

# A Review Paper on Various Plants are used in Various Types of Diseases

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**Abstract:** Medicinal plant are mostly used in healthcare in the whole world. The medicinal plant. are Effective in production of medicine . In this paper we can seen the role and usefulness of medicinal plants and approaches to diseases prevention.

**Keywords:** Medicinal Plants, Prevention, Natural Source

## I. INTRODUCTION

India is an agricultural country. In India there are infinite medicinal plants are available on this land and these plants are very beneficial in various types of diseases in many forms. Many years ago our ancestors used these medicinal plants and research on the traditional plants and give us this property. We can write about some plants which are treat the various diseases.

- 1. Ocimum tenuiflorum (tulsi):** Ocimum tenuiflorum i.e tulsi is a traditional medicinal plant which belongs to family Lamiaceae tulsi plays a vital role in our everyday life and is said to be the queen of herbal plants. (1,2) the only plant that can absorb carbon dioxide through-out its life. It releases the oxygen in the early morning is beneficial for the people in breathing disorders. Tulsi has a lot of significance for human beings. Tulsi is used as antioxidant, antibacterial, anti-inflammatory, for eye problems, hepato protective, neuro protective, antidiabetic, to remove stress, cough, respiratory problems, cardio protective, antithyroid, CNS depressant, memory enhancement, mosquito repellent, anti-cataract etc. (3,4)
  - a. Chemical Constituents:** Studies found forty five compounds and oils in holy Tulsi. The main constituent in volatile oil from basil are rosmarinic acid (A strong antioxidant), linalool, methyl chavicol, methylcinnamate. Its medicinal effects are mostly due to rhythmol, eugenol and camphor. The seeds contain an oil composed of fatty acids and sitosterol. It is one of the healing herb that contain Vitamin A and Vitamin C that stimulate production of disease fighting antibodies by up to 20 percent as well as antioxidant that help to prevent cell damage that can lead to cancerous condition. (5)
- 2. Cough:** Tulsi is important constituent of ayurvedic syrup. It is used to treat asthma and bronchitis. Chewing the leaves of tulsi relieves cough and flu.
- 3. Eye problems:** The drops of tulsi leaves are beneficial for eye infections and any other problem related to eye. It also treat night blindness. One drop of tulsi leaves can put into eyes daily it can remove all problems.
- 4. Skin problems:** Basil juice of tulsi is beneficial for ringworm and other skin problems.
- 5. Antioxidant:** It protects the cells in the body from smash up to the presence of free radicals. Excess of oxidation in the body also causes the cell damage. This acid prevents the formation of excess oxidation. It also increase the immunity and protect against covid-19. (6)
- 6. Metabolic Stress:** Tulsi can reduce blood glucose, correct abnormal lipid profiles and protect the liver and kidneys from the metabolic damage caused by high glucose levels. Tulsi has also been shown to improve lipid profiles, prevent weight gain, hyperglycemia, hyperinsulinemia, hypertriglyceridemia and insulin resistance, and protect the organs and blood vessels from atherosclerosis in laboratory animals fed high-fat diets. Similarly, in human clinical trials, tulsi has shown to decrease glucose levels, improve blood pressure and lipid profiles and reduce many diabetic symptoms in patients with type 2 diabetes. (7,8)
- 7. Psidium guajava (Guava):** Guava is a traditional medicinal plant present in India belongs to the family Myrtaceae. Guava fruits are usually 4 to 12 centimetres (1.6 to 4.7 in) long, round or oval depending on the species. The fruit is basically green in colour which turns to yellow once it is ripened. The most commonly available guava in the market is apple guava. Common types of guava around the world includes apple guava,

cherry guava, and strawberry guava. Mostly eaten raw in the ripened or semi-ripened form or consumes in the form of juice. The main constituents of guava are vitamins, tanins, phenolic compounds, flavonoids, essential oils, sesquiterpene alcohols and triterpenoid acids. Not only guava fruit but also there leaves are shows the medicinal properties. like it helps to preventing cancer, regulating blood pressure, cough and cold, diarrhea, teeth and gums problem. Etc. It also helps in weight loss and constipation. There are various uses of guava such as,

### **1.1 Anticancer Activity**

The antioxidant, Lycopene which is present abundantly in Guava plays a crucial role in preventing and fighting cancer. Amongst all, breast cancer and prostate cancer responds the best. Red flesh (when dissected) guava contains more lycopene as compared to the other varieties. Lycopene acts by scavenging the free radicals and also prevents further formation of free radicals. (9)

### **1.2 For Teeth Problems**

The leaves of guava is very beneficial for gums and teeth problem. The leaves are chewed directly it gives instant relief to teeth and the teeth problems like bleeding, pain in teeth are completely cured. (10)

### **1.3 Antibacterial**

Guava extract exhibit antibacterial activity against both gram positive and gram negative bacteria. Guava leaves extract very good activity against intestinal microbes.

### **1.4 Antidiarrheal**

Boiling 6-10 new tender guava leaves in a pot containing warm water and drinking the same in the empty stomach while being still warm has been found to be very effective in controlling diarrhea. Among children the guava bark are used to cure diarrhea owing to there astringent property. (11)

### **1.5 Antihypertensive and Antilipidoma**

Guava is highly useful for the treatment of hypertension, hyperlipidemia and heart disease. It also contains some amount of potassium which helps to relax blood vessels and thus helps in controlling blood pressure. It has been found that consuming guava fruit on daily basis results in significant reduction in Blood pressure and blood lipids owing to higher potassium and fibers in the fruit. Moreover, Guava contains a high concentration of pectin which causes a significant reduction in the blood lipids by delaying absorption of the foods and thereby reduces the risk of cardiovascular illnesses

### **1.6 Wound Healing**

The ripened fruit of guava is used to cure the wound healing. Also the leaves of guava is also used to treat the wound. Guava leaves made into a paste by grinding with water or oil and applied on wound surface. (12)

### **1.7 Antacid Activity**

The alkaline nature of guava leaves gives very good response against the hyperacidity to the stomach. The guava tea is prepared by taking 10-15 guava leaves boiled into the 3 to 4 cups of water and warm it upto 5 to 10 min then cool and drink it daily at morning. It is help to control the acidity. (13)

### **1.8. Tridax Procumbens**

Tridax procumbens also known as 'coat buttons' is a perinnial plants belongs to the family Asteraceae. In marathi it is called as 'dagadi pala'. This species has a long history of treditional uses in different communities.

Chemical constituents: The main chemical constituents in T. Procumbens are flavon glycoside, chromon glycoside, sterols, and polysaccharides. T. procumbens are used in Ayurveda in India. From this species different substance like oil, skin poultocs, teas are manufactured. It shows many pharmacological properties like antifungal, antioxidant, antiinflametry, antimicrobial antitumor, etc. (14)

### **1.9 Antifungal Activity**

Antifungal activity of *T. procumbens* has been investigated. Different extraction methods have been used to find the optimum zone of inhibition from different fungal strains including *Microsporum fulvum*, *Microsporum gypseum*, *Trichophyton mentagrophytes*, *Trichophyton rubrum*, *Candida albicans*, and *Trichosporon beigeli*. Extracts of the aerial parts of this plant have shown activity against dermatophytes with zones of inhibition ranging from 17 to 25mm with dichloromethane (DCM) fraction resulting in the best response (Policegoudra et al., 2014). However, the authors do not describe which ones are the bioactive compounds responsible for the antifungal properties. The authors suggest that these compounds could be fatty acid derivatives and constituents but no evidence is given about this statement. (15)

### **Analgesic**

It is used to cure the wound and relief pain. The leaves of *T. procumbens* are used to cure the wounds.

### **Remove Kidney Stones**

It helps to remove the stones from the kidney up to 22mm within a 15 to 20 days. Boil the leaves of this plant in water then filter this juice and take at morning daily.

### **Antioxidant Activity**

The essential oils of *T. procumbens* have shown antioxidant activity by reducing the levels of oxidative stress when using the DPPH assay. These essential oils seem to have higher antioxidant activity than ascorbic acid and increasing the concentration of the essential oil seemed to increase the antioxidant power. It is postulated that this characteristic of *T. procumbens* makes it a great candidate for the treatment of inflammation and cancer with less toxic effects. (16)

Traditional uses:- Leaves: dried and other herbs ingested orally, juice Diabetes, insect repellent, used to treat diarrhea, and to help check for hemorrhages, as well as hair loss. Jaundice, healing of wounds, inflammation

### **Citrus Limon**

The citrus is a fluid plant from rutaceae family. Approximately 140 genera and 1300 species are present in this species citrus. Citrus fruits are commonly known for their valuable nutritional, pharmaceutical and cosmetic properties. The genus Citrus includes evergreen plants, shrubs or trees (from 3 to 15 m tall). Their leaves are leathery, ovoid or elliptical in shape. Lemon possesses numerous characteristics such as antioxidants, antimicrobial, antifungal, antibacterial, anti-inflammatory, anticancer etc. (17)

### **Chemical Constituents**

The main chemical constituents present in both lemon and its juice are flavanoids such as flavanones—eriodictyol, hesperidin, hesperetin. Phenolic acid is another important component present in the juice of lemon. Glycosides, coumarins, and sitosterol. Citrus fruits constitute only 0.9% of total daily calories and 1.7% of daily carbohydrate. Polymethoxylated flavones have much importance and are very rare in other plants (18)

### **General Uses of Lemon**

The essential oils of lemon have much to do with the health and delightful and distinctive aroma of the person. It's a very versatile solution for the whole body. The essential oils, taken internally, diluted, or topically used for various conditions, can be used in the following manner inhaled as aromas.

### **Improve Energy and Alertness**

Lemons can also improve brain function, boost alertness, mental care and clarity. The revitalizing effects of lemon oil are caused by the high and energizing fragrance. Lemon oil can also be taken internally to boost energy.

### **Antiscorbutic and Vitaminic**

Very rich in vitamin C, so it has potassium and calcium antiscorbutic characteristics. It is very much desirable to reinforce body defenses and prevent numerous illnesses because of its capacity for regeneration of white corpuscles. It also

increases the immunity in body and it helps in covid-19 as a immunity buster.

### **Lemon Help to Remove Acne**

Drinking citrus juice with water every morning is the simplest way for people with worse case acne to tap into these healing characteristics. It has been proven efficient that one portion of lemon juice is mixed with a portion of rose or melon water and placed on skin regions with acne. The solution should be left for half an hour on the skin and washed with water. This is a twice weekly operation. Fresh citrus juice should be applied directly with a cotton ball or swab and left overnight in the impacted zones. In the morning, the solution should be washed. Because this is the least diluted solution, it tends at first to combustion, but is regarded the most efficient way to treat acne with citrus fruit.

### **Anticancer Activity**

limon nanovesicles have been isolated from the fruit juice using the ultracentrifugation method and purification on a 30% sucrose gradient, using an in vitro approach. The study showed that isolated Nano vesicles (20g/mL) inhibited cancer cell proliferation in different tumour cell lines, by activating aTRAIL-mediated apoptotic cell death. Furthermore, C. limon nanovesicles suppress chronic myeloid leukemia (CML) tumour growth in vivo by specifically reaching the tumour site and by activating TRAIL-mediated apoptotic cell processes. (19)

6 Effect on digestive system :- studies have been shows that D-limonene increases gastric motility and causes a reduction in nausea, neutralization of stomach acid and relief gastric reflux.(20)

### **Effect on Cardiovascular System**

Daily intake of c.lemon juice on beneficial effects on blood pressure. Daily lemon juice intake and walking were effective in reduce blood pressure. (21)

### **Mangifera Indica**

Mangifera indica (MI), also known as mango, aam, it has been an important herb in the Ayurvedic and indigenous medical systems for over 4000 years. Mangoes belong to genus Mangifera which consists of about 30 species of tropical fruiting trees in the flowering plant family Anacardiaceae. (22)

Chemical constituents:- The main phytoconstituents present in M.indica is steroids, flavons,tannin, resins,volatile oil, terpenoids, proteins, carbohydrates etc Traditional uses:-

### **Traditional uses**

Most parts of the tree were used medicinally for abscesses, tumour, snake bite, datura poisoning, wounds, diarrhoea, indigestion, liver disorders, excessive urination, anemia, tetanus, asthma and bronchitis The immature fruit, when sliced and dried, was used in septicemia. The leaves were steeped to produce a tea with a cooling effects, the liquid was used as a bath to treat fever and cold. The bark was considered diuretic, astringent hemostatic and antirheumatic when used in hot local baths and hot dressings. It was used in a wash for blennorrhoea. The seeds were used to treat clods, coughs, diarrhea, bleeding piles. The raw kernels were considered to antihelmenthics.

Mangifera indica possesses many pharmacological effects like antimicrobial, antibacterial, antifungal, antioxidant, antiparasytic, antiinflametry analgesic, antipyretic, anticancer, cardiovascular, antidiabetic, dermatological, hepatoprotective, neuroprotective, antiobesity etc.(23)

### **Antimicrobial Effect**

Extract of Mangifera indica was investigated for antimicrobial activities against three Gram negative (Salmonella spp, Escherichia coli and pseudomonas spp)and two gram positive Staphylococcus and Streptococcus Spp).Bannapalli variety extract possessed the best antibacterial activity. However, mango kernel extract possessed bacteriostatic and antibacterial activity. mango leaves include phenolics, alkaloids, saponins, glycosides, terpenes, and tannins. The concentration of the aforementioned compounds were measured as follows: flavonoid content was the highest at 11.25 mg/100 g; there was 3.23 mg/100 g of saponins; phenolic content was 0.08 mg/100 g; and tannins in leaves was at 0.46 mg/100 g(24)

#### **Antiviral Activity**

In vitro effect of mangiferin was studied against Herpes simplex virus type 2; mangiferin does not directly inactivate HSV-2 but inhibits the late event in HSV-2 replication. In vitro mangiferin was also able to inhibit HSV-1 virus replication within cells and to antagonize the cytopathic effects of HIV.(25,26)

#### **Antiallergic Activity**

The anti-allergic properties of Vimang on allergic models, as well as suggesting that this natural extract could be successfully used in the treatment of allergic disorders. Mangiferin, the major compound of Vimang, contributes to the anti-allergic effects of the extract.(27)

#### **Teeth Problems and Mouth Freshening**

The leaves of *M.indica* is used in the treatment of toothach and it also used to clean and freshening of mouth.

#### **Anticancer**

The significant cytotoxic activities has been demonstrated by the stem bark extract of mango against the breast cancer cell lines MCF 7, MDA-MB-435 and MDA-N, as well as against a colon cancer cell line (SW-620) and a renal cancer cell line.(28) *Mangifera indica* was tested for antibacterial activity against *Staphylococcus coli* and *Pseudomonas aeruginosa*. The ethanol Pofseiundhoibmitoionnas Spp) and two Gr(*Staphylococcus* and *Streptethanolic* extract produced zone Tdabirsesocdreidtsiesorensa, eltuxucmseosssu:-irvT,esnurarikneTabtrieiotdeni,,tidoaanteaumlruaisaep, sot:ei-stmoanoiustng, pwarotusnodfs, thdeiartrheowa, erineduigsesdtiomne, dliicvienrally

#### **Azadiackt'a idica**

Neem is the most important plant in ayurvedic medicine The leaf, roots,bark ,fruits,and other parts is used as a medicine. There are a lots of uses of this plant like aantioxidants antibacterial,antifungal,antitumor, etc. Neem is considered as harmless to human beings, animals, birds it is appoved by the US environmental protection agency.

#### **Medicinal Uses of Neem**

1. 1.The leaves of neem plant is used in the treatment of eye problems, skin problems, fungal infections skin ulcers, lepracy etc.(29)
2. Antioxidant properties:- The process through which free radicals are created, is a normal function of the body but the resulting molecules are unstable and can damage other cells due to high molecules of free radicals even cancer is occurs .Neem protects against chemically induced carcinogens and liver damage by boosting antioxidant levels.(30)
3. Antiviral effects:-The neem is used for small pox, chicken pox. It also shows antibacterial properties also.
4. Skin problems:- The leaves of neem plants us used to treat the skin problems like infection, rasbesh,allergy etc.
5. Antiinflametry, antipyretic, analgesic :- The chloroform extract of stem bark is effective against carrageenin-induced paw oedema in rat and mouse ear Inflammation. Inflammatory stomatitis in children is cured by the bark extract. Antipyretic activity has been reported in neem oil.(31)
6. Gi tract:- A healthy stomach related condition is essential for well being neem decrease the undisirable warmth and toxins in gi tract.
7. skin moisture and softness :- neems skin benifits work both internal and externally As an outer application neem oil or cleanser grasps up the skin.
8. Hair :- For those with overabundance pitta and warmth caught in the scalp and hair falls neem is very beneficial for cooling the scalp and helping to development of shiny and smooth hair.
9. lungs:- neem help to clear breething and a sound respiratory framework.
10. *Emblca officinalis* ( aamla ) :- commonly known as Indian gooseberry or Amla is one of the most important medicinal plants in Indian traditional systems of medicine (Ayurveda, Unani and Siddha). It is a well-known fact that all parts of amla are useful in the treatment of various diseases. .Among all, the most important part is

fruit. Amla fruit is widely used in the Indian system of medicine as diuretic, laxative, liver tonic, refrigerant, stomachic, restorative, anti-pyretic, hair tonic, ulcer preventive and for common cold, fever; as alone or in combination with other plants. Phytochemical studies on amla disclosed major chemical constituents including tannins, alkaloids, polyphenols, vitamins and minerals. Gallic acid, ellagic acid, emblicanin A & B, phyllembin, quercetin and ascorbic acid are found to be biologically effective. (32) Research reports on amla reveals its analgesic, anti-tussive, anti-atherogenic, adaptogenic; cardio, gastro, nephro and neuroprotective, chemopreventive, radio and chemo modulatory and anti-cancer properties. Amla is also reported to possess potent free radical scavenging, antioxidant, anti-inflammatory, anti-mutagenic, immunomodulatory activities, which are efficacious in the prevention and treatment of various diseases like cancer, atherosclerosis, diabetes, liver and heart diseases. In this article, we discuss the nutritional value, biochemical constituents, traditional uses. (33,34)

Neuroprotective Effects: An examination when CP infusion inferred an all around saved brain development. (35) This plant is used in various diseases like, fatigue, old age, hematinics, menstrual disorders, malaria, diabetes, tuberculosis, chronic nose infections, diuretics, to treat fever, anticancer, antioxidant etc.

Antineoplastic activity of the plant isopropyl alcohol extract of amla fruit is reported to be effective against various cancer cell lines. (36) This plant is used in various diseases like, fatigue, old age, hematinics, menstrual disorders, malaria, diabetes, tuberculosis, chronic nose infections, diuretics, to treat fever, anticancer, antioxidant etc.

1. For hemorrhage, diarrhea and dysentery: Using dried fruit. A decoction prepared from the fruit combined with T. chebula and T.
2. belericais useful in chronic dysentery and biliousness, in doses of 1 oz. once or twice daily.
3. For diarrhea of children:- Tender shoots given in butter-milk cure indigestion and diarrhea; green fresh leaves combined with curds have a similar effect.
4. For anemia, jaundice and dyspepsia: Use dried fruit with iron. A.
5. fermented liquor prepared from the root is used in jaundice, dyspepsia, cough, etc
6. To stop nausea and vomiting: A powder of the amla seed and red. sandalwood is given with honey, to stop emesis
7. For hair problem :- The powder of amla is very beneficial for hairs. Or the oil of amla also used to stop the hairfall.
8. Tinospora cordifolia (Gulvel) :- The plant tinospora cordifolia is the traditional plant mainly used in ayurvedic systems in many conditions. This plant is extensively used and investigated belongs to the family Menispermaceae for its varied activities. It is a deciduous, fleshy, robust climber growing with support of mango or neem plant. (35) This plant is used in various diseases like, fatigue, old age, hematinics, menstrual disorders, malaria, diabetes, tuberculosis, chronic nose infections, diuretics, to treat fever, anticancer, antioxidant etc.

### Diabetes mellitus

Hypoglycemic activity of Gulvel was shown in alloxan-diabetic rats. (36) The aqueous and alcoholic extracts reduced fasting blood sugar and improved glucose tolerance followed by deterioration after one month treatment. Aqueous root extract of Gulvel caused a significant reduction in blood glucose, brain lipids, and hepatic glucose-6-phosphatase, serum acid phosphatase, alkaline phosphatase, and lactate dehydrogenase, and increased the body weight, hemoglobin, (36)

### Skin disorders and leprosy

Traditional use of Gulvel has been mentioned in skin diseases. In Ayurveda, it has been mentioned as —Kushtaharal (means, useful in leprosy), and useful in skin disorders like —Kandul Gulvel has been shown to have beneficial antileprotic activity in a combination formulation. (37)

### **Snake bite and scorpion bite**

Use has been mentioned in snake bite and scorpion bite due to its ability to remove exogenous and endogenous toxins. The most likely mechanism relates to immune-modulation and antioxidant properties(38)

Millet'tia pi□□at'a ( kaia□ja) :- kaia□ja is t'ke i□dige□ous medici□al pla□t' used i□ Ayuiveda, siddka,a□d u□a□i syst'em of medici□es foi t'ke keali□g effect's o□ kema□ bei□gs. t'ke pla□t' Millet'tia pi□□at'a is belo□gs t'o t'ke family legume□acea. t'ke pait's of t'kis pla□t' like baik,s't'em, foot's, leaf, flowe i'e used i□ diffeie□t t'ypes of diseases suck as diai'ikea, cough, lepiosy et'c.

### **Treditional uses of karanja**

This plant is used For the treatment of wounds, ulcers, painful rheumatic joints, tumours, piles, skin diseases, itches, diarrhoea and other diseases. The leaves of plant are used for wound healing, relieving rheumatic pains, anti-helminthic, cleaning ulcers, gonorrhoea, digestive, laxative, genitalia, cold, cough, gonorrhoea, diarrhoea, dyspepsia, and leprosy. Flowers were used in the treatment of diabetes(39)

1. relief pain :- The leaves of karanja is boiled into a water and after some time shake well the body.it gives relief pain to the body.
2. skin infection:- The dried bark powder of karaja and alovera gel is mix and spread on body part where the infection is there it treat the skin problems.and fungal infection, dark circle etc.
3. Anti-inflammatory activity :- Pongamia pinnata leaves and seed extracts have been reported to show potent anti-inflammatory activity against acute, subacute and chronic inflammation induced rat modal.
4. Neuroprotective activity: Neurodegenerative diseases are associated with neuroinflammation, manifested by over-production of nitric oxide (NO) by microglial cells. Three compounds from Pongamia pinnata namely Pongaglabol methyl ether (flavonoid), and lonchocarpin (chalcone) and glabrachromene II (chalcone) were shown to be potential therapeutic agents for neurodegenerative.(40)
5. Alovera:- alovera is the indian medicinal treditional plant belongs to the family Asphodelaceae (Liliaceae) family, and is a shrubby or arborescent, perennial,xerophytic, succulent, pea- green color plant. More than 75 active ingredients from inner gel have been identified including vitamins, minerals, enzymes, sugars, anthraquinones or phenolic compounds, lignin, saponins, sterols, amino acids, and salicylic acid.(41,42)

The alovera is used in various types of diseases,like wound healing, cosmetic, antiageing, skin hydretion effect, antibacterial, antifungal, antiviral etc

1. laxative action :- Anthraquinones increase intestine water content, stimulate water secretion, and increase intestinal peristalsis [28]. And as mentioned earlier a group of specialized cells known as the pericyclic tubules, which occur just beneath the outer green ring of the leaf, produce an exudate that consists of a bitter yellow latex with powerful laxative-like actions(43)
2. antibacterial:- The alovera shows the antibacterial property. The activity of Aloe vera inner gel against both Gram-positive and Gram-negative bacteria has been demonstrated by several different methods .Streptococcus pyogenes and Streptococcus faecalis are two microorganisms that have been inhibited by Aloe gel
3. antitumor effects :- The two fractions from Aloes that are claimed to have anticancer effects include glycoproteins (lectins) and polysaccharides [6]. Different studies indicated antitumor activity for Aloe vera gel in terms of reduced tumor burden, tumor shrinkage, tumor necrosis, and prolonged survival rates.(44)
4. cosmetic preparation:- In the cosmetics preparation alovera is used in high quantity in preparation like gels, shampoos, creams, soaps it is used as a hair care etc.

Ficus benghalensis is commonly known as Banyan tree or Vata or Vada tree in Ayurveda. Belonging to family mulberry. There are more than 800 species and 2000 varieties of Ficus species, most of which are native to the old world tropics. It is used in Ayurveda for the treatment of diarrhea dysentery and piles; teeth disorders Rheumatism, skin disorders like sores to boost immune system as a hypoglycemic. The extracts of Ficus benghalensis were also reported to inhibit activity from liver and kidney fruit extracts exhibited anti-tumor activity in the potato disk bioassay(45)

Traditional uses:- Different parts of the tree have been found to possess medicinal properties: leaves are good for ulcers. Aerial root are useful in gonorrhoea, seed and fruit are cooling, tonic and astringent and is also used in diarrhea, dysentery

and diabetes. The bark of the plant is used in ayurvedic medicine for the treatment of diabetes. (46)

**Pharmacological effects:**

1. Analgesic Activity: The analgesic activity of stem bark extraction of *Ficus benghalensis* tested using acetic acid induced writhing model on rats, showed significant analgesic activity.
2. For hair growth: The white coloured roots of banyan trees are very beneficial for hair growth. These roots are boiled into a coconut oil and take it for 8 days and after that it can be useful to hair. It shows the length and broad hairs.
3. Anticancer Activity:- The fruit extract of *Ficus benghalensis* has been documented for its anti-cancer activity in the potato disc bioassay, but none of the tested extracts showed any marked inhibition on the uptake of calcium in to rat pituitary cell-line. (47)
4. Anti-inflammatory Activity:- The ethanolic (300 mg) and petroleum ether extracts (600 mg/kg/day) of *Ficus benghalensis*, significantly reduced ( $p < 0.05$ ) carrageenan- induced paw edema in rats. The result indicated the ethanolic extract of *Ficus benghalensis* exhibited significant anti inflammatory activity.(48)

*Bael Aegle marmelos*(Linn.)

Bael is plant of Indian origin having tremendous therapeutic potential is not fully utilized. It belongs to family Rutaceae, the family of citrus fruits. It is known with different names in different languages 8-12. Bel, Beli, Belgiri (Hindi); Bilva, Shivadruma Shivaphala, Vilva (Sanskrit); Bael, Bengal quince, Golden apple (English); Bel, Bel Kham (Urdu); Bel (Assamese and Marathi);

Chemical composition:- Various chemical constituents like alkaloids, coumarins and steroids have been isolated and identified from different parts of tree, such as leaves, fruits, wood, root and bark.

Pharmacological effects:-

1. Anticancer activity:- Bael inhibited in vitro proliferation of human tumour cell lines including the leucemic K562T-lymphoid Jurkat, Beta-lymphoid, Erythro leukemic HEL20. Extract of *A. marmelos* is anti-proliferative but it produces effect on MCF-7 and MDA-MB-231 breast cancer cell line when it is in high concentration (49)
2. Antipyretic and Analgesic activities:- Bael extract exhibits antipyretic, anti-inflammatory and analgesic activities, as it has shown a significant inhibition of the carrageenan induced paw edema, cotton-pellet granuloma and paw itching.(50)
3. Constipation:- Ripe fruit is regarded as best of all laxatives. It cleans and tones up the intestines. Its regular use for two to three months helps in evacuation of even the old accumulated faecal matter from the bowels. For best result, it should be taken in the form of Sharbat, which is prepared from the pulp of the ripe fruit (51)
4. Respiratory infections:- Medicated oil prepared from leaves gives relief from recurrent cold and respiratory infections. The juice extracted from leaves is mixed with equal quantity of sesame oil and heated thoroughly, a few seeds of black pepper and half a teaspoonful of black cumin are added to the hot oil, and then it is removed from the fire and stored for use when necessary. A teaspoonful of this oil should be massaged onto the scalp before a head bath. Its regular use builds up resistance against cold and cough (52)
5. Bael fruits, leaves, and other parts of the tree have phytochemicals that possess numerous pharmacological values. The anti-inflammatory activity was demonstrated by preparations of bael roots. Antioxidant potential of alcoholic and aqueous extracts of bael bark was able to scavenge target radical species such as  $O_2^-$ , NO, 2, 2'-azinobis-3-ethylbenzothiazoline-6-sulphonate (ABTS+) [50, 51]. All parts of the bael tree can be prepared as ideal tonics and reported to be good for the brain.

*Ficus religiosa* (pipal)

Commonly known as "Peepal" has played a significant role in improving health and alleviating illness of mankind. *Ficus religiosa* is a large evergreen tree found throughout India. It was explored and used in various systems of medicine like Ayurved, Siddha Unani and Homeopathy. The *Ficus* genus contains 800 species and 2000 varieties of trees, shrub and vines. These plants grow in different climatic zones the chemical constituents present are Alanine, Threonine, Tyrosine, Bark Bergapten, Bergapton, Lanosterol, B-Sitosterol, Stigmasterol, Lupen-3-One, B-Sitosterol-D-Glucoside,



Vitamin K1 . (53)

Therapeutic uses like *Ficus religiosa* have been used in traditional Indian medicine for various range of ailments. Traditionally the bark, leaves, fruits and other parts are used as medicines for treatment of various diseases. Bark is used for treating gonorrhoea, ulcers, and the leaves are used for skin diseases. The leaves also reported to possess antivenom activity and regulate

mARenPestruPsal ceLyclaeIERDchIRNEPDSaIEPAAeNRRJCOHURXN62A5L OF

#### **Anti-inflammatory activity**

Viswanathan et al investigated the anti-inflammatory and mast cell proliferative effect of aqueous extract of bark of *F. religiosa*. The anti-inflammatory effect was evaluated against acute (carrageenan induced hind paw oedema) and chronic (cotton pellet implantation) models of inflammation. *F. religiosa* has found to be potential anti-inflammatory & analgesic property. It was found that the leaf extract of *F. religiosa* has potential anti-inflammatory activity against carrageenan induced paw oedema.(54)

#### **Anti amnesic activity**

To investigate the anti-amnesic activity of *F. religiosa* methanol extract of figs of *F. religiosa* were used. Figs are known to comprise a high serotonergic content and modulation of serotonergic neurotransmission which plays a crucial role in the pathogenesis of amnesia. The anti-amnesic activity was investigated using methanolic extract of figs of *F. religiosa* on scopolamine-induced anterograde and retrograde amnesia in mice. The result showed anti-amnesic activity against scopolamine induced amnesia, in a dose-dependent manner (55)

3Anthelmintic activity:- Methanolic extract *F. religiosa* bark was 100% lethal for *Haemonchus contortus* worms. The stem and bark extracts of *F. religiosa* proved lethal to *Ascaridia galli* in vitro. The pharmacological studies has accepted that anthelmintic activity is due to a proteolytic fraction called ficin. It is evident from above that methanolic extracts of *F. religiosa* possibly exerted anthelmintic effect because of ficin(56)

#### **Immunomodulatory Activity**

To study the immunomodulatory effect of alcoholic extract of the bark of *F. religiosa* various hematological and serological tests were carried out in mice. Administration of extract remarkably ameliorated both cellular and humoral antibody response.

#### **Murraya koenigii (Kadi Patta)**

Kadi patta is the Indian traditional medicinal plant belongs to the family Rutaceae. The leaves, roots and stems of this plant has used for many purposes like in preparing juices, bringing aroma in many dishes. There are much potential of these plants because it is used for many diseases curing viz. anti-cancerous, antibacterial, antidiabetic, anti-diarrhea, and for memory enhancing. Their roots and leaves are taking for the cure from itching, inflammation, piles, etc. Phytochemicals Like Phenolics, saponins, terpenoids, flavonoid, tannins, alkaloids, phenolic acids, elagic acids, tannic acids etc. Are present. (57)

#### **Traditional uses**

Its leaves are used to cool down the internal heat of stomach and to build up the digestive immunity. Paste of the leaves prepared can be used as an antidote against some venomous animals' bite. The blend of extraction of curry tree leaf and bark are very helpful in maintaining hair growth. It can be the best alternate of antipyretic drugs. Intake of curry leaves extract reduces the destruction of b-cells of islets thus reduces or preventing the development of diabetes mellitus which is a malignant disease. It is found that *M. koenigii* is helpful in maintaining skin pigmentation, control cholesterol level and enhance memory. It decreases the risk of calcium deficiency and gave strength to bone. It is observed that it also responsible for good dental health.(58)

#### **Pharmacological effects**

Antiobesity and Antihyperlipidemic activities: The dichloromethane (MKD) and ethyl acetate (MKE) extracts of *Murraya*

koenigii leaves significantly reduced the body weight gain, plasma total cholesterol (TC) and triglyceride (TG) levels significantly. The observed antiobesity and antihyperlipidemic activities of these extract are correlated with the carbazole alkaloids, Mahanimbine. When it was given orally (30 mg/kg/day) significantly lowered the body weight gain as well as plasma TC and TG levels.

#### Effect on bronchial disorders

The herbal composition containing organic extract of any plant part of *Murraya* (leaves, bark, roots, and seeds) is useful in the treatment and remedy of bronchial respiratory.

#### Hair care

The carry leaves are used as the hair care . It gives the shine to the hair and also decreases the hair fall by using the carry leaves oil.

#### Carica papaya Linn. (papaya)

The papaya tree belongs to a small family — Caricaceae having four genera in the world. Papaya contains broad spectrum of phytochemicals including polysaccharides, vitamins, minerals, enzymes, proteins, alkaloids, glycosides, fats and oils, lectins, saponins, flavonoids, sterols, etc. Papaya is a common man's fruit, which is reasonably priced and has a high nutritive value. It is low in calories and rich in natural vitamins and minerals. Papaya places first among the fruits for vitamin C, vitamin A, riboflavin, folate, calcium, thiamine, iron, niacin, potassium and fibre. (59)

**Some uses of papaya trees:** Latex Anthelmintic, relieves dyspepsia, cures diarrhoea, pain of burns and topical use, bleeding haemorrhoids, stomachic, whooping cough.

**Ripe fruits:** Stomachic, digestive, carminative, diuretic, dysentery and chronic diarrhoea, expectorant, sedative and tonic, relieves obesity, bleeding piles, wounds of the urinary tract, ringworm and skin diseases psoriasis.

**Unripe fruit:** Laxative, diuretic, dried fruit reduces enlarged spleen and liver, used in snakebite to remove poison, abortifacient, anti-implantation activity and antibacterial activity.

**Seeds:** Carminative, emmenagogue, vermifuge, abortifacient, counter irritant, as paste in the treatment of ringworm and psoriasis, anti-fertility agents in males. Seed juice Bleeding piles and enlarged liver and spleen.

**Root:** Abortifacient, diuretic, checking irregular bleeding from the uterus, piles, anti-fungal activity.

**Leaves:-** Young leaves as vegetable, jaundice (fine paste), urinary complaints & gonorrhoea (infusion), dressing wounds (fresh leaves), antibacterial activity, vermifuge, in colic, fever, beriberi, abortion (infusion), asthma (smoke).

**Flowers:-** Jaundice, emmenagogue, febrifuge and pectoral properties.

**Stem bark:-** Jaundice, anti-haemolytic activity, STD, sore teeth (inner bark), anti-fungal activity. Pharmacological effects:

**Antimalarial:-** The petroleum ether extract of the rind of raw papaya fruit exhibits significant antimalarial activity. There may be significant commercial potential in extracting the active element from this plant, which grows abundantly throughout the tropics and the rind of which is discarded as waste, can be exploited for antimalarial activity (60)

**Cosmetics :-** The papaya is used as a cosmetic. It is used for shining the skin, remove acne, dark circles from the skin.

**Antipyretic:-** The juice of the papaya leaves is used to cure the fever. Dengue etc.

**Antimicrobial:-** The seed of papaya has antimicrobial activity against *Trichomonas vaginalis* trophozoites. The report suggests the use of papaya seed in urogenital disorder like trichomoniasis with care to avoid toxicity. (61)

## II. CONCLUSION

In this review paper we can see about the different kinds of medicinal plants which are used in various diseases. There medicinal uses, pharmacological effects general information procedure etc. a routine flame assay a Rnd ch P Anti-inflammatory actil et al investigated the 3. tCahoendrcelupshioarnam:- aIncnotlhtoigsacraelgvaicewetiopnaop,uesrefsw,eefAfceacntess,tdugidffyelrtheentdmimffeetrheonadt,ptyrrpocmsedo uf rme.eedtlcic.oinasl plants

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