International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

A Review on Pharmacological Activity of Ficus Racemosa

Vaishnavi N. Dhavale[1*], Sushant. S. Dhandore[2], Sanjay. K. Bais[3].
Fabtech College of Pharmacy, Sangola-413307

Date of Submission: 05-11-2025 Date of Acceptance: 15-11-2025

ABSTRACT
In India, Ficusracemosa Linn. (Family: Moraceae), also referred to gularis a popular medicinal herb that has long been used in diabetes, liver issues, diarrhea, inflammatory diseases, hemorrhoids, and abnormalities of the respiratory and urinary systems. Every ancient Ayurvedic, Siddha, Unani, and homeopathic text mentions this herb. Astringent, carminative, vermifuge, and anti-dysentery properties are found in a variety of plant parts, including bark, roots, leaves, fruits, and latex. It is a useful treatment for overindulgence in food. Menorrhagia, diabetes, leucoderma, refrigerant, antiasthmatic, hepatoprotective, antioxidant, and antiulcer are all treated with fruit extract. It is applied locally to reduce inflammation in sprains, fibrositis, lymphadenitis, and skin wounds. The review that is currently being conducted is therefore an effort to offera thorough analysis of pharmacological, phytochemical, and pharmacogonstical features.Gluanol acetate, beta-sitosterol, and leucocynedin are the main chemical constituents, while beta-amyrin, beta-sitosterol, and tannin are found in leaves. Lupeol-OAc, glucose, sterol, and gluanol-OAcare chemically present in fruit.

KEYWORD: hemorrhoids, cluster fig, hepatoprotective, leucoderma, anti-dysentery properties, vermifuge, Menorrhagia, diabetes.

I. INTORDUCTION

Ficus is a significant group of trees with a variety of chemical ingredients that show promise as medicines. For Buddhists and Hindus alike, it is a sacred tree. Four species of this genus make up group known as "Nalpamaram."[1] F. Glomerata is another name for Ficusracemosa.,Gular, , Yajnayoga, Yajnyasara, Udusmbara are some of the aliases for Ficusracemosa, which is revered by the god Dattaguru. Ritual sacrifice has been performed using it. Upon cutting or plucking the leaves, this type of ksirivriksa latex is released. Among the plants in a collectiveknown as pancavalkala, which refers to the five herbs' thick bark skins: parisa, plaksa, vata, asvattha, and udumbarais this one. According to Raja Nighantu, Decoction of pancavalkalais administeredeither directly or as an enema to stop rectum and vaginal bleeding. Udumbara is classified as an anti-diuretic herb by Maharishi Charka as mutrasangrahaniya. According to Susruta, the herb has astringent qualities, aids in the healing of calluses in fractures (bhagnasandhaniya), reduces Rakta pitta, burns, and makes people feel less fat, and is beneficial for vaginal problems.

HABIT AND HABITAT

In India, the plant thrives in a variety of hills and woods. It is often found near water streams and is grown as well. With a height of 10–16 meters,It is a medium-height tree. The foliage's deep green color offers nice shade. The bark is commonly broken and reddish-gray in color.[2]

PHARMACOGNOSTICAL CHARACTERISTICS

MACROSCOPICAL CHARACTERISTICS

In various woodlands and hilly locations, Ficusracemosa first appeared. For shade and edible fruits, In remote villages, this plant can be purposefully planted, although it also grows in forests naturally and onhillsides near an excellent source of water, like a river or pond. Green, elliptic or oval, and expanding from the primary trunk in large clusters, the leaves are 7.5–10 cm long. As they ripen, The green fruits may become dark crimson, dull reddish, or orange. Seeds, which number 23, are comparativelyGrain-like, tiny, and

International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

plentiful. The roots are long and have a shade of brownIt has a powerful scent and a slightly bitter taste.[3]

➢ MICROSCOPICAL CHARACTERISTICS

Cork: It consists among cells that are rectangular or polygonal in shape. BothCork is composed of rectangular and polygonal cells. Thin-walled cells arranged in one or two layers make up the phellogen.

Phelloderm: Additionally, it is lignified with simple pits and contains thick parenchyma cell tissue or tiny sclereid clusters. One red calcium oxalate prism among many parenchymatouscells.

Cortex: It consists of several rectangular, isodiametric, pitted sclereids with very thick walls, and a resinous substance is present in the cortical cell inside of it. Prismmatic crystals of this calcium oxalate are seen within cells. The components of phloem include sclereids, medullary rays, phloem fibers, sieve tubes, phloem parenchyma, and companion cells.[4]

Leaf: It has Palisade cells with a single layer in the uppermost layer of the epidermis and dorso-ventral features. There were many, occasionally The upper epidermal cells have trichomes that are enclosing, uniseriate, unicellular.

Mesophyll: middle of bottom, upper layers of leaf's epidermis lies a layer of sclerenchymatous cells that envelop the vascular bundle.[5,6]

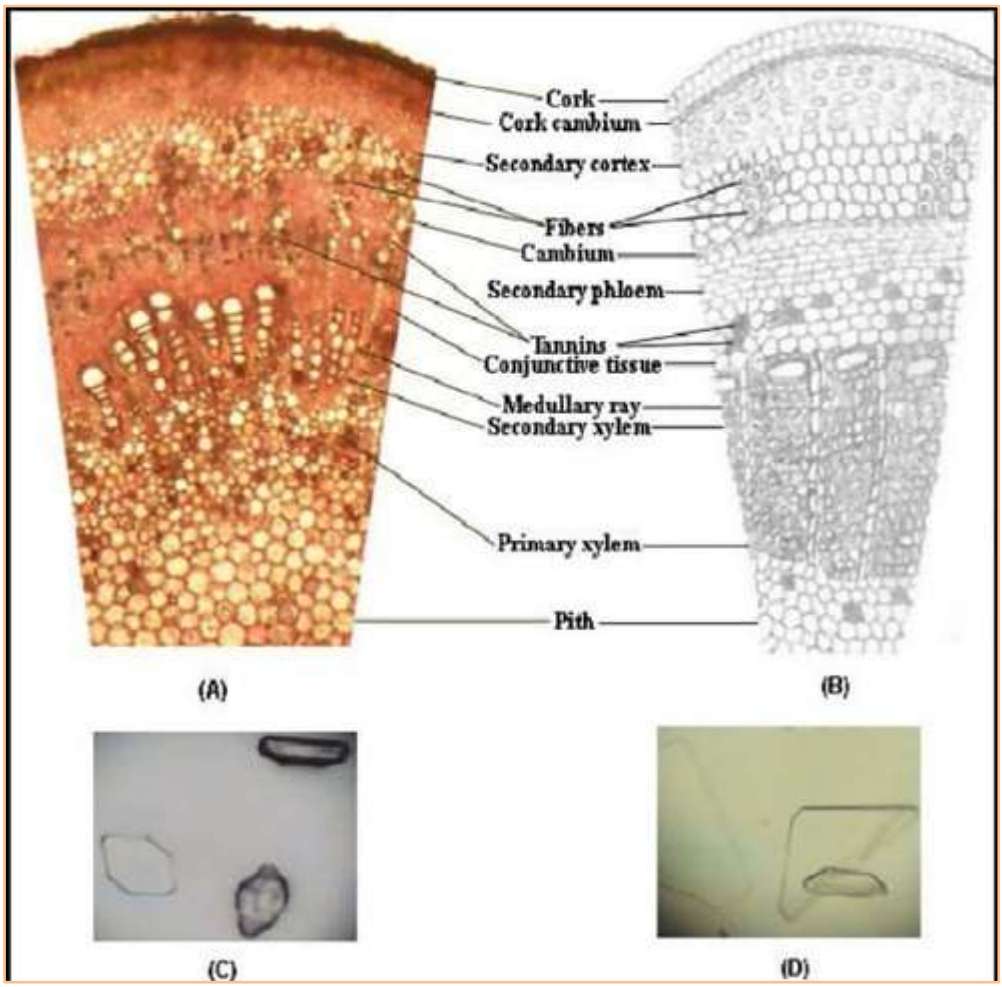


Fig 2: (A)- T.S. of the young stem containing the bark, (B)- Schematic diagram of the T.S., (C)- Rhomboidal crystals, (D)- Prismatic crystals.[7]

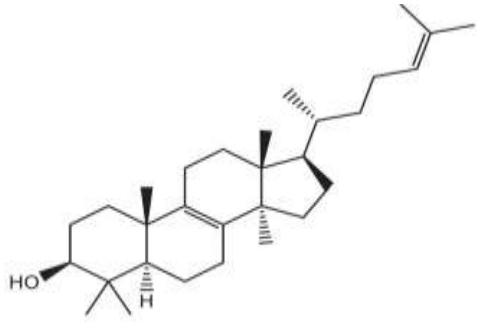
International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

- **Phytochemical Constituents**

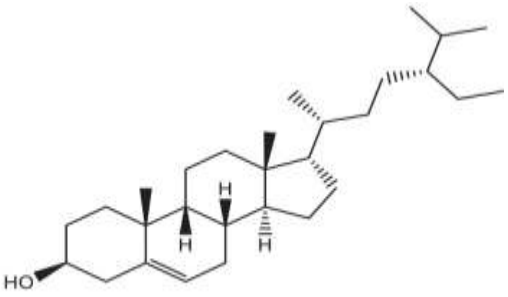
Leaf		Alkaloids, triterpenoids (lanosterol), flavonoids, tannins, and steroids. The leaves were used to isolate glauanol acetate, a novel tetracyclic triterpene with the following characteristics: 13alpha, 14beta, 17betaH, 20alphaH.[8]
Bark		Tannin, wax, saponin, glauanol acetate, beta-sitosterol, leucool, cerylbehenate, lupeolacetate, alpha-amyrin acetate, leucoanthocyanidin.[9]
Trunk		Stigmasterol, beta-sitosterol, upenol[10]
Fruit		Beta-sitosterol, glaunanolacetate, hetriacontane, tiglic acid, glucose, glauanol, glauanol acetate, and other phytosterols.[11]
Root		Tinyatoxin, bark euphorbol and its hexacosanoate, cycloartenal, euphorbi.[12]
Latex		Trimethylellagic acid, palmitic acid, taraxeros, tinyatoxin, tirucallol, euphol, euphorbinol, isoeuphorbol, 4-deoxyphorbol and its esters, a-amyrin, beta-sitosterol, cycloartenol, cycloartenol, cycloeuphordenol, and euphol.[13]

Fig: Phytochemical structures found and extracted from several Ficusracemosa Lin sections[14]

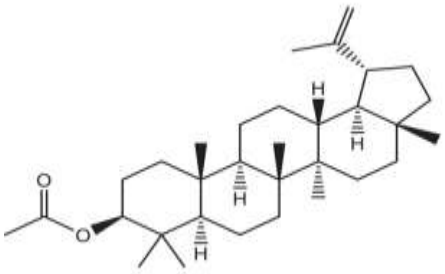
International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494



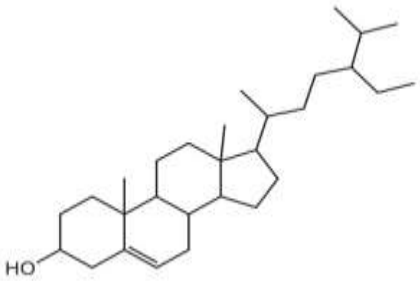
Lanosterol



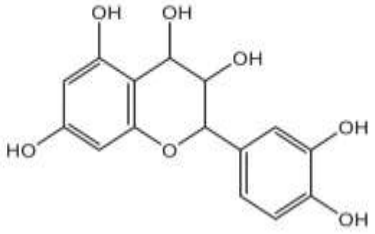
Sitosterol



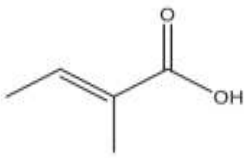
Lupeol acetate



beta-sistosterol



Leucocyanidin



Tiglic acid

➢ **Pharmacological Activities**

❖ **Antidiuretics**

The bark decoction of F. racemosa has demonstrated an antidiuretic action. It started in less than an hour, peaked 3 hr later and continued for whole five-hour study time. Additionally, rise in urine osmolarity and fall Na+ level and Na+/K+ ratio.[15]

❖ **Antitussive Activity**

It is properties of stem bark methanol extract were evaluated in mice model of coughing generated by SO_2 gas. The highest inhibition was 56.9%. 90 minutes following administration.[16]

❖ **Anthelmintic**

When bark crude extracts were tested on adult earthworms for anthelmintic action, they showed dose-dependent reduction of spontaneous movement (paralysis) and generated pin-prick responses that were similar to those of three percentpiperazine citrate. Given an aq. elucidate treatment, however, don't demonstrate a definitive recovery, suggesting the effectiveness of wormicidal treatment.[17]

❖ **Hypoglycemic Activity**

Glucose levels decreased in rats when given themethanolic extract at 200 and 400 microgram per kilogram. Additionally, the action was comparable to glibenclamide's (10 mg/kg)

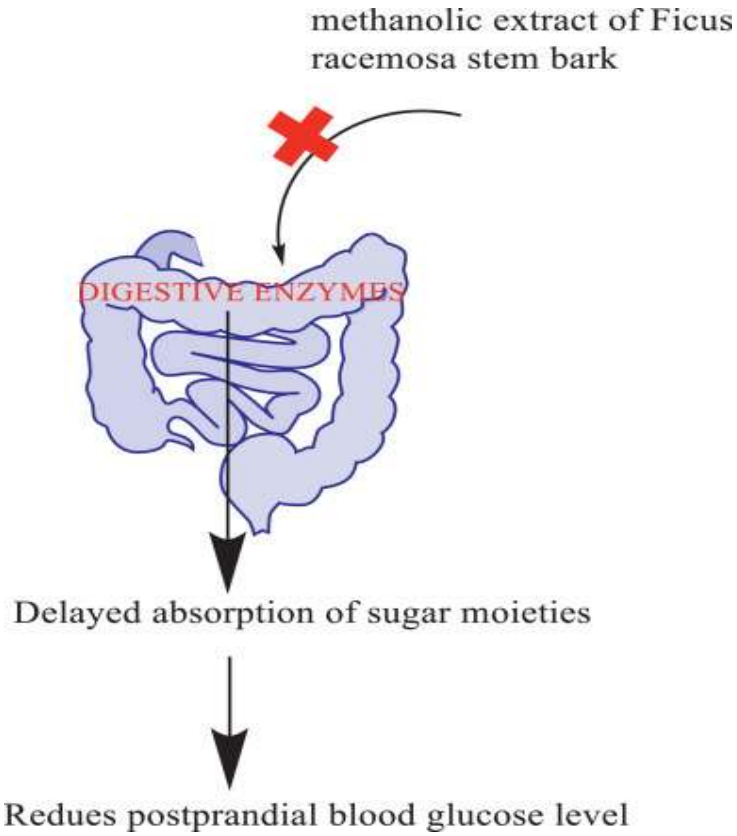
International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

impact, a common antidiabetic medication,proving its traditional claim to be an antidiabetic.[18,19]

The correlation between the hypoglycemia tests in F. racemosa and the post-absorptive condition demonstrated that improved hypoglycemic activity results from medication absorption.[20]In 14 days, decreased blood glucose levels in the alloxan-diabetic albino rats, demonstrating its hypoglycemic action. Comparing the separated chemicals from the stem bark, it was discovered that ß-sitosterol (1) had strong hypoglycemic action.[21]

In rabbits with normal blood sugar levels and those with alloxan-induced diabetes, extract of fruit powder at one to four gram per kilogram dosages decreased it.[22] The sucrose-challenged streptozotocin-reduced diabetes.[23]

The stem bark of Ficusracemosa reduced blood sugar. activity similar to common antidiabetic drug, demonstrating its traditionally used antidiabetic properties.[24,25,26]



❖ **Antibacterial Activity**

Actinomycesvicosus was shown to be effectively inhibited by The leaves' hydroalcoholic extract. A minimal inhibitory concentration of 0.08 mg/ml was discovered.[27]

❖ **Antipyretic Activity**

200, 300, and 100 mg/kg body weight p.o., Normal body temperature in albino rats and pyrexia caused by yeast were significantly reduced in a dose-dependent way for five hours following medication administration, according to Stem bark methanol extract. Its antipyretic properties were similar to those of paracetamol.[28]

❖ **Anticholinesterase**

In this work, anticholinesterase activity at hot , cold aqueous extracts was evaluated against acetylcholinesterase in vitro in rat brain.In this ,acetylcholinesterase was inhibitory in both hot aqueous extract (FRH) and the cold aqueous extract (FRC). In contrast to FRC, FRH exhibited considerably stronger Cholinesterase inhibitory action ($P \leq 0.001$); nonetheless, at the studied dosages (200–1000 µg ml−1), Neither extract showed 50% AChE inhibition. Drug action study for FRC and FRH, and they were 1813 and 1331 µg ml−1, respectively. It was determined what There was an anticholinesterase activity %. The extracts (FRH and FRC) both showed dose-

International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

dependent inhibition of acetylcholinesterase in the rat brain. They did not, however, exhibit the same level of inhibitory activity as the common acetyl cholinesterase inhibitor neostigmine bromide ($P < 0.001$). At the studied doses (200–1000 µg ml-1), neither extract showed 50% inhibition of AChE; hence, Boltzmann's dose response analysis was used to extrapolate IC50 values. Cholinesterase inhibitory activity against FRC was substantially stronger ($P < 0.001$) in FRH than in FRC.[29]

❖ **Memory Enhancing Property**

Acetylcholinesterase inhibitors are one of the most crucial therapy strategies for Dementia is a advancing neurological illness known as Alzheimer's disease (AD). AD is treated increasing amount acetylcholine (Ach) in the brain.

The hypothesis behind this study was that the extract from F. racemosa might exhibit a number of properties that could help treat AD, including neuroprotection, which is linked to antioxidant and anti-inflammatory properties, and the ability to raise Ach levels, similar to what was previously reported for the extract of Ficushispida. In rats, elucidate chosen for study increased Ach levels and enhanced memory. When used to treat AD, the combined pharmacological effects of F. racemosa extract may be advantageous and supportive.[30]

❖ **Anti-inflammatory Activity**

Carrageenin, serotonin, histamine, and dextran-induced rat hind paw edema models were used to test the anti-inflammatory properties of F. racemosa extract.[31]

The ethanol extract of leaves was fractionated using bioassay guidance to isolate racemosic acid. It'sin vitro IC50 values for COX-1 and 5-LOX were 90 and 18 µM, respectively, indicating strong inhibitory action.[32]

❖ **Antioxidant/ Radio Protective**

Techniques used for scavenge radicals in ethanol and water extracts. The micronucleus assay was used to examine the in vitroradioprotective capability of fibroblast cells. A substantial reduction in the proportion of micronucleated cells was observed following a pretreatment with different dosages an hour before to 2 Gy γ-radiation, indicating its function as a radioprotector.[33] Comparing elucidate from bark to that roots, the former has demonstrated strong action. Using thevarioustest, fruit ethanol extract give significant antioxidant activity. 3-Caffeoyl quinate (O-(E)-) exhibited strong antioxidant properties.[34]

❖ **Renal Anticarcinogenic**

The extract from At 200 and 400 mg/kg body weight, F. racemosa dramatically reduced hydrogen peroxideLipid peroxidation, DNA synthesis, and kidney glutathione level all showed considerable recovery; however, renal ornithine decarboxylase activity declined.[35] Using As a kidney carcinogen, ferric nitrilotriacetate (Fe-NTA) produced similar outcomes.[36]

❖ **Antifilaria**

Both aqueous and alcoholic extracts inhibited the whole worm's spontaneous movement, while Setariacervi nerve muscle preparation showed an increase in contraction amplitude and tone. In vitro, microfilariae were killed by both extracts. An alcoholic extract's LC50 and LC90 were 21 and 35 ng/ml, respectively, but an aqueous extract's were 27 and 42 ng/ml.[37]

❖ **Antidiarrhoeal**

Rats with various experimental types of diarrhea were helpsantidiarrheal qualities from elucidate. Rats' enteropooling caused by PGE2 and diarrhea caused by castor oil were both significantly inhibited by it. Additionally, these extracts significantly decreased the rats' gastrointestinal motility when they were fed charcoal. The outcomes demonstrated that it was an effective anti-diarrheal medication.[38]

❖ **Analgesic Activity**

A dose-dependent analgesic action was demonstrated by the bark and leaf ethanol extract when tested for analgesic efficacy at 100, 300, and 500 mg/kg using an analgesiometer.[39]

❖ **Hepatoprotective Activity**

Rats used Anethanolic leaf extract to induce chronic liver injury by subcutaneously injecting Carbon tetrachloride at 50% v/v. This demonstrated hepatoprotective effect. Serum bilirubin, SGOT, SGPT, and alkaline phosphates were calculated as biochemical measures to evaluate liver function.[40]

❖ **Antifungal Activity**

The plant exhibited strong inhibitory effect against six fungal species, including Torulopsisglabrata, Candida albicans, Trichophytonmentagrophytas,

International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

Trichophytonrubrum, and Trichophytonsoundanense.[41,42]

❖ **Hypolipidemic Activity**

Rats given dietary fiber-rich fruits had a markedly hypocholesterolemic impact because it increased the excretion of bile acids and cholesterol in their feces.[43]

The ethanolic bark extract's hypolipidemic effects were investigated in rats with alloxan-induced diabetes . Research revealed that, in analysis to common Glibenclamide, the reference drug, the extract had strong antidiabetic and hypolipidemic benefits.[44]

❖ **Larvicidal**

Activity was examined against Culexquinquefasciatus (Diptera: Culicidae) larvae in their early fourth instar. The death of the larvae was noted during a one day. The largest larvae seen in the acetone extract of bark, while all extracts exhibited modest larvicidal effects. The discovery and separation of a derivative of tetracyclic triterpenewas achieved through the fractionation of acetone extract guided by bioassay. A novel mosquito larvicidal chemicalgluanol acetate was separated and identified.

After isolation, gluanol acetate was discovered to be a novel mosquito larvicidal substance. Anopheles stephensi Liston.[45]

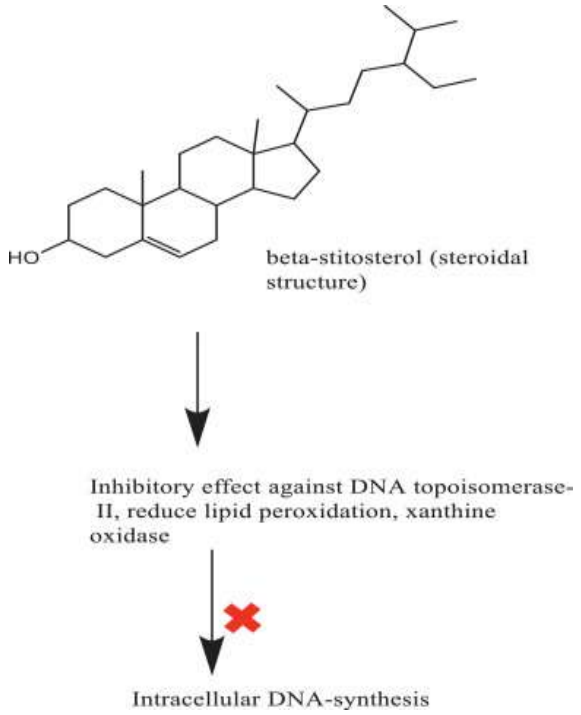
❖ **Chemo-preventive Activity**

Rats were given the treatment orally using two different methods: ferric nitrilotriacetate (fe-NTA) caused potassium bromate to induce nephrotoxicity in rats, and tumors to induce chemotoxicityDecreased H2O2, lipid peroxidation, gama-glutamyltranspeptidase, and xanthin oxidase. Additionally, it exhibits recovery in bloodurea nitrogen, when all of these indicators evaluate downward, it indicates chemopreventive efficacy.

❖ **Anticancer Activity**

Two techniques were used to administer the medication orally to the rats: potassium bromate caused nephrotoxicity in the rats and ferric nitrilotriacetate (fe-NTA) caused chemotoxicity. Extract from Ficusracemosa (PM Paarakh, 2009) reduces xanthin oxidase. DNA synthesis show recovery; a decline in any of these markers suggests chemopreventive effect.[46]

Extract from Ficusracemosa (PM Paarakh, 2009) reduces xanthinoxidase . DNA synthesis, show recovery; a decline in any of these markers suggests chemopreventive effect. (Fig)This nephrotoxic chemical induces kidney cancer in rats. It was shown that lupeol's ability to alter signaling pathways in carcinogenesis, such as nuclear factor kappa B (NF-B) and the phosphatidylinositol 3-kinase [PI3K]/Akt (protein kinase B pathway), was connected to its anti-tumor-promoting qualities.[47]



International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

❖ **Anti-parkinsons activity**

Found to have anti-Parkinson's effects in animal models used for experiments caused by 6-hydroxydopamine (6-OHDA) with haloperidol. Rats' neurochemical (MDA, CAT, SOD, and GSH) and behavioral (catalepsy, muscular rigidity, and locomotor activity) responses to characteristics were examined in this study. 6-OHDA markedly exacerbated motor dysfunction, including hypolocomotion and muscular rigidity. Administering 6-OHDA resulted in a marked rise in the degree of lipid peroxidation as well as a decrease in glutathione, superoxide dismutase, and catalas. Both motor function and oxidative damage were dramatically reduced by daily PEFRE (400 mg/kg) treatment. Therefore, the study demonstrated that the therapy with FicusreligiosaBoth provided oxidative stress protection for the brain and dramatically reduced the motor deficits.[48]

❖ **Antifertility activity**

Fertility was 70% decreased by extract. Within sixty days. Abnormal morphology, motility, viability, and cauda epididymis sperm count were all suppressed. Amount of fructose seminal vesicle, amount of acid in the epididymis were all significantly reduced. Bark extract used vaginally demonstrated 80% vaginal contraceptive effectiveness.[49]

❖ **Antinociceptive activity**

A technique for making mice writhe in response to acetic acid was used to investigate the potential antinociceptive efficacy of an Bark and fruit of Ficusracemosa Lin. are extracted in ethanol. Upon administering 500 mg of fruit and bark extracts per kilogram of body weight, the experimental animals exhibited notable antinociceptive action. While the bark extract only demonstrated 42.6% decrease in mice's writhing caused by acetic acid, the fruit extract demonstrated the strongest 61.38% inhibition.[50]

❖ **ACE Inhibitors**

Inhibition activity, radical scavenging properties of cold and worm elucidate (FRC and FRH) used in this work. Although hot aqueous extract contained kaempferol, coumarin, and ferulic acid in addition to bergenin, the cold aqueous extract's HPLC profiles showed that bergenin, an isocoumarin, was present. FRH also shown noticeably more radical scavenging ability than FRC. Pig kidney and rabbit lung ACE were both shown to be dose-dependently inhibited by the extracts. When compared to FRC (128 and 291With lower IC(50) values for pig kidney ACE and rabbit lung ACE, FRH demonstrated noticeably more activity than FRC. Additionally, there was a noteworthy association found between ACE-inhibitory action and radical scavenging activity.[51]

❖ **Cardioprotective activity**

The ability of standardized extract to protect the heart from doxorubicin-induced damage. The extract increased the amount of glutathione in the cardiac tissue and serum, which also markedly reduced the thiobarbituric acid reactive compounds (TBARS).[52]

❖ **Antiplatelet Activity**

Despite having demonstrated therapeutic promise, The ability of FRB extracts to induce platelet aggregation is thought to be a limiting factor in their application.[53]

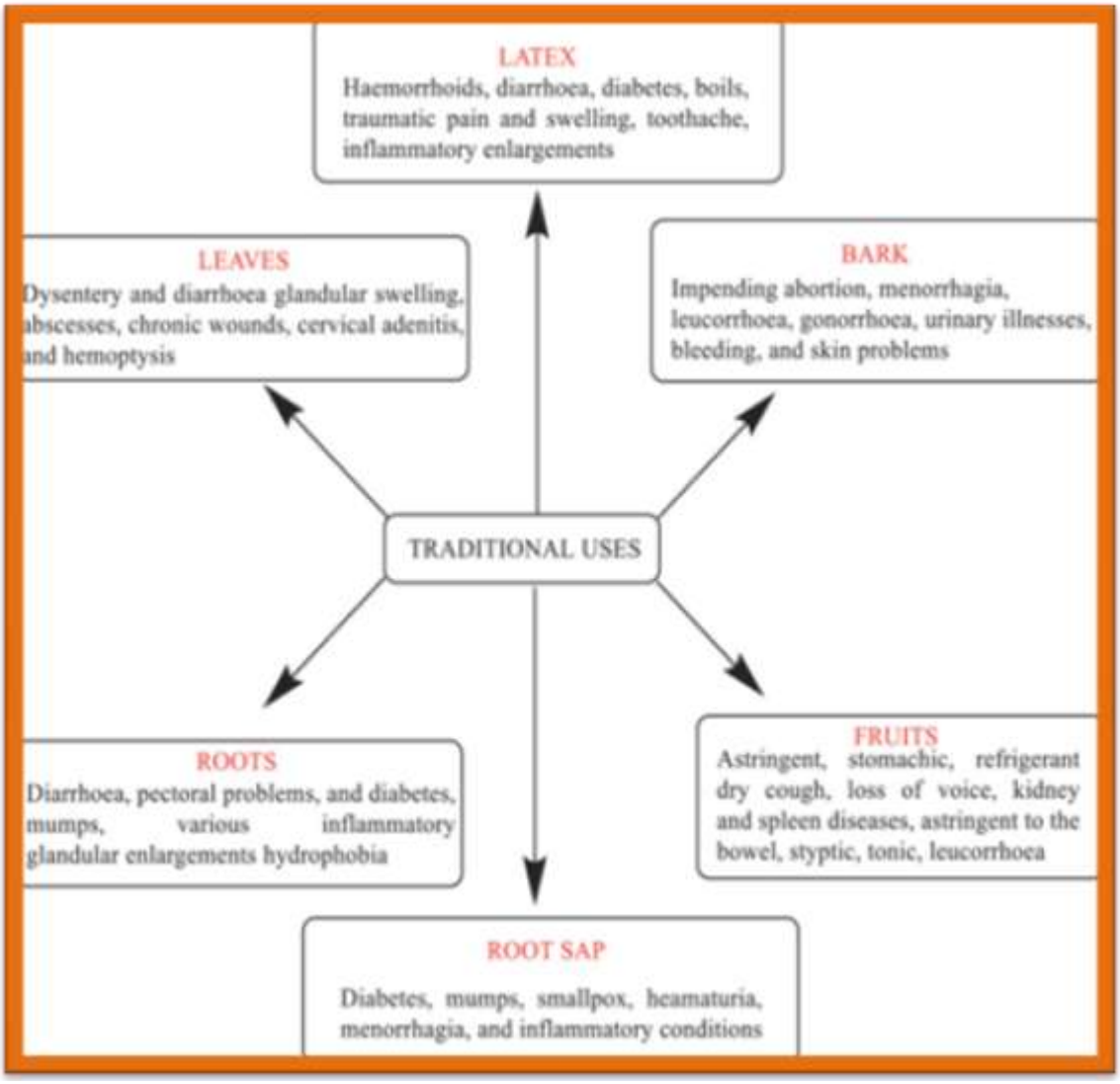
❖ **Clinical Evalution**

F. racemosa was one of the ingredients of a composite ointment used in a clinical research involving 15 burn patients. It aided in accelerating epithelialization and demonstrated great effectiveness in managing Candida albicans infections. After eight to twenty-six days of treatment, the burns were fully cured. In 28 patients with chronic postprandial hyperglycemia, the effectiveness of a special herbal blend comprising Ocimum sanctum, Momordicacharantia, Tinosporacardifolia, Pteracarpusmarsupium, Syzygiumcuminni, and F. racemosa was evaluated.[54]

➢ **Traditional Uses**

Traditional medicine has also made extensive use of Ficusracemosalinn. to cure a range of ailments (Fig. 6). Its latex, seeds, bark, fruits, leaves, and roots are all utilized medicinally in different ways, frequently in combination with other plants.[55,56,57,58,59,60,61]

International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494



For a number of ailments, FicusracemosaLinn has been utilized extensively in conventional medicine. There are several medical uses for its bark, seeds, latex, fruits, leaves, and roots, often in conjunction with other herbs.

- **Bark**

Bark is recommended for diabetes, hiccough, leprosy, dysentery, piles, and urological disorders; it is especially useful in cases of impending abortion.

- **Leaves**

For cuts and ulcers, the leaves are a great wash. They are beneficial for both dysentery and diarrhea. An internal remedy for menorrhea and dysentery, a mouthwash for spongy gums, and Bark and leaf infusions are a useful treatment for hemoptysis, cervical adenitis, persistent wounds, and glandular swelling abscess.

- **Fruits**

Leucorrhea, blood issues, burning, fatigue, urine discharge, leprosy, intestinal worms, dry cough, voice loss, kidney and spleen disease, and intestinal astringency are among the conditions that the fruits can help with. They aid with miscarriage, spermatorrhea, menorrhagia, scabies, cancer, and visceral obstruction.

- **Roots**

In cases of dysentery, roots are employed. Diabetes, pectoral problems, mumps, hydrophobia, and other inflammatory glandular enlargement.

International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

- **Latex**

Aphrodisiac latex is used to treat vaginal diseases, toothaches, traumatic swelling, diarrhea, boils, hemorrhoids, and diabetes. Root sapis is used to cure diabetes. This plant's sap is a well-liked treatment for mumps and other inflammatory swellings.

➢ **Side Effects**

- Being a coolant tree, f. racemosa is used with caution by kapha-dominant individuals who frequently experience colds, coughs, and allergic rhinitis.
- Avoid using ripe fruit in cooking as it can aggravate or exacerbate intestinal worm infestation.
- During pregnancy, precautions are taken.[62]

II. CONCLUSION

Using natural resources, tribal and rural societies have found solutions to their problems, wants, and illnesses. The present review discusses the broad and significant pharmacological activity of Ficusracemosa Lin. Among its many pharmacological properties are antifertility, anti-ulcer, gastroprotective, anti-tussive, and anti-diuretic qualities. Ficusracemosa Linn has been used for ages. The thorough information on the constituents' varied therapeutic activities that is provided in this review is highly likely to offer comprehensive endorsement of this plant's use in a variety of medications. Isolating and characterizing the active ingredients in these ficus species should be the focus of future research.

REFERENCE

[1]. Joy PP, Thomas J, Mathew S, Skaria BP, Medicinal Plants, Tropical Horticulture , 2, 2001, 123-125.
[2]. The Wealth of India- A Dictionary of Indian Raw Materials, Publications and Information Directorate, CSIR, 4, 1992, 35-36.
[3]. K. Babu, G.S. Sabesan, S. Rai, Comparative pharmacognostic studies on the barks of four Ficus species, Turk. J. Bot. 34 (3) (2010) 215–224.
[4]. P.K. Waarrier, V.P.K. Nambiar, C. Ramankutty, Indian medicinal plants, Orient Long-man Ltd Madras (1-5) (1995) 157–159.
[5]. R. Mitra, in: Bibliography on Pharmacognosy of Medicinal Plants, National Botanical Research Institute, Lucknow, 1985, pp. 249–250.
[6]. A.K. Narayana, M. Kolammal, in: Pharmacognosy of ayurvedic drugs of Kerala, 1,The Central Research Institute, University of Travancore, 1957, pp. 95–99.
[7]. Ahmed F, Urooj A, Pharmacognostical studies of ficusracemosa stem bark Pharmacognosy Journal, 2011; 3(19): 19–24
[8]. R. N Chopra, I. C Chopra, K. I Handa, L. D Kapur, Indigenous Drugs of India, U.N. Dhur and Sons Pvt. Ltd, Calcutta, 1958, 674-675.
[9]. A. Husain, O. P Virmani, S. P Popli, L. N Misra, M. M Gupta, G. N Srivastava, Z Abraham & A. K Singh, Dictionary of Indian Medicinal Plants, CIMAP, Lucknow, India,1992, 546.
[10]. C. Suresh, L. Jawakhar and M. Sabir, Chemical examination of the fruits of FicusGlomerata, J Indian ChemSoc, 1979, 56(12), 1269-1270.
[11]. K. Murti, U. Kumar, M. Panchal, M. Shah, Exploration of preliminary phytochemical studies of roots of Ficusracemosa, Marmara Pharm J, 2011, 15, 80-83
[12]. J. Bheemachari, K. Ashok, N. H Joshi, D. K Suresh, V. R. M Gupta,.Antidiarrhoeal evaluation of Ficusracemosa Linn.latex, ActaPharmaceuticaSciencia, 2007,49,133 -138.
[13]. The Ayurvedic Pharmacopoeia of India, Ministry of Health and Family Welfare, Govern ment of India, New Delhi, Part I, 1, 1989, 117-118.
[14]. P.K. Dubey, P. Yaduwanshi, V. GouttamFicusracemosalin-gooler a review World J. Pharmaceut. Researc., 7 (12) (2018), pp. 325-341
[15]. Ratnasooriya WD, Jayakody JR, Nadarajah T, Antidiuretic activity of aqueous bark extract of Sri Lankan Ficusracemosa in rats, ActaBiol Hungary 2003; 54, 357-363
[16]. Malairajan P, Geetha G K, Narasimhan S and Jessi KV, Analgestic activity of some Indian Medical plants, J. Ethno Pharmacol, 106(3), 2006, 425-428.
[17]. Baslas RK, Agha R, Isolation of a hypoglycaemic principle from the bark of FicusglomerataRoxb, Himalayan Chem Pharm Bull, 2, 1985, 13-14.

International Journal of Pharmaceutical Research and Applications
Volume 10, Issue 6 Nov - Dec 2025, pp: 232-244 www.ijprajournal.com ISSN: 2456-4494

[18]. Sophia D, Manoharan S, Hypolipidemic activities of Ficusracemosalinn, Bark in alloxan induced diabetic rats, African J Traditional Complement Med, 4, 2007, 279-288
[19]. Shrotri DS, Ranita A, The relationship of the post-absorptive state to the hypoglycaemic action studies on Ficusbengalensis and Ficusracemosa, Indian J Med Res, Vol. 48, 1960, 162-168
[20]. Kar A, Cho udhary BK, Bandy opadhyay NG, Com parative evaluation of hypoglycaemic activity of some Indian Medicinal Plants in alloxan diabetic rats, J Ethnopharmacol, 4, 2003, 105-108.
[21]. Akhtar MS, Qureshi AQ, Phytopharmocological evaluation of FicusglomerataRoxb, Fruit for hypoglycemic activity in normal and diabetic rabbits, Pakistan J Pharm Sci, 1, 1988, 877-889.
[22]. Rahuman AA, Venkatesan P, Geetha K, Gopalakrishnan G, Bagavan A, Kamaraj C Mosquito larvicidal activity of gluanol acetate, a tetracyclic triterpenes derived from Ficusracemosa Linn, Parasitol Res, 103, 2008, 333-339.
[23]. R.K. Baslas, R. Agha Isolation of a hypoglycaemic principle from the bark of FicusglomerataRoxbHimal. Chem. Pharm. Bull. (2) (1985), pp. 13-14
[24]. R.R. Bhaskara, T. Murugesan, M. Pal, S. Sinha, B.P. Saha, S.C. MandalsGlucose lowering efficacy of Ficusracemosa barks extract in normal and alloxan diabetic ratsPhytother. Res. (16) (2002), pp. 590-592
[25]. D. Sophia, S. ManoharanHypolipidemic activities of Ficusracemosalinn, Bark in alloxan induced diabetic ratsAfr. J. Tradit. Complement. Med. (4) (2007), pp. 279-288
[26]. Shaikh T, Rub R, Bhise K, Pimprikar R B, Sufiyan A, Antibacterial activity of Ficusracemosa Linn. leaves on actinomycesviscosus, J Pharm Sci Res, 2, 2010, 41-44
[27]. Rao RB, Anupama K, Swaroop KR, Murugesan T, Pal M, Mandal SC, Evaluation of anti-pyretic potential of Ficusracemosa bark, Phytomedicine, 9, 2002, 731-733
[28]. Biswas TK, Mukherjee B, Plant medicines of Indian origin for wound healing activity: a review. IntJ Low Extreme Wounds, 2, 2003, 25- 39.33] A. P Breen, J. A Murphy, Reactions of oxyradicals with DNA, Free Rad Biol Med, 1995, 18,1033–1077.
[29]. P. K Warrier, Indian medicinal plants-A compendium of 500 species, Orient Longman Ltd.Chennai, 1996, Vol. III, 38-39
[30]. S. C Mandal, T. K Maity, J. Das, B. P Saba, M. Pal, Hepatoprotective activity of Ficusracemosa leaf extract on liver damage caused by carbon tetrachloride in rats, Phytother Res, 1999, 13, 430-432.
[31]. R. W Li, D. N Leach, S. P Myers, G. D Lin, G. J Leach, P. G Waterman, A new anti-inflammatory glucoside from Ficusracemosa L, Planta Med, 2004, 70, 421-426
[32]. R. W Li, S. P Myers, D. N Leach, G. D Lin, G. Leach, A cross-cultural study: anti- inflammatory activity of Australian and Chinese plants, J Ethnopharmacol, 2003, 85, 25-32.
[33]. Channabasavaraj KP, Badami S, Bhojraj S, Hepatoprotective and antioxidant activity of methanol extract of Ficusglomerata, J Nat Med, 62, 2008, 379-383.
[34]. Jahan IA, Nahar N, Mosihuzza man M, Hypoglycaemic and antioxidant activities of Ficusracemosa Linn. Fruits, Nat Prod Res, 23, 2008, 399-408
[35]. Khan N, Sultana S, Modulatory effect of Ficusracemosa: diminution of potassium bromated induced renal oxidative injury and cell proliferation response, Basic ClinPharmacolToxicol, 97, 2005b, 282-288.
[36]. Bhatt RM, Kora S, Clinical and experiment study of Panchavalkal and Shatavari on burn wound sepsis-bacterial and fungal, J Nat Integr Med Assoc, 26, 1984, 131-133.
[37]. Mishra V, Khan NU, Singhal KC, Potential antifilarial activity of fruit extracts ofFicusracemosa Linn. against Setariacervi in vitro, Indian J ExpBiol 43, 2005, 346-350.
[38]. Mukherjee PK, Saha K, Murugesan T, Mandal SC, Pal M, Saha BP, Screening of anti diarrhoeal profile of some plant extracts of a specific region of West Bengal. India. J Ethnopharmacol, 60, 1998, 85-89.

[39]. Malairajan P, Geetha GK, Narasimhan S, Jessi KV, Analgesic activity of some Indian Medicinal Plants, J Ethnopharmacol,106, 2006, 425-428.
[40]. Mandal SC, Maity TK, Das J, Saba BP, Pal M, Hepatoprotective activity of Ficusracemosa leaf extract on liver damage caused by carbon tetrachloride in rats. Phytother Res, 13, 1999, 430-432
[41]. Deraniyagala SA, Wijesundera RLC, Weerasena OVD, Antifungal activity of Ficusracemosa leaf extract and isolation of the active compound, J Nat SciCounc Sri Lanka, 26, 1998, 19-26
[42]. Vonshak A, Barazani O, Sathiyaamoorthy P, Shalev R, Vardy D, Golan GA, Screening of South Indian Medicinal Plants for antifungal activity against cutaneous pathogens, Phytother Res, 17, 2003, 1123-1125
[43]. Agarwal V, Chauhan BM, A study on composition and hypolipidemic effect of dietary fibre from some plant foods, Plant Foods Hum Nutr, 38, 1988, 189-197.
[44]. Sophia D, Manoharan S, Hypolipidemic activities of Ficusracemosalinn, Bark in alloxan induced diabetic rats, African J Traditional Complement Med, 4, 2007, 279-288.
[45]. Khan N, Sultana S, Chemomodulatory effect of Ficusracemosa extract against chemically induced renal carcinogenesis and oxidative damage response in Wistar rats, Life Sci, 77, 2005a, 1194-1210
[46]. K. Naghma and S. Sarwat, Modulatory Effect of Ficusracemosa:Diminution of potassium Bromate-Induced Renal Oxidative Injury and Cell Proliferation Response ,Basic ClinPharmacolToxicol , 2005, 97(5), 282 – 288.
[47]. S.C. Mandal, T.K. Maity, J. Das, B.P. Saba, M. PalAnti-inflammatory evaluation of Ficusracemosalinn. leafextractJ. Ethnopharmacol., 72 (1-2) (2000), pp. 87-92
[48]. Jitendra O, Bhangale and Acharya SR, Anti-Parkinson Activity of Petroleum Ether Extract of Ficusreligiosa (L.) Leaves, Advances in Pharmacological Sciences, 2016; 1-9.
[49]. AhirwarDheeraj et al. Journal of Reproduction and Contraception Volume 22. Issue 1, March 2011, Pages 37-44.
[50]. Ferdous M, Rouf R, Ahmad J, Shilpi and Jamaluddin S, Antinociceptive activity of the ethanolic extract of Ficusracemosa Lin. (Moraceae),Oriental Pharmacy and Experimental Medicine, 2008; 8(1): 93-96.
[51]. Ahmed F, Siddesha J M, Urool A, Vishwanath B S. Radical scavenging and angiotensin converting enzyme inhibitory activities of standardized extracts of Ficusracemosa stem bark. Phytother research, 2010; 24(12): 1839-43
[52]. Ahmed F, Urooi A. Cardioprotective activity of standardized extract of Ficusracemosa stem bark against doxorubicin induced toxicity.Pharmaceutical biology, 2012; 50(4): 468-73.
[53]. Faiyaz A. Kumar MS, Urooj A. Kemparaju K., Platelet aggregation inducing activity of Ficusracemosa stem bark extracts, Research Letters, Journal of Pharmacology and Pharmacotherapeutics, 2012; 3(4): 329-330.
[54]. Kar, A, Choudhary BK and Bandyopadhyay Ng, comparative evaluation of hypoglycemic activity of some Indian medicinal plants in alloxan diabetic rats, J Ethno pharmacol, 84(1), 2003, 105-108.
[55]. S. Vedavathy, D.N. RaoHerbal folk medicine of tirumala and tirupati region of Chittoor district, Andhra Pradesh Fitoterapia, 66 (2) (1995), pp. 167-171
[56]. C.H. Chandrashekhar, K.P. Latha, H.M. Vagdevi, V.P. Vaidya Anthelmintic activity of the crude extracts of FicusracemosaInt. J. Green Pharm., 2 (2) (2008), pp. 100-103
[57]. V.V. Patil, R.B. Pimprikar, N.G. Sutar, A.L. Barhate, L.S. Patil, A.P. Patil, R.Y. Chaudhari, V.R. PatilAnti-hyperglycemic activity of Ficusracemosa Linn leavesJ. Pharm. Res., 2 (1) (2009), pp. 54-58
[58]. Y.S. Prabhakar, D.S. KumarA survey of cardioactive drug formulations from ayurveda. II: porridges, oils, clarified butters, electuaries, pastes, ash preparations and calcinedpowdersFitoterapia, 61 (5) (1990), pp. 395-416
[59]. S. Sharma, V. Gupta In vitro antioxidant studies of Ficusracemosalinn. rootPharm. Mag., 4 (13) (2008), p.70

[60]. P.K. Mukherjee, K. Saha, T. Murugesan, S.C. Mandal, M. Pal, B.P. Saha Screening of anti-diarrhoeal profile of some plant extracts of a specific region of West Bengal, India J. Ethnopharmacol., 60 (1) (1998), pp. 85-89

[61]. J.A. Parrotta, J.A. Parrotta Healing Plants of Peninsular India CABI publishing, USA (2001), pp. 557-558

[62]. Pakash Deep, Amrit, Kr.Singh, MdTahir Ansari, Prashant r ghav. Pharmacological potentials of ficusracemosa:-Areview.Int.J.Pharma. Sci. Rev.Res, 22(1)sep-oct2013 06,29-34