

Medicinal Use and Properties of *Syzygium cumini* (Jamun)

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ARTICLE ID: 005

ABSTRACT

Syzygium cumini, also known as Indian blackberry, Jamun, Jambu, Jambul, Jambool, and Naval, belongs to the Myrtaceae family. Ayurveda has recorded Jamun's historic uses, and it has considerable health advantages for a number of diseases. The majority of *S. cumini* plant components are used in traditional Indian medicine. Different parts of the tree, such as the leaf, bark, seed, and pulp, are used to treat diabetes, allergies, viral infection, inflammation, and gastric ulcers. Jambolin and organic acids are among the phytochemicals found in *Syzygium cumini* seeds. Jamun seeds are used to treat gastrointestinal disorders in Ayurveda. Its bark is bitter, pleasant, astringent to the bowels, anthelmintic, and useful for sore throats, bronchitis, asthma, thirst, biliousness, dysentery, blood impurities, and ulcers. Jamun leaf gall extract contains a number of antioxidant phytochemicals that are used to treat a number of metabolic illnesses, including diabetes, arthritis, cancer, and liver disease.

Keyword: Ayurveda, Phytochemicals, Diabetes, Jambolin.

Introduction

Jamun is a significant minor crop in India that is native to the country. Bangladesh, India, Nepal, Pakistan, the Philippines, and Indonesia are all home to this evergreen tropical tree. It is a tall, evergreen tree that becomes partially deciduous during droughts. Jamun is a fast-growing tree that reaches heights up to 100 feet, and it bears fruits in clusters during the summer. Each fruit cluster may contain fruits numbering only a few to as many as 10 or even 40. The Jamun fruits are round to oblong in shape, with the size of each varying between 1/2 to 2 inches. They are green in color and turn from light to dark purple, or even black coloration, once they are fully ripe. The taste of the Jamun fruits is sweetish sour, and eating of the fruits tends to color the tongue purple. It can be found growing wild all around the country. It is a nicely curved tree that is grown on the bunds and roadside avenues for its excellent fruits, shade, and windbreak.

The Jamun tree is considered sacred by Hindus and Buddhists, alike, and is commonly found in the compounds of Hindu temples. It is considered dear to Lord Krishna and its leaves and fruits are offered to Lord Ganesha (Elephant God) during his worship

Ayurvedic medicine traditionally uses the fruits, leaves, seeds, and bark. Tannins, sugars, and other vital elements found in its bark aid in the treatment of a variety of ailments. Astringent, sweet, refrigerant, carminative, diuretic, digestive, anthelmintic, febrifuge, constipating, stomachic, and antibacterial are all properties of the plant's bark. Diabetes, pharyngitis, spleenopathy, urethrorrhea, and ringworm infection are all treated with the fruits and seeds.

**Jamun Tree****Fruit****Seed****Leaves****Bark**

Medicinal Uses of Jamun

1. In Ayurvedic medicine, 1–3 g of dried seed powder is usually given orally to humans to treat diabetic conditions.
2. Jamun is known in unani medicine to strengthen teeth and gums, enrich blood, and deworm against ringworm infection of the head.
3. The fruit juice is useful for treating enlarged spleen and resolving urinary problems.
4. The leaf juice and poultice of the leaves are effective in the treatment of dysentery and skin disorders.

5. The leaves have long been used to treat diabetes, constipation, and leucorrhoea, as well as to prevent blood from leaking into the faces.
6. The bark contains tannins and carbohydrates, accounting for its long-term use as an astringent to combat ailments like dysentery (Namasivayam *et al.* 2008).
7. The seeds have also shown anti-inflammatory effects in rats and antioxidant properties in diabetes (Chaudhuri *et al.* 1990).
8. Jamun fruit reduces the sugar in the blood and is very good in the control of diabetes. Its seeds contain Glucoside, Jamboline and Ellagic acid, which are reported to have the ability to check the conversion of starch into sugar in case of excess production of glucose (Giri *et al.* 1985).

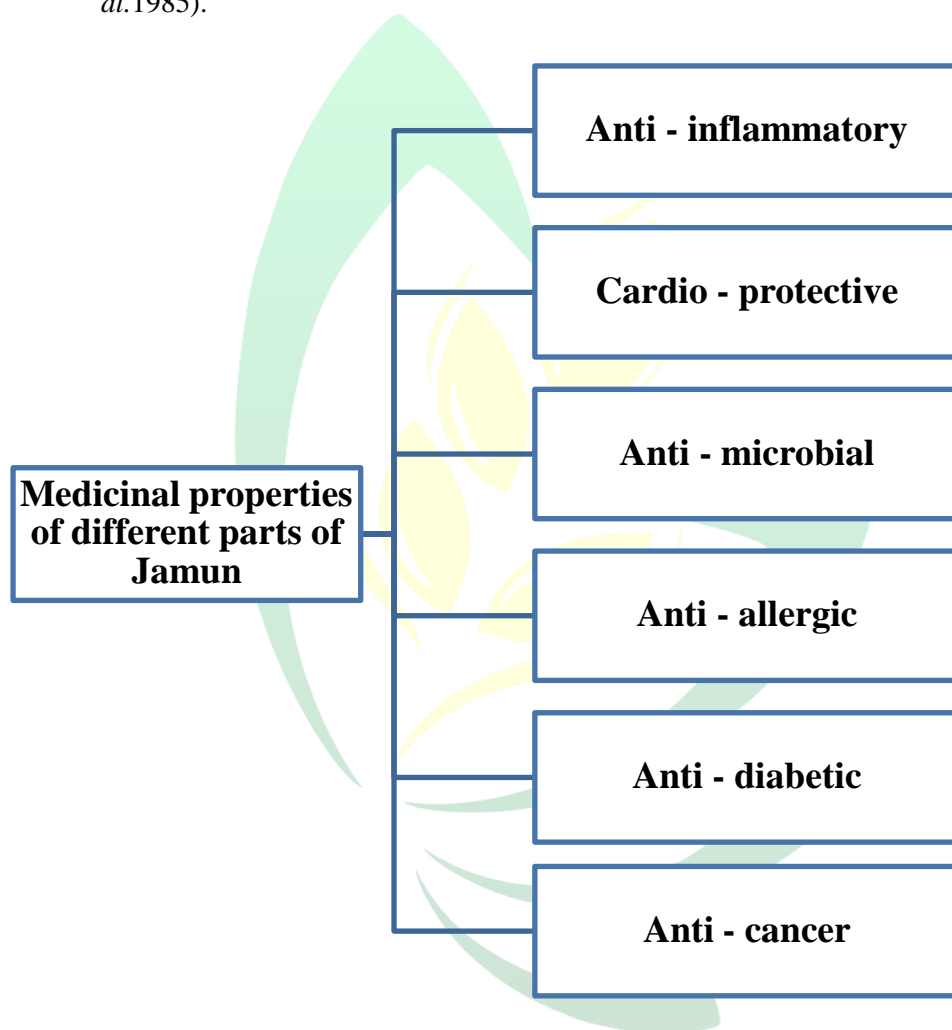


Table – Bioactive compound found in jamun

Name of the bioactive compound	Compound present	Uses
Terpenes	Mysterol, Citronellol, Eugenol, Terpinolene	Additive pharmaceutical
Flavonoids	Malvidin, Myricetin, Anthocyanin and Petunidin	Antioxidant, Coloring agent

Lipids	Lauric acid, Linoleic acid	Anti-acne
Alkanes	Malic acid, Citric acid	Antioxidant, Antiseptic
Phenols	Ferulic acid, Caffeic acid	Allelopathic Antibacterial

Phytochemistry

Jamun fruits and all other parts are rich in various phytochemical compounds. Jamun fruits are rich in anthocyanin, glucosides, ellagic acid, isoquercetin, kaemferol, myrecetin etc. Jamun seeds also contain number of phytochemicals such as jambosine, jamboline, gallic acid, ellagic acid, corilagin, quercetin, β -sitosterol etc. Flowers are rich in oleanolic acid. Astringency or sourness of fruit is due to gallic acid and tannins. Roots also contain several flavonoids and glycosides. Different plant parts are rich in different phytochemicals

Conclusion

The traditional uses of Jamun are noted in Ayurveda and it has tremendous health benefits over a various disease. *Syzygium cumini* has many phytochemicals in its seeds, leaves and bark. The phytochemicals are useful in treatment of various health problems. It has many medicinal and nutritional properties. Ultimately, we could say that *Syzygium cumini* is a real healing tree.

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