auriculata* Linn exhibit antiparasitic activity by targeting the parasites' reproductive processes or disrupting their cellular functions. This dual action against both microbes and parasites underscores the diverse therapeutic potential of *Senna auriculata* Linn in modern medicine. The exploration of *Senna auriculata* Linn's antimicrobial and antiparasitic activities not only sheds light on its pharmacological mechanisms but also paves the way for further research into harnessing its medicinal properties. By elucidating the intricate interactions between this botanical powerhouse and infectious agents, we move closer to unlocking its full therapeutic potential for combating microbial and parasitic diseases.^{18,19,20}

8. Potential uses in cancer treatment

Often referred to as "Tanner's cassia" or "Avaram senna," *Senna auriculata* Linn has demonstrated encouraging promise in the treatment of cancer. *Senna auriculata* Linn has bioactive substances with anti-cancer effects, according to research investigations. These substances have proven to have the capacity to stop cancer cells from proliferating, trigger apoptosis, or programmed cell death, and stop cancer from spreading to other body parts. Additionally, *Senna auriculata* Linn's antioxidant qualities are essential in preventing oxidative stress, a major contributor to the onset and spread of cancer. *Senna auriculata* Linn may aid in halting the development of cancer and improving the effectiveness of traditional cancer treatments by scavenging free radicals and lowering oxidative damage. Moreover, the anti-inflammatory effects of *Senna auriculata* Linn can contribute to reducing inflammation in the body, which is intimately associated with the emergence

of different kinds of cancer. By modulating the inflammatory response, *Senna auriculata* Linn may help in creating an unfavorable environment for cancer growth and metastasis. Although *Senna auriculata* Linn has been used more extensively in cancer treatment, the research that is now available indicates that this plant species has potential as a useful therapeutic agent in the battle against cancer.

9. Safety considerations and future research directions

When investigating the therapeutic potential of any herbal treatment, including *Senna auriculata* Linn, safety considerations are crucial. Although this plant has long been used for its therapeutic qualities, thorough investigation and clinical trials are essential to guaranteeing its safety profile. To protect the health of those who use *Senna auriculata* Linn, potential side effects, pharmacological interactions, and contraindications need to be carefully examined.

Moreover, upcoming exploration directions must concentrate on expanding our understanding of the pharmacological mechanisms of *Senna auriculata* Linn, identifying its active compounds, and exploring novel therapeutic applications. Collaborative efforts between researchers, healthcare professionals, and traditional medicine practitioners can further enhance the scientific knowledge surrounding this plant and unlock its full therapeutic potential. By prioritizing safety considerations and advancing research efforts, we can harness the benefits of *Senna auriculata* Linn effectively and responsibly, paving the way for its integration into modern healthcare practices

1. Tender fruits have mentioned for their Vamihara (Antiemetic), Krimihara (Anthelmintic), Sarvapramehahara (Antidiabetic), Trishnaghna (Thirst improving), Akshihita (Eye tonic), Ruchya (Appetizing) properties.



2. Seeds are useful by way of *Madhumehaghna* (Antidiabetic), *Vishahara* (Antidote), *Raktaatisaraghna* (Anti-diarrheal)

3. Roots are mentioned for *Trishnahara* (thirst improving), *Pramehaghna* (Antidiabetic), *Shwasaghna* (Antiasthmatic), *Raktapittashaman* (Antihemorrhagic), *Shukrakshayahara* (Spermenhancinf) possessions.

4. Traditionally, the leaf macerate of *Senna auriculata* (L.) Roxb. was used to treat infections, particularly in Gujarat, Andra Pradesh, and Maharashtra. In cases of joint diseases, it also successfully lowers inflammation and pain. Additionally, the leaves of *Senna auriculata* (L.) Roxb are useful for treating gastritis, ulcers, skin sores, muscle soreness, and abnormal muscle contraction. The flowers work well as agents that promote health.

5. The crushed flowers are mixed with goat milk to cure sexually transmitted diseases. The dried powder of flowers of *Senna auriculata* (L.) Roxb. is used to clean the hair, and taken by diabetic

patients and in fever. The root is chewed and its juice is consumed to treat diarrhea, vomiting, diarrheal illness, tumors, and stomach symptoms. Bark powder is applied to the gums at night to alleviate toothaches. Helminthic infections are treated using the fruits.

6. 3-o-methy-d glucose, alpha-tocopherol-beta-D-mannosidase, n-hexadecanoic acid, resorcinol, octadecenal, and carboxylic acid are all found in *Senna auriculata* (L.) Roxb. leaves.

According to reports, the seeds of *Senna auriculata* (L.) Roxb. contain fatty acids, specifically palmitic, oleic, and linoleic acids. Benzoic acid, 2-hydroxyl methyl ester, glycine, n-(trifluoroacetyl), 1-methybutyl ester, cupric acid ethyl ester, resorcinol, and water-soluble galactomannan such as beta-D-manopyranosyl-1(1-4)-o-beta-D-manopyranosyl (1-4)-o-beta-D-monopyranose were all detected in the ethanolic seed extract. The identified metabolites may play a part in inflammatory disorders, microbial infections, and oxidative stress.

Table 3: Phytoconstituents present in different parts of *Senna auriculata*

Sr. No.	Parts Of the Tree	Phytoconstituents
1	Roots	3-o-methy-d glucose, alpha-tocopherol-beta-D-mannosidase, n-hexadecanoic acid, resorcinol, octadecenal and carboxylic acid. The seeds of <i>Senna auriculata</i> (L.) Roxb. reported with presence of fatty acids content are palmitic, oleic, and linoleic acids. The ethanolic seed extract showed the presence of benzoic acid, 2-hydroxyl methyl ester, glycine, n-(trifluoroacetyl), 1-methybutyl ester, cupric acid ethyl ester, resorcinol, water-soluble galactomannan like beta-Dmanopyranosyl-1(1-4)-o-beta-D-manopyranosyl (1-4)-obeta-D-monopyranose. ^{21,22}
2	Flower	alkaloids, glycosides, saponins, polyphenols, tannins, phlorotannins, terpenoids, triterpenes, carbohydrates, proteins, amino acids, anthraquinone, aloe-emodin, and sitosterols. ^{5,6}
3	Seeds	α -spinasterol, Δ 22-stigmastenol Triterpenoids: Barringtonenol C. ²³
4	Leaves	3-o-methy-d glucose, alpha-tocopherol-beta-D-mannosidase, n-hexadecanoic acid, resorcinol, octadecenal and carboxylic acid. valoneic acid dilactone. ⁴
5	Flowers	alkaloids, glycosides, saponins, polyphenols, tannins, phlorotannins, terpenoids, triterpenes, carbohydrates, proteins, amino acids, anthraquinone, aloe-emodin, and sitosterols.

Table 4: Pharmacological Actions of *Senna auriculata*(L) Rox

1. Insulinogenic Action
2. Hepatoprotective Action
3. Antihyperlipidemic Action
4. Insulinogenic Action
5. Hepatoprotective Action
6. Antihyperlipidemic Action
7. Antiatherosclerotic and Cardioprotective Action
8. Antifertility Action
9. Cytotoxic Activity
10. Immunomodulatory Effect
11. Nephroprotective Activity
12. Antipyretic Activity
13. Antiviral Activity
14. Anthelmintic Action
15. Anti-Melanogenesis Action
16. Antioxidant Action
17. Antimutagenic Action
18. Antimicrobial Action
19. Anti-Ulcer Action

CONCLUSION:

- As a researchers continue to explore its therapeutic applications, it is evident that *Senna auriculata*, Linn holds great promise as a natural remedy.
- Hopes this review has deepened your understanding of the medicinal properties of this plant and sparked further interest in its therapeutic potential.

REFERENCES

1. Nille GC, Mishra SK, Chaudhary AK, Reddy KR. Ethnopharmacological, phytochemical, pharmacological, and toxicological review on *senna auriculata* (L.) Roxb.: A special insight to antidiabetic property. *Frontiers in pharmacology*. 2021 Aug 24;12:647887.
2. Nille GC, Mishra S, Trigunayat A, Reddy KR. Comparative antidiabetic investigation of talapotaka churna and avartaki churna in STZ-Induced diabetic rats. *Asian J. Pharmaceut*. 2016 Jul 1;10(3):S243-9.
3. Nille GC, Mishra SK, Chaudhary AK, Reddy KR. Ethnopharmacological, phytochemical, pharmacological, and toxicological review on *senna auriculata* (L.) Roxb.: A special insight to antidiabetic property. *Frontiers in pharmacology*. 2021 Aug 24;12:647887.
4. Nandhini HH, Punithavathy S, Lokesh A, Hariram S. Exploring the therapeutic potential-A comprehensive review of the medicinal properties of *Senna auriculata* Linn The god gifted plant.
5. Soundharajan SR, Ponnusamy RD. Chemical composition and characterization studies of *Senna auriculata* flower extract. *International Journal of Pharmacy and Pharmaceutical Sciences*. 2014;6(7):327- 330.
6. Senthil Rani S, Renuka Devi P. Chemical composition and characterization studies of *Senna auriculata* flower extract. *International Journal of Pharmacy and Pharmaceutical Sciences*; c2014 .p. 6.
7. Nadkarni KM. *The Indian Materia Medica*. Mumbai: Popular Prakashan; 2002;I:284.
8. Singla L, Kaundal M. Role of Ayurvedic herbs in managing Urinary System Diseases: A Review. *Journal of Ayurveda and Integrated Medical Sciences*. 2024 Jul 23;9(5):132-43.
9. Prasathkumar M, Raja K, Vasanth K, Khusro A, Sadhasivam S, Sahibzada MU, Gawwad MR, Al Farraj DA, Elshikh MS. Phytochemical screening and in vitro antibacterial, antioxidant, anti-inflammatory, anti-diabetic, and wound healing attributes of *Senna auriculata* (L.) Roxb. leaves. *Arabian Journal of Chemistry*. 2021 Sep 1;14(9):103345.
10. Deshpande S, Kewatkar SM, Paithankar VV. In-vitro antioxidant activity of different fraction of roots of *Senna auriculata* Linn. *Drug Invention Today*. 2013;5:164-168.



11. Jaydeokar AV, Bandawane DD, Bibave KH, Tushar PV. Hepatoprotective potential of *Senna auriculata* roots on ethanol and antitubercular drug-induced hepatotoxicity in experimental models. *Pharmaceutical Biology*. 2014;52(3):344-355.
12. Kumar S. Anti-psoriatic activity of *Senna auriculata* L. flowers in Freund's adjuvant formaldehyde induced animal model. *Indian Journal of Natural Products and Resources*. 2020;10(4):259-265.
13. Meena V, Baruah H, Parveen R. *Senna auriculata*: A healing herb for all remedy. *Journal of Pharmacognosy and Phytochemistry*. 2019;8(3):4093-4097.
14. Ganesh S, Arivarasu L, Rajeshkumar S, Thangavelu L. Anti-inflammatory activity of *Senna auriculata* flower extract. *Journal of Pharmaceutical Research International*. 2021;33(62A):396-403.
15. Indumathi TR, Devaki E. Study of antimicrobial activity of *Senna auriculata* flower extract finished on cellulosic fabrics. *Journal of Natural Fibers*. 2017;14(3):369-377.
16. Salma B, Janhavi P, Muthaiah S, Veeresh P, Nanjundaiah MS, Divyashree S, Peddha M. Ameliorative efficacy of the *Senna auriculata* root against high-fat-diet+ STZinduced type-2 diabetes in C57BL/6 mice. *ACS Omega*. 2020;6(1):492-504.
17. Khader SZ, Syed Ahmed SS, Balasubramanian SK, Arunachalam TK, Kannappan G, Mahboob MR. Modulatory effect of dianthrone rich alcoholic flower extract of *Senna auriculata* L. on experimental diabetes. *Integrative Medicine Research*. 2017;6:131-140.
18. Meena V, Baruah H, Parveen R. *Senna auriculata*: a healing herb for all remedy. *Journal of Pharmacognosy and Phytochemistry*. 2019;8(3):4093-4097.
19. Prasathkumar M, Raja K, Vasanth K, Khusro A, Sadhasivam S, Sahibzada MKU. Phytochemical screening and in vitro antibacterial, antioxidant, antiinflammatory, anti-diabetic, and wound healing attributes of *Senna auriculata* (L.) Roxb. leaves. *Arabian Journal of Chemistry*. 2021;14:103345.
20. Indumathi TR, Devaki E. Study of antimicrobial activity of *Senna auriculata* flower extract finished on cellulosic fabrics. *Journal of Natural Fibers*. 2017;14(3):369-377.
21. Meena V, Baruah H, Parveen R. *Senna auriculata*: a healing herb for all remedy. *Journal of Pharmacognosy and Phytochemistry*. 2019;8(3):4093-4097.
22. Deshpande S, Kewatkar SM, Paithankar VV. In-vitro antioxidant activity of different fraction of roots of *Senna auriculata* Linn. *Drug Invention Today*. 2013;5:164-168.
23. Rai KN. A new anthraquinone glycoside from the hard wood of *Senna auriculata*. *Asian Journal of Chemistry*. 1997;9:877-878.

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