

Pharmacological potential of *Ficus benghalensis*: A Mini Review

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Abstract

Medical plants are utilized for curing various diseases throughout the globe. The biological application of medical plants is due to the presence of different classes of compounds. Medicinal plants are an important source of natural products which are produced in a selective and priced way. *Ficus benghalensis* is an important medicinal plant used to treat dysentery, diarrhea, inflammation, hemorrhagic diarrhea, etc. This review documented the medicinal application of *Ficus benghalensis*.

Keywords: *Ficus benghalensis*, Taxonomy, phytochemical, pharmacology.

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In developing nations, more than 80% of patients receive their medical care from conventional practitioners. Since they have been utilized for thousands of years, medicinal herbs have proven effective in a wide range of treatments (1). The abundance of medicinal plants found in biodiversity has provided humans with a multitude of remedies (2). The medicinally useful herbs were discovered, extracted for a biochemical profile, and prepared for medical use. They primarily obtain their medications from cultivated plants and wild botanicals (3). Ayurveda, Unani, and Siddha all use medicinal plants as their primary source of raw materials for their respective systems of medicine. There are over 25,000 potent plant-based formulations used in Indian medicine, and 1.5 million practitioners utilize remedial plants for promotion, prevention, and treatment, according to some estimates. (4). Seventy-four percent of the 119 pharmaceuticals developed and marketed today were derived from a pool of traditional herbal treatments used by 7800 medicinal drug production plants in India and utilize 2000 tons of herbs annually. In addition to producing drugs to treat serious illnesses like cancer, medicinal plants are widely used to extract herbal products like cosmetics. (5)

The *Ficus benghalensis* tree is a member of the Moraceae family, which is commonly known as a banyan or Unani medicine (6,7). The *F. benghalensis* tree is native to South Asia, particularly India, Sri Lanka, South China, Thailand, Malaysia, and Pakistan. It is frequently observed close to temples and other revered locations. It is seen as a holy tree by both Hindus and Buddhists. The banyan tree is widely grown in municipal parks and botanical gardens across the tropics of the New and Old Worlds (8). An extremely big evergreen tree, between 23 and 34 meters tall, with vast spreading branches supported by aerial roots that eventually grow auxiliary trunks spanning a wide area (9). Basic, alternation, the leaves are long 10-20 cm, broad 5-12.5 cm, ovate or orbicular-ovate to oblong, coriaceous, cuspidate obtuse, entirely whole, glabrous or pubescent under the surface, with a rounded base, sub chordate or sharp, strong basal veins, and 7-8 pairs of lateral veins. Stipules are coriaceous, 1.8 to 2.5 cm long, and have a coarse reticulate underside. Petioles are 1.2 to 5 cm long. Males, females, and incomplete females (gall flowers) are the three types of tiny, unisexual flowers found close to one another within the interior walls of sessile fleshy receptacles. Axillary pairs of pubescent basal bracts are present (10). The compound and pharmacological properties of the bark of *Ficus benghalensis* were broadly examined; in any case, a couple of studies allude to its leaves that are associated with both eating routine and medication. *Phytopharmacol. Res. J. Vol.1, Issue, 2, July 2022, pp. 19-23*

(11). It has antibacterial properties (12), antidiabetic (13,14), and anti-infectious and anti-tumor properties (15). Plant produces phytochemicals, a chemically diverse set of molecules that act as a defense against infections, predators, and rivals. They have chemical qualities that are beneficial to humans in the treatment of diseases, such as antioxidant, antibacterial, DNA replication interference, and enzyme inhibition or stimulation (16). Numerous studies revealed that *Ficus benghalensis* has a number of neuropharmacological potentials. (17). It has been claimed that the bark aqueous extract has good potential for improving cognition. (18). The various parts of the *Ficus benghalensis* plant have been reported for antimicrobial activity (19). Anti-plasmodial (20) anti-ulcer (21) anti-atherogenic (22), antiallergenic (20), analgesic (19), anti-inflammatory (23), antistress (24) mosquito larvicidal (25). Aerial roots ' *Ficus benghalensis* Anxiolytic, memory-improving, and muscle-relaxing properties have been identified and described (26). Ficus species were found to contain various active secondary metabolites, including phenol, tannins, steroids, saponins, flavonoids, alkaloids, sugars, protein, essential oil, and volatile oils, according to phytochemical research (27). The ethyl acetate extracts of ficus benghalensis have led to the extraction of mucusoside, carpachromene, and alpha amyryne acetate as well as O-L-rhamnopyranosyl-hexacosanoate-D-glucopyranosyl ester. The isolated compounds have shown good acetylcholinesterase antioxidant activity (28).

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