WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 5.045
Volume 4, Issue 2, 1680-1695. Review Article ISSN 2277– 7105

A REVIEW ON COMMONLY USED INDIAN MEDICINAL PLANTS AND ITS MEDICINAL USE

Richa Tyagi*[1], Dr. Ekta Menghani[2], Vinita Singh[3]

[1]Research Scholar, Suresh Gyan Vihar University, Jaipur. India.

[2]Asst prof. JECRC University, Jaipur. India.

[3]Research scholar, Mewar University, Chittorgarh, India.

Article Received on
10 Dec 2014,

Revised on 04 Jan 2015,
Accepted on 29 Jan 2015

***Correspondence for Author**
Richa Tyagi
Research Scholar, Suresh Gyan Vihar University, Jaipur. India.

ABSTRACT

India is known for its rich culture and heritage of plants. Half of the population in India is dependent on medicinal plant. The present review will focus on Indian medicinal plants with therapeutic potential. Therapeutic plants have proved their importance by curing ailments counting with bacterial infections and serious diseases full of threat. Therapeutic herbal plants are always full of antioxidant and works as antimicrobial agents. Therapeutic plants are attaining popularity over allopathic drugs. The reason which make curative plants popular includes a speedy upsurge in contagious diseases, drug resistance in microbes, adverse effects of man-made antibiotics, although medicinal plants produce slow recovery, but the therapeutic use of medicinal plant is becoming popular because of their lesser side effects and low resistance in microorganisms. Antimicrobial activities of many plants have been reported by the researchers. Medicinal plants have a rich source of antimicrobial agents. Plants are used for medicinal purpose in different countries and these are the source of many effective drugs. A large number of therapeutic plant and its parts are been used as crude drugs and extracts from these plants are widely used for their medicinal properties. Most of the organ of plans have therapeutic possessions, Hundreds of plants species have been tested for antimicrobial properties, the vast majority of have not been adequately evaluated. So, the main aim of the review is to collect all the information available on selected Indian median medicinal plants and to focus on their therapeutic uses.

KEYWORDS: Medicinal plants, antimicrobial agent, infections, herbal drugs, antifungal, *tulsi*.

INTRODUCTION

In between 2500 and 500 BC Ayurvedic perception emerged and developed in India. Ayurveda is also recognized as the science of life, in old times people were dependent on Ayurveda for their health issues. Metabolically a good-balance indicates a healthy and positive body in humans. According to old system of medicine, some external issues were responsible for diseases. Ayurveda has a massive collected works in all parts of illnesses, pharma and therapeutics.

Many Western pharmaceutical company has stated the Indian systems of medicine as a wealthy source of knowledge. In India, around 20,000 medicinal plants have been recorded however traditional communities are using only 7,000 - 7,500 plants for curing different diseases. Before 4000 years, the therapeutic information in India was named as Ayurveda. In India Ayurveda is still the most significant system of drug and medicinal treatment in India. Plant alkaloids are the primary active ingredients of Ayurveda drugs.

Nowadays the active ingredients from most of the herbal plants are being recognised and importance of these therapeutic herbs has being extracted. According to an approximation around 3,000 species were recognised with medicinal properties out of 17,000 discovered species.

In our country India, alternative medications are also accessible for the people who don't want orthodox drugs or the persons who cannot be assisted by conventional drug. In India people believe in *Ayurveda* and *Kabiraji* (Therapeutic medicine) as alternative drug system for different diseases. Ayurveda and its drugs is supposed to be present in our country for more than thousands of centuries. It pays numerous methods to deliver curative properties to the ill patients. One of the things that Ayurveda uses is medications from plant derivation.

Ayurveda, the first prearranged system of medicine, ever evolved throughout the globe, is not mere a system dealing with healing techniques and curing diseases. It is indeed a codified science which issues definite guidelines for healthy, peaceful and happy living and maintenance and protection of physical and psychological health, with an object of achieving longevity. Indian system of medicine is dependent on herbal plants and its content to cure various diseases. So, the main effort of the present review is to collect information related to therapeutic uses of following plants.

There are so many Indian medicinal plants that have great therapeutic impact and used to cure diseases.

1. Tulsi

Tulsi is *Ocimum tenuiflorum* and also known as Basil. Species of *Tulsi* include- *Rama Tulsi* (*Ocimum sanctum*), *Krishna Tulsi* (*Ocimum sanctum*) and *Vana Tulsi* (*Ocimum gratissimum*). Each having bit discrepancy in taste. *Tulsi* plant is known to have various therapeutic prospective and is used for medicinal resolutions. It work as an antidiebetic, antifungal, antifertility, anticancer,[1] antiemetic, antiasthemetic. The extract from *tulsi* was deep-rooted for antibacterial and antifungal activity, the extract inhibit the growth of various gram positive bacteria including *bacillus subtilis* and gram negative bacteria counting with *E.coli* . Extract from different part of the plant is used in Ayurveda's groundwork. Oil from the plant is rich in vitamin C, carotene, calcium and phosphorus it is known to upsurge life spam of a human being.

Extract from the plant is cast-off for common cold, inflammation, malaria, heart disease, headaches, stomach disorders, kidney stones, heart disorders,[2] and many more. Plant is used in contradiction of wound for better healing power .It work best for nervous system and helps in boosting the memory. Theoretically plant removes phlegm and catarrhal matter from the bronchial tube, so *tulsi* is known to eliminate respiratory diseases. It is used with honey and ginger against bronchitis, influenza and asthma in home remedies. Tulsi oil is also used in food industry as flavouring component, in fragrance industry.[3]

Tulsi leaves are beneficial against malaria. The juice of leaves suppress fever, cold and flu.[3] It is used in Ayurveda's grounding of cough syrup and is given to patients grief of renal kidney stones it aids in reinforcement of kidneys. It removes stones via urinary tract. The extract lowers the level of cholesterol in blood. So *Tulsi* serves as the most operative against cardiac complaints.[4, 5, 6,]

In earache, few drops of extract relieves the patient from pain .Extracts of this herbal plant is also helpful in digestive syndromes, In rural areas people practice fresh leave extract, flower tops and slender roots as an antidote for snake and scorpion bites.

It also shrinks the indications of viral hepatitis. This plant is also lowers the blood sugar level so it works best against diabetes.[4, 5, and 6] Oil from plant also work as mosquito repellent and it elevates the body immunity against various infections by producing antibodies. The leaves

of *tulsi* are active in ulcer and infections in the mouth. It also reduces the breath odour. *Tulsi* is very effective against various skin infections if suppress leukoderma . *Tulsi* extract is operative against sore eyes and night-blindness, which is instigated by lack of vitamin, typically cast-off before sleep, it effort as an real eye drops, *tulsi* extract is used as stress dismissing agent it revitalize and reinstate a person health. In rural areas people use *tulsi* seeds with milk or water and works as an antioxidant.[4, 5, 6]

(ii) *Azadirachta indica (neem)*

Neem is *Azadirachta indica*. It is tropical evergreen tree and is innate to India, Instigate particularly in dry regions .Whole plant contain Antipyretic properties, antiviral, antipyretic, the plant supress inflammation, ulcers and infections because of fungus.

In Sanskrit it is known as '*nimba*' which means 'to give good health'. Even *Charak-Samhita'* and '*Susruta*-Samhita' also accepted the benefits of the plants. Neem is known for its unpleasant taste. In Ayurveda neem is said to be *'sarva roga nivarini'* that means *"*the curer of all sicknesses" neem juice is nasty and tough to drink but one glass of neem juice is full of good health. Conservatively individuals in take juice of the plant for acne, it is useful against Eczema also. It is believed that it blushes out all the contaminants from the body, the neem juice also lowers the body sugar level. A few drops in eye recovers eye sight.

It is reported that neem juice also shrinks the vaginal pain during pregnancy. Neem has antibacterial, antifungal, antiviral, antipyretic (fever reducing), antihistamine and antiseptic possessions, plant and its diverse parts are castoff to cure infections and skin diseases and for dental care, its leaves, flowers, seeds, roots, bark and fruits are consumed to treat various diseases. Every part of the plant have health supporting aids. In Ayurveda it is used as main element in blood purification plan and it is used in most Diabetic prescriptions as well.

Neem is used in contradiction of various ailments counting with flu, temperature, painful throat, and pest, infections from fungus, skin diseases, malaria, and insects.[7] Neem is shown to have antibacterial activity against various bacteria including *S.aureus*, *S. pyogenes*, *E. coli*, and salmonella typhi. All of these bacteria are pathogenic and causes meningitis, cystitis, painful throats, typhoid, blood poisoning, and food poisoning .Neem is operative against viral infections also it inhibits viral multiplication by intermingling with the surface of the cells so that it stops the cell from becoming infected by the virus. Chickenpox,[8] shingles, herpes, and hepatitis can be cure by treatment of neem. The plant is operative against so many infections and illness like malaria, leprosy.[8] In Ayurveda neem is used against various fungal infections even in rural areas people still use neem against every infection. People use to brush their teeth with neem twigs that protects their gums against infection, these twigs are also used to eliminate intestinal worm, asthma, and cough. Neem oil, aqueous extracts of neem leaf, Dried neem leaf powder, the smokes from scorching dried neem and neem leaf paste is used against athlete's foot, ringworm, and candida, they may grounds fungal infection in moist parts of body. Gedunin and nimbidol are two major composites contemporary in leaves of neem which are effective against infections it is said that these two complexes are also castoff against leprosy.[8] It suppress fungal growth and germination.

Neem is used in medication of heart diseases also it can treat high BP, blood lumps, fat, and speedy heartbeat,[8] it is operative against blood disorders including poor circulation, blood poisoning, and kidney glitches, used in various sexual diseases with gonorrhea, syphilis, chlamydia, warts at different parts of the body, candidacies, and infections of urinary tract.
Neem leave extract is used to formulate spermicidal and thus researchers are going to use neem extracts for making contraceptives .Gum produced by neem is used in Scabies, wounds, ulcer, skin ailments and root can be used as refrigerant, diuretic representative. It also work as anti-repellent. This plant is found effective against Dengue[9] and HIV.[10]

(iii) Garlic

Garlic is *Allium sativum*. It is branded for its antibacterial, antiviral property. It encloses a material called Allicin, which has anti-bacterial belongings. Garlic is very operative against various diseases counting wounds, ulcers, skin infections, flu, worms, respiratory ailments, high blood pressure,[12] cancer, colic, colds, kidney problems, bladder problems, and ear aches,[13] diaphoretic, diuretic, expectorant, stimulant, alterative, antispasmodic, vulnerary, and vermifuge . Garlic is best known for its cardiovascular properties.[11]

Garlic is known as a robust natural medicine for regulating pressure of blood, it lowers fat and cholesterol, supress infections in urinary tract, digestive tract, and respiratory .Garlic is known to have anticancer and antitumor possessions.[14, 15, and 16] Propyline sulfide, a chemical found in garlic and onion extract, acts on the enzyme liposaminase, a chemical that is linked to malignancy, *Allium sativum* have sulphur complexes existing in it that boost the immune system, these sulphur reduces the construction of carcinogens, and increases the process of damaged DNA repair. Garlic also contain various antioxidant. These antioxidant suppresses reactive body chemicals that use to harm the body. These antioxidants also protects cell membrane that prevent the cell through damage, which is use to stop the ageing process.[12] Garlic is used as a detoxifier, it improves metabolism and has a stimulating effect on the liver.

(iv) *Ashwagandha*

Withania somnifera is found in all regions of the globe, this plant is known to have therapeutic belongings.[17, 18] Scientifically known as *Withania somnifera*, Indian ginseng is used widely in Ayurveda. *Ashwagandha c*ontain chemical compounds like CH_3OH, C_6H_{14}, $(C_2H_5)_20$, 3- tigioyloxytropana, steroids lactones, tropanol, pseudotopanol, alkaloid, choline, cuscokygrene, isopelletierine. All these chemical compound are known to have curative property.

In old time this plant was used to increase energy, strength, youthfulness and to increase the blood, vital fluid, semen and muscle fat. It aids to supress weakness, dehydration, bone weakness, joint inflammation, impotency, muscle tension and it also helps to reduce in aging prior to age.[19, 20, 21, 22] Root of this plant is used in rheumatic ache, joint inflammation, nervous illnesses and epilepsy, cold and cough. It helps to boost the immune system, in females it recovers the reproductive system. In males it improves sexual desires and superiority of semen and upsurge sperm count.

It is also beneficial in brain disorders it can improve memory and can act against Alzheimer's disease, memory loss and insomnia, Parkinson's disease, in rural areas people use to take it to improve hemoglobin in blood. It is cast-off to upsurge the WBC count.

(v)Aloe Vera

Aloe vera is found all around the globe counting with Haiti, United states of America, Venezuela, India.[23, 24] Usually known as aloe. It comes from lily family. This family originates from dry parts of the world. Aloe plant use to stockpile water because of restricted rain and mass this water in form of gel in succulent leaves. Long ago people believed that this gel can be used in skin problem or restoration of skin. Aloe Vera relives sunburn. It antidotes blisters, insect bites, eczema, burns, swellings, injuries.[28, 29, 30]

It is also used to treat acne. The plant is rich in amino acids so taking it day-to-day in the diet top off diet. It is an excellent anti-inflammatory product that work best for joint and muscle motion. It has vitamin A, different classes of vitamin B including B6,B1, E ,B2, B12, and Folic Acid and minerals like copper, chromium, sodium, calcium, iron, magnesium ,zinc, manganese[25, 26, 27] they heightens the body’s immune system, taking repeatedly can mend digestive system, sacking heartburn, arthritis, lower blood glucose, breathing complaints ,acts

as boost for female reproductive system and inhibits cancer. Gel from Aloe Vera helps skin to decrease acne, reduce erythema and supress wrinkle.[34]

Function of body becomes smooth with regular intake of juice from Aloe Vera.[35] It decreases cell damage because of stress and this plant reduces physiological changes in body that too because of stress.[35]

It avert scarring and stretch marks, warts, insect bites, rashes, sores, herpes, eczema, asthma, stomach ulcers, colitis, hemorrhoids, urinary tract infections and prostate problems. This plant is best known to protect body from oxidative stress.[31, 32, 33]

(vi) Mangifera indica

Commonly known as mango, due to sweetness is also called as 'king of fruits'. Mango is rich in anti-oxidants, phytochemicals. Mango is rich in 6 polyunsaturated fatty acids, omega-3, carotenoids, polyphenols, olyphenols, gallic acid, tannis, xanthone. It is used in a number of forms throughout the world, it is used as pickle, chutney, jelly, cooling summer drink, in vegetable dishes. Mango pulp is rich in antioxidant that cure number of diseases including rheological properties, the pulp is also used to supress food born microbes.[37, 38]

Mango is rich in fibres, these fibres assistances in rejection of excreta from colon and checks constipation. It is rich in tartaric, citric and malic acid, which helps in upholding the alkali reserve inside the body. Extract of mango is operative against bacteria and works as anti-bacterial agent.

Dried mango flowers are cast-off to treat diarrhoea, chronic dysentery, bladder complications. This plant is full of anti-oxidant so it aids to lift the immune system. The leaves of the mango tree are useful in diabetes while the dried seed powder is used alongside diarrhoea, kidney stone, gonorrhoea, dry cough.

Leaves of mango cure piles. Leaves have antibacterial,[39] hypoglycaemic actions,[40] supress ulcers[41] Mango root paste is cast-off as a medicine in contradiction of fever. Mango is full of iron and can be used by pregnant females to cure anaemia, it shows improvement in cell amount. Juice recovers concentration and memory and avert memory. Mango is worthy for eyes too, vitamin A which is present in mango helps this fruit to cure eye diseases.

(vii) Curcuma longa

Commonly known as turmeric. Normally cast-off in every home in the dried state as haldi, Turmeric have various properties against microbes, fungus and works against inflammation. Turmeric is cast-off as best home remedy for contamination. It is also applied for skin allergies, wounds painful throat, inflammation of joints.[42] Intake of turmeric in oral form can reduce inflammatory swelling.[43]

It is cast-off as antibiotic against injuries. Turmeric is full of dietary fibre, iron, manganese, Vit B6, C, E, niacin, potassium, zinc.

A slight amount of turmeric in regular diet protects from anaemia, neuritis, memory illnesses and cancers, infectious ailments, high blood pressure and strokes, it inhibits cancer by conquering the development of tumour cells, multiple myeloma.

Turmeric is rich in antioxidant, turmeric oil have termerone, curlone, curumene, cineole, and p-cymene chemical composite that aids the body against contaminations. Curumene is very strong antioxidant compared to Vit C, E, A and is effective against Alzheimer's disease .[44] The roots of turmeric is used to lower the blood cholesterol levels, it is operative in contradiction of coronary artery disease and heart stroke. Turmeric is admirable agent as liver shielding and anti-depressant, used to advance digestion, decrease gas and bloating. It defends liver so eradicate hepatitis, cirrhosis, and jaundice. Turmeric is antispasmodic so it diminishes menstrual pain and cramps.

(viii) Phyllanthus emblica

Commonly known as amla or Gooseberry. In Ayurveda system of medicine *Phyllanthus emblica* is widely used for therapeutic purpose.[46] Gooseberry is rich in antioxidants and phytochemicals. It supress oxidative stress.[45] It has Phyllemblin, Ascorbic acid (Vitamin C), Gallic acid, Tannins, Pectin. Corilagin, it is the finest source of Vitamin C. It is active against undue salivation, nausea, vomiting, and giddiness.

The dried Gooseberry is also known to have innumerable therapeutic belongings. Dried Gooseberry is used against diarrhoea and dysentery, digestive difficulties, bronchitis, asthma and constipation .It is also used in chyavanaprash, triphala, it has anti-viral assets. It works as antioxidant,[46] hepatoprotective agent,[47] works to supress inflammation[49] and acts as hypocholesterolemic.[48] Gooseberry is known to progress new tissues and surges the blood cells. It also deliver reinforce to teeth, and protects gums from bleeding and recovers vision. It bids protein and provide robust nails and hairs.

(ix) Bacopa monnieri

Commonly known as Brahmi. Brahmi has different range of chemical composites including alkaloids, flavonoids, sterols, saponins. Betulic acid, stimastorol, betasitosterol, bacoside and bacopa saponins[50] and it has countless antioxidants so it diminishes the manufacturing of free radical in the body.[51] This plant is recognized as adaptogen in ayervedic system of medicine that upsurges the resistance of body in state of stress.[52] Brahmi is cast-off as a brain tonic that relaxes brain and known to upsurge sex drives,[54] memory accompaniment, it is a neuro protective herbal medicine that guards brain against Alzheimer's disease. Useful as antiasthma, anti-stress, antiulcer.[55,56,57,58,59]

It progress blood circulation and reinforce the capillaries, used to eliminate joint pain since arthritis or rheumatism. Brahmi is also cast-off for hair and nail progress. It increases wound healing[53] Dried leaves of brahmi is also used in various medicinal groundwork.

(x) Coriandrum sativum

Coriandrum sativum is also known as Chinese parsley or dhania. Coriander is rich in antioxidants that supress free radicals,[61] alkaloids, flavonoids, essential oils, vitamins, and dietary fibre, and minerals.[62] It decreases the signs of aging, cast-off in various health juices, it aids in dipping cholesterol inside the body. Coriander supress bacterial and fungus contaminations. Coriander known to regulate blood glucose.[60]

Medicinal plants have health-giving possessions due to presence of some complex biochemical ingredients, these constituents are known as secondary metabolites present in the plant for its defence mechanism.

These plant metabolites are classified in several groups conferring to their composition alkaloids, essential oils, glycosides and corticosteroids etc.

REFERENCES

1. Ames B N. Dietary carcinogens and anticarcinogens-oxygen radicals and Degenerative diseases. Sci, 1983; 221: 1256-1264.
2. Horton J W. Free radicals and lipid peroxidation mediated injury in burn trauma: the role of antioxidant therapy. Toxicol, 2003; 189: 75-88.
3. Simon J E, Quinn J, Murray R G. Basil: a source of essential oils. In: Janick J, Simon J E. (Eds). Advanced in New Crops.Timber Press, Portland, OR, 1999; 484-489.
4. Chattopadhyay R R. A comparative evaluation of some blood sugar lowering agents of plant origin. J. Ethnopharmacol, 1999; 67: 367-372.
5. Prakash J and S K Gupta. Chemopreventive activity of Ocimum sanctum seed oil. J. Ethanopharmacol, 2000; 72: 29-34.
6. Umadevi P. Radioprotective, anticarcinogenic and antioxidant properties of the Indian holy basil, Ocimum Sanctum (Tulasi). Indian J. Exp. Boil, 2001; 39: 185-190.
7. Neem Foundation. Abstract book - World Neem Conference; November 21-24, 2007; Coimbatore, India. Mumbai: Neem Foundation, 2007.
8. National Research Council (US). Board on Science and Technology for International Development. Neem: a tree for solving global problems. Washington, DC: National Academy Press, 1992.
9. Parida MM, Upadhyay C, Pandya G, Jana AM. Inhibitory potential of neem (Azadirachta indica Juss) leaves on dengue virus type-2 replication. J Ethnopharmacol, 2002; 79: 273-8.

10. Udeinya IJ, Mbah AU, Chijioke CP, Shu EN. An antimalarial extract from neem leaves is antiretroviral. Trans R Soc Trop Med Hyg, 2004; 98: 435-7.
11. Banerjee SK. and Maulik S. Effect of garlic on cardiovascular disorders. Nutrition Journal, 2002; 1: 4-30.
12. Lawson LD. and Bauer R. Garlic: A review of its medicinal effects and indicated active compounds. American Chemical Society, 1998; 176–209.
13. Kapoor LD. CRC handbook of ayurvedic medicinal plants. Boca Raton: CRC Press, 1990.
14. Bensky D, Gamble A, Kaptchuk TJ. Chinese herbal medicine: materia medica. Seattle, Wash.: Eastland Press, 1993; xxv: 556.
15. Huang KC. The pharmacology of Chinese herbs. Boca Raton: CRC Press, 1999.
16. Minyi C. Anticancer Medicinal Herbs. Hunan, China: Hunan Science and Technology Publishing House,1992; 308.
17. Atal CK, Kapoor BM. Cultivation and utilization of medicinal plants (Eds. PID CSIR), 1989.
18. WHO survey. In medicinal plants (Eds. Haq. I.) Hamdard Foundation Press, Karachi, 13, 1993.
19. Charaka Samhita, Chikitsa Sthana, Second Chapter, 1997, Chowkambha Publishers, 38(English Edition).
20. Sharma PV, Dravyaguna Vigyan, Chowkambha Sanskrit Sansthan, 1997.
21. Vaidyaratnam P.S Varier's, "Indian Medicinal Plants, a compendium of 500 species", (Warrier.P.K. Nambiar V.P.K, Ramankutty Eds.), PartII, 1994; 52-55, by Orient Longman Publications, Hyderabad
22. Nadakarni, Indian Materia Medica, 1993, 1: 1292.
23. "African Pharmacopoeia," Vol. 1, Organization of African Unity, Scientific, Technical & Research Commission, Lagos, 1985.
24. G. Y. Yeh, D. M. Eisenberg, T. J. Kaptchuk and R. S.Phillips, "Systematic Review of Herbs and Dietary Supplements for Glycemic Control in Diabetes," Diabetes Care, 2003; 26(4): 1277-1294.
25. S. W. Choi, B. W. Son, Y. S. Son, Y. I. Park, S. K. Lee and M. H. Chung, "The Wound-Healing Effect of a Glycoprotein Fraction Isolated from Aloe vera," British Journal of Dermatology, 2001; 145(4): 535-545.

26. T. Yamaguchi, H. Takamura, T. Matoba and J. Terao, "HPLC Method for Evaluation of the Free Radical Scavenging Activity of Foods by Using 1,1-Diphenyl-2-Picrylhydrazyl," Bioscience, Biotechnology and Biochemistry, 1998; 62(6): 1201-1204.
27. A. Femenia, E. S. Sanchez, S. Simal and C. Rossello, "Compositional Features of Polysaccharides from Aloe vera (Aloe barbadensis Miller) Plant Tissues," Carbohydrate Polymers, 1999; 39(2): 109-117.
28. J. P. Heggers, "Beneficial Effect of Aloe on Wound Healing in an Excisional Wound Healing Model," Journal of Alternative and Complementary Medicine, 1996; 2(2): 271-277.
29. R. H. Davis, M. G. Leitner, J. M. Russo and M. E. Byrne. "Wound Healing. Oral and Topical Activity of Aloe vera," Journal of the American Paediatric Medical Association, 1989; 79(11): 559-562.
30. R. Maenthaisong, N. Chaiyakunapruk and S. Niruntraporn, "The Efficacy of Aloe vera for Burn Wound Healing: A Systematic Review," Burns, 2007; 33(6): 713-718.
31. B. Joseph and S. J. Raj, "Pharmacognostic and Phytochemical Properties of Aloe vera Linn—An Overview,"International Journal of Pharmaceutical Sciences Review & Research, 2010; 4(2): 106-110.
32. Barcroft and Myskja, "Aloe vera: Nature's Silent Healer," BAAM, 2003.
33. H. A. El-Shemy, M. A. Aboul-Soud, A. A. Nassr-Allah, K. M. Aboul-Enein, A. Kabash and A. Yagi, "Antitumor Properties and Modulation of Antioxidant Enzymes' Activity by Aloe vera Leaf Active Principles Isolated via Supercritical Carbon Dioxide Extraction," Current Medicinal Chemistry, 2010; 17(2): 129-138.
34. D. P. West and Y. F. Zhu, "Evaluation of Aloe vera Gel Gloves in the Treatment of Dry Skin Associated with Occupational Exposure," 2003, Vol. 31, No. 1, American Journal of Infection Control, pp. 40-42.
35. P. L. Saroj, D. G. Dhandar and R. S. Singh, "Indian Aloe," Central Institute for Arid Horticulture, Bikaner, 2004.
36. S. Foster, "Aloe vera: The Succulent with Skin Soothing Cell Protecting Properties," Herbs for Health Magazine, 1999.
37. Dak M, Verma RC, Jaaffrey SNA. Effect of temperature and concentration on rheological properties of ''Kesar'' mango juice. J Food Eng, 2007; 80: 1011-1015.
38. Gupta C, Garg AP, Uniyal RC. Antibacterial activity of Amchur (Dried Pulp of Unripe Mangifera indica) extracts on some food borne bacteria. J Pharm Res, 2008; 1: 54-57.

39. Doughari JH, Manzara S. In vitro antibacterial activity of crude leaf extracts of Mangifera indica Linn. Afr J Microbiol Res, 2008; 2: 067-072.
40. Severi JA, Lima ZP, Kushima H, Brito ARM, Campaner dos Santos L, Vilegas W, Lima AH. Polyphols with antiulcerogenic action from aqueous decoction of mango leaves (Mangifera indica L.). Molecules, 2009; 14: 1098-11.
41. Aderibigbe AO, Emudianughe TS, Lowal BA. Evaluation of antidiabetic action of Mangifera indica in mice. Phytother Res, 2001; 15: 456-458.
42. Kapoor LD. Handbook of Ayurvedic medicinal plants. Boca Raton, FL: CRC Press, 1990.
43. Cronin, J.R. Curcumin: Old spice is a new medicine. Journal of Alternative & Complementary Therapies, 2003; 9(1): 34-8.
44. Dikshit M, Rastogi L, Shukla R, Srimal RC. Prevention of ischaemia induced biochemical changes by curcumin and quinidine in the cat heart. Indian J Med Res, 1995; 101: 31-35.
45. Singletary KW, Jackson SJ, Milner JA. Non-nutritive components in foods as modifiers of the cancer process. In A. Bendich R. J. Deckelbaum (Eds.), Preventive nutrition: The comprehensive guide for health professionals Totowa, NY: Humana Press, 2005; 55–88.
46. Zhang YJ, Tanaka T, Iwamoto Y, Yang CR, Kouno I. Phyllaemblic acid, a novel highly oxygenated norbisabolane from the roots of Phyllanthus emblica. Tetrahedron Letters, 2000; 41: 1781–1784.
47. Bhattacharya A, Chatterjee A, Ghosal S, Bhattacharya SK. Antioxidant activity of active tannoid principles of Emblica officinalis (Amla). Indian Journal of Experimental Biology, 1999; 37: 676–680.
48. Jeena KJ, Joy KL, Kuttan R. Effect of Phyllanthus emblica, Phyllanthus amarus and Picrorhiza kurroa on NNitrosodiethylamine induced hepatocarcinogenesis. Cancer Letters, 1999; 136: 11–16.
49. Mishra M, Pathak UN, Khan AB. Emblica officinalis Gaertn and serum cholesterol level in experimental rabbits. British Journal of Experimental Pathology, 1981; 62: 526–528.
50. Asmawi MZ, Kankaanranta H, Moilanen E, Vapaataslo H. Anti-inflammatory activities of Emblica officinalis Gaertn leaf extracts. Journal of Pharmacy and Pharmacology, 1993; 45: 581–/584.
51. AB Negrao, PA Deuster, PW Gold, A Singher and GP Chrousos, Individual reactivity and physiology of the stress response, 2000; 54(3): 122-28.

52. Dravya Guna Vigyana by Priya Vrita Sharma, Vol. 2, Chaukhamba Bharati Academy, 1995; Pg. 3-6.
53. Chrousos GP and Gold PW. J Am Medical Association, 1992; 267: 1244-1252.
54. Bale, Tracy L. and Vale, Wylie W. Annual Review of Pharmacology and Toxicology, 2003; 44: 525-558.
55. Bone K. Clinical Applications of Ayurvedic and Chinese Herbs: Monographs for the Western Herbal Practitioner. Warwick, Queensland: Phytotherapy Press, 1996.
56. Bove, Mary, ND. "Adrenal Function, Stress and Botanical Medicine". Medicines from the Earth Proceedings. Black Mountain, NC, 2003.
57. Carlini EA. Pharmacology, Biochemistry and Behaviour, 2003; 75: 501-512
58. Carrasco, Gonzalo A and Van de Ka, Louis D. European Journal of Pharmacology, 2003; 463: 235-272
59. Chowdhuri DK, Pannar D, Kakkar P, et al. Phytother Res, 2002; 16: 639-645
60. Dhanapakiam P., J. Mini Joseph, V.K. Ramaswamy, M. Moorthi and A. Senthil Kumar: The cholesterol lowering property of coriander seeds (Coriandrum sativum): Mechanism of action. Journal of Environmental Biology, 2008; 29(1): 53-56
61. Misharina T. A. and A. L. Samusenko: Antioxidant Properties of Essential Oils from Lemon, Grapefruit, Coriander, Clove, and Their Mixtures Applied Biochemistry and Microbiology, 2008; 45(4): 438–442
62. Wangensteen Helle, Anne Berit Samuelsen and Karl Egil Malterud: Antioxidant activity in extracts from coriander. Food Chemistry, 2004; 88: 293–297.