

TO BUILDUP THE IMMUNITY POWER BY USING MEDICINAL PLANTS

E. B. Sedamkar and D. A. Kolhapure*

Department of Botany,
Department of Geography*
KLE Society's G.H.College, Haveri- 581110
Karnataka-India.
Email: ebdamkargkl@gmail.com

ABSTRACT

Ayurveda is an ancient Indian medicinal system and is based on a scripture that is really a natural and holistic approach to physical and mental health. Ayurvedic medicine is one of the world's oldest medical systems and remains one of Indian traditional health care system by using medicinal plants in strengthening the immunity power and treating the various human diseases.

The development of the country in various fields including food technology, our children, youths, including adults are fast addicting to junk food culture and this is causing lot of health problems, eating unhealthy street food and bakery items is directly leading to obesity and heart diseases. Thereby, children should shun junk food and incorporate healthy foods mentioned in ayurveda to keep diseases at bay.

Using medicinal plant as a food and by practicing meditation our mind and body can be rejuvenated and it helps to develop concentration in studies. Every Indian should feel proud of ayurveda as it originated in India and is becoming the most popular health care system to buildup the immunity power against any type of diseases.

Keywords: Medicinal plants, Karnataka, Traditional, Indigenous, Ayurveda.

INTRODUCTION:

Medicinal Plants have been used for long before prehistoric period. Ancient Unani manuscripts Egyptian papyrus and Chinese writings described the use of herbs. Evidence exist that Unani Hakims, Indian Vaidis and European and Mediterranean cultures were using herbs for over 4000 years as medicine. Indigenous cultures such as Rome, Egypt, Iran, Africa and America used herbs in their healing rituals, while other

developed traditional medical systems such as Unani, Ayurveda medicine in which herbal therapies were used systematically.

Among ancient civilizations, India has been known to be rich repository of medicinal plants. The forest in India is the principal repository of large number of medicinal and aromatic plants, which are largely collected as raw materials for manufacture of drugs and perfumery products. About 8,000 herbal remedies have been codified in AYUSH systems in INDIA. Ayurveda, Unani, Siddha and Folk (tribal) medicines are the major systems of indigenous medicines. Among these systems, Ayurveda and Unani Medicine are most developed and widely practiced in India.

Recently, WHO (World Health Organization) estimated that 80 percent of people worldwide rely on herbal medicines for some aspect of their primary health care needs. According to WHO, around 21,000 plant species have the potential for being used as medicinal plants. . The use of herbal treatments is independent of any age groups and unisex. Many of the researchers including Jain S.K, 1991, Kamaraj V.P, 2000, Maikhuri R.K, et al. 1998, Saldanha, C.J. 1984 & 1996, Shalini Vidyarthi, et al. 2013 Singh, N.P. 1988, Khare C.P. (Edt) 2007 and Sedamkar E.B, 2019 are studied on the Flora, Traditional and indigenous uses and health care system of medicinal plants.

IMMUNITY BOOSTING PLANTS:

Holy Basil:

Common name: Tulsi, holy basil

Botanical name: *Ocimum sanctum*

Family: Lamiaceae



Holy basil, also popularly known as tulsi, include oral care, relief from respiratory disorders, fever, asthma, lung disorders, heart diseases, and stress. Tulsi is a powerful

herb that has been used in Ayurveda and other traditional medical treatments in India for thousands of years. The small holy basil shrub with tiny lavender flowers is considered a sacred plant in India. It was believed that the holy basil leaves had potent powers to flush out toxins from the body. Even now in India, people have tulsi water (water which has tulsi leaves soaked overnight) or chew on a tulsi leaf to improve overall health. Several health products are available with tulsi extracts to help treat common cold, cough, and the flu.

It is incredibly beneficial for our health, primarily due to the unique composition of its essential oil, containing eugenol, camphor, flavonoids, nerol, and various terpenes. This rich blend of organic compounds delivers several health benefits. It can help relieve acne, asthma, inflammation, respiratory issues and lower your chances of heart diseases.

Holy basil differs from the basil used in Italian dishes or Thai basil used in curries in Southeast Asia. Holy basil or tulsi has a pungent and bitter taste and it is not usually used for cooking. It is however used to make tulsi tea which has adaptogenic properties. Holy basil is highly nutritious and is a good source of potassium, calcium, magnesium, phosphorus, and vitamin C, B6, A, and K. It also contains iron, sodium, zinc, thiamin, riboflavin etc.

The miraculous healing properties of holy basil come mainly from its essential oils and the phytonutrients in it. Holy basil has antibiotic, germicidal, fungicidal, and disinfectant properties. It is very effective in protecting our body from all sorts of bacterial, viral, and fungal infections and boosting immunity power.

Turmeric:



Common name: Haridra, Haldi

Botanical name: *Curcuma longa* L.

Family: Zingiberaceae

The amazing health benefits of turmeric including the ability to reduce inflammation, heal wounds, improve skin health, protect cognitive abilities, and ease menstrual difficulties. Turmeric also helps prevent depression, alleviate pain, slow down aging, protect the digestive tract, and prevent cancer.

Closely related to the other members of the ginger family, turmeric is a perennial herb native to India. The herb itself is derived from the rhizome of the plant, which is dried before the useful powdered form can be acquired. It needs a rather specific temperature and environment to thrive, so it is not widely cultivated throughout the world but is exported due to its desirability. The bright yellow color of this herb, due to the curcumin it contains, is perhaps its most striking characteristic. You've certainly seen it, even if you haven't recognized it, and if you have ever enjoyed Indian food, you have almost certainly consumed it.

Turmeric smells slightly like mustard but has a hot, almost pepper-like bitterness to it that complements a variety of dishes. The herb has also been praised as one of the most comprehensive and powerful herbal medicines in Ayurvedic treatments and other traditional cultural remedies.

Turmeric is one of the most nutritionally rich herbs. As per the USDA, it contains some protein, vitamin C, vitamin B6 calcium, iron, dietary fiber, sodium, and about 29 calories in a 1 tablespoon serving of turmeric powder. It also provides a rich supply of potassium, magnesium, and manganese to buildup the immunity power.

Ginger:



Common name: Ginger

Botanical name: *Zingiber officinale*

Family: Zingiberaceae

Amazing benefits of ginger that you may not aware of. Although some of these are still being debated, you could do your own research if you want to use ginger for medicinal purposes. It maintains Normal Blood Circulation, Ginger contains chromium, magnesium and zinc which can help to improve blood flow, as well as help prevent chills, fever, and excessive sweat. Ginger is a known effective remedy for the nausea associated with motion sickness. It improves the absorption and stimulation of essential nutrients in the body. It does this by stimulating gastric and pancreatic enzyme secretion. Ginger has been used for thousands of years as a natural treatment for colds and flu around Asia. Ginger is ideal in assisting digestion, thereby improving food absorption and avoiding possible stomach ache. Ginger appears to reduce inflammation in a similar way to aspirin and ibuprofen. Ginger contains some of the most potent anti-inflammatory fighting substances known and is a natural powerful painkiller. Ginger powder induces cell death in ovarian cancer cells.

Ginger has demonstrated a success rate of 75 percent in curing morning sickness and stomach flu. Ginger helps improve the immune system. Consuming a little bit ginger a day can help foil potential risk of a stroke by inhibiting fatty deposits from the arteries. It also decreases bacterial infections in the stomach, and helps battle a bad cough, throat irritation and strengthening the immunity.

Black pepper:



Common name: Peppercorn, Black pepper

Botanical name: *Piper nigrum*

Family: Piperaceae

Black pepper grows in India and other tropical Asian countries. Black pepper is one of the most commonly used spices in the world. Black pepper and white pepper both come from the same plant species. But they are prepared differently. Black pepper is made by cooking the dried unripe fruit. White pepper is made by cooking and drying the ripe seeds.

People take black pepper by mouth for arthritis, asthma, upset stomach, bronchitis, a bacterial infection that causes diarrhea (cholera), colic, depression, diarrhea, gas, headache, sex drive, menstrual pain, stuffy nose, sinus infection, dizziness, discolored skin (vitiligo), weight loss, and cancer. People apply black pepper to the skin for measles, nerve pain, itchy skin caused by mites (scabies), and to treat pain. People inhale black pepper oil to prevent falls, to help quit smoking, and for trouble swallowing. In foods, black pepper oil are used as a spice.

Dalchini:



Common name: Cinnamomum

Botanical name: *Cinnamomum zeylanicum*

Family: Lauraceae

Dalchini or Cinnamon is an aromatic spice obtained from the bark of several trees of the Cinnamon genus. It is a nutritional properties, flavor, aroma, and taste of the spice make it an interesting addition to food, alcohol and traditional medicine, thus varying the uses. Dalchini is a highly beneficial supplement for the skin and hair and offers a wide range of health benefits. Apart from the aromatic fragrance, Dalchini has numerous medicinal properties and health benefits. It helps to maintain the blood sugar level, control vomiting, reduces breathlessness, strengthens heart muscles Antioxidants, Anti-Inflammation, Anti-Cancer, Cardioprotective etc.

Diabetes may be a cause of uncontrolled blood sugar levels. Type 1 Diabetes indicate when your immune system destroys the insulin-producing beta cells of your pancreas. While Type 2 Diabetes may be caused by genetic or lifestyle factors. Studies have also shown that over-consuming sugar can also cause diabetes. Intake of Cinnamon is considered to control the blood sugar levels in your body. If you consume cinnamon after a meal, it can decrease the amount of glucose that enters your bloodstream. You must consult a health practitioner before consuming cinnamon for Diabetes.

Ashwagandha:



Common name: Ashwagandha

Botanical name: *Withania Somnifera*

Family: Solanaceae

The meaning of word Ashwagandha is ‘smell of horse’. It is named so for two important reasons – first is because roots of Ashwagandha emit the smell of horse. Second reason is it is believed that consuming Ashwagandha in any form may develop or improve vitality, energy levels and strength similar to that of a horse. Ashwagandha is available in the market as a single herb formulation or in combination with other herbs. Ashwagandha helps in improving immune system. It is a potent adaptogen and aphrodisiac herb used in impotency, cancer, frequent miscarriage, uterine weakness, infertility, asthma, anemia, cancer, arthritis (osteoarthritis, gout, rheumatoid arthritis), anxiety, stress, depression, ADHD (Attention deficit hyperactivity disorder), diabetes, high cholesterol, infertility, Parkinson’s disease, fibromyalgia etc.

Ashwagandha (also known as Indian ginseng) is used in Ayurveda since a very long time as a crucial part of ayurvedic treatment for several health conditions. In Ayurveda, Ashwagandha is Rasayana (potent rejuvenative agent). It is acknowledged to increase the vitality and longevity. It improves memory, preserve mental functions and increases intelligence. It protects brain from degeneration and dementia. Due to its anti-inflammatory properties, it is widely used in all inflammatory disorders.

Amla:



Common name: Amla, Gooseberry

Botanical name: *Phyllanthus emblica*

Family: Phyllanthaceae

Amla commonly called as Indian Gooseberry, is a popular plant that has been used in Ayurvedic and Unani medicine systems for centuries. Ayurveda is one of the oldest known medicine systems in the world, originating in India more than 3,000 years ago. Amla was traditionally used to increase vitality, enhance digestion, soothe asthma and cough, stimulate hair growth, and promote longevity. All parts of the plant were used, the fruit was used the most and believed to have the highest medicinal power. Limited studies support this traditional stance, as the fruit has been found to contain the most active compounds.

Amla can help with the graying of hair. They dry the fruit and then boil it in coconut oil until solidification. The water in which the dried amla pieces are soaked is

considered to be nourishing; people advise using it as the last rinse while washing the hair. Evidence is lacking to back up this practice. People traditionally use it to reduce inflammation and support blood sugar control. Its high vitamin C content gives it antioxidant activity.

The fruit is yellowish-green in color and has a globular shape. In addition to its medicinal uses, it is also commonly used to make different vegetable dishes, pickles. The sweet dish called Murabba, a popular dessert in South and Central Asia, is made by keeping the amla fruit in a sugary syrup.

Amruthaballi:



Common name: Giloy,,Guduchi

Botanical name: *Tinospora cordifolia*

Family: Minispermaceae

Guduchi is also known as Amruthaballi or Giloy has gained lot of attention in recent years because of its valuable health benefits. Plant has fleshy aerial roots, heart shaped leaves with yellow flowers. Amruta means “heaven’s nector” that cures various types of conditions. It is an ancient, powerful and divine plant that is one of the very importnat medicinal plant used in Ayurveda.

No wonder the plant is called Amruthaballi. It is also known as Jivanti, means life giver. In Ayurveda it is considered to be one of the best rejuvenating plant. Amruthaballi is commonly grows in deciduous and dry forest. It is a climber. All parts of the plant is udes for various medicinal purposes. It contains many phytochemicals – dierpenoid, cordifol, tinosporin, cardifolide, glycosides etc . It is a good antioxidant and has following properties – antitumor, hypoglycemic, anti microbial, diuretic,

hepatoprotective, antipyretic. Immune booster – used as an herbal tonic to fight against many chronic conditions. Detoxifier of liver – helps in protecting liver health – good for treating liver disorders including hepatitis. Guduchi satva or guduchi sugar is a powder made from its stem. It helps in strengthening liver. Blood purifier and good for anemia, cardiac debility. It enhances memory power and for both adults and children. It also delays signs of aging. Helps in skin health, improves skin complexion. – Good for wounds, gout, psoriasis. Reduces allergies, diabetic, and lowers blood sugar level. Supports nervous system function. Reduces constipation and fatigue. Reduces fever, promotes vitality. Guduchi tea is very soothing drink and is a stress buster. Another traditional use of Amruthaballi is people use it in eye diseases. Guduchi is helpful in controlling tuberculosis. Guduchi juice helps in urinary disorder as a diuretic, antiperiodic and reduces infections.

Lemon:



Common name: Lemon

Botanical name: *Citrus lemon.L*

Family: Rutaceae

Vitamin C is essential for health, and a deficiency can lead to health problems. The early explorers knew this and took lemons on their long voyages to help prevent or treat scurvy, a life threatening condition that was common among sailors. This article looks at the nutritional content of lemons, their possible health benefits, ways to use them in food, and any potential health risks. Lemons are an excellent source of vitamin C and flavonoids, which are antioxidants.

Antioxidants help remove free radicals that can damage cells from the body. These nutrients can help prevent diseases and boost health and wellbeing. Here some of the possible benefits of consuming lemons. symptoms can start to appear within a month of not consuming vitamin C, and they include: Lowering stroke risk, Blood pressure, Cancer prevention, Preventing asthma, Boosting the immune system, Weight loss, fatigue, malaise (a feeling of being unwell), inflammation of the gums or bleeding gums, red patches on the skin due to blood vessels breaking beneath the surface, joint pain, slow wound healing, loosening of teeth and depression and Boosting the immune system.

Clove:



Common name: Caryophyllus, Clove

Botanical name: *Syzygium aromaticum*

Family: Myrtaceae

Clove has historically been used for its antiseptic and analgesic effects. Clove and clove oils are used safely in foods, beverages, and toothpastes. Clove oil cream has been used in the treatment of anal fissures and an extract has exhibited aphrodisiac action in rats; however, there are limited studies supporting clinical applications for clove oil. Cloves are dried flower buds that come from the clove tree .They have a spicy and pungent taste and are known for their medicinal properties. They have been in use for a long time for treating inflammation and aiding diabetes treatment. Some of the important nutrients they contain include manganese, fiber, and vitamins C and K. These nutrients help boost brain function and promote immunity.

Studies have shown that the eugenol in cloves works as a powerful anti-inflammatory agent. This also holds true for clove essential oil, one form of clove that is widely available. Clove also fights inflammation of the mouth and throat. In a study, clove oil could help ease the inflammation associated with plaque and gingivitis. The eugenol in cloves lowered pro-inflammatory cytokines in animal studies. Hence, it could help treat inflammation associated with arthritis in humans. It also good sources of antioxidants, Antioxidants fight inflammation and protect us against cancer. The eugenol in clove is believed to provide relief from tooth pain. The substance is an anesthetic and has antibacterial properties, and this may help you deal with the pain. It possesses many medicinal properties and has several benefits. From fighting inflammatory diseases to helping treat acne, this spice can improve human health in various ways.

Garlic:



Common name: Caryophyllus, Lasun

Botanical name: *Allium sativum L.*

Family: Liliaceae

Garlic has been part of the kitchens for centuries. This herb has curative and medicinal properties because of its antibacterial and antiseptic nature. The beneficial properties of garlic are because of a compound, Allicin. It is rich in minerals like phosphorus, zinc, potassium, and magnesium. Vitamins C, K, Folate, niacin and thiamine also are found abundantly in garlic. Zinc in garlic promotes immunity. Vitamin C helps to fight off infections. It is very beneficial against eye and ear infections as it has antimicrobial properties. This plant also effectively using in Wards

Off Cough and Cold, Good for Cardiac Health, Improves Brain Functioning, Improves Digestion, Balances Blood Sugar, Improves Skin Health, Prevents Cancer and Peptic Ulcer, Good for Weight Loss etc.

Pippali:



Common name: Pippali, Hippali

Botanical name: *Piper longum L.*

Family: Piperaceae

Pippalimool or roots of Pippali (long pepper) plant, are used in dried powder (reddish-brown to creamy-grey bitter powder) form with warm water, milk or preferably with ghee. When used with Ghee, the drying, and hot properties of Pippalamula are balanced. This combination is beneficial in headaches due to vitiation of Vata.

Sleeplessness, and high blood pressure, the Pippla Moola churna should be taken with cold water, twice a day. The decoction of roots is prepared by boiling the 2 tablespoon of roots in one glass water, and cooking till water reduces to half cup. This is filtered, and taken twice a day. Pippali roots can be taken in the form of tea for cold, cough, and congestion. For making the tea, the powder is boiled in water, and sugar, and milk is added. In the case of enlarged the liver, and spleen, five grams root powder, and one gram pippali fruit powder is boiled in 200 ml water, and cooked for a few minutes. This is filtered, and taken.

CONCLUSION:

As our lifestyle is now getting changing, we are moving away from nature. While we cannot escape from nature because we are the part of nature. As Medicinal plants are natural products they are free from side effects, they are comparatively safe, eco-friendly

and locally available. Traditionally there is lot of Medicinal plants used for the ailments related to different seasons. There is a need to promote them to save the human lives.

These herbal products are today are the symbol of safety in contrast to the synthetic drugs, that are regarded as unsafe to human being and environment. Although Medicinal plants had been priced for their medicinal, flavoring and aromatic qualities for centuries, the synthetic products of the modern age surpassed their importance, for a while. However, the blind dependence on synthetics is over and people are returning to the naturals with hope of safety and security to buildup the immunity power. It's time to promote them globally As such there are no serious side -effects when someone consumes these plants. If you are taking any medication then **consult your doctor** before taking Amruthaballi.

ACKNOWLEDGMENT:

Authors are grateful to Honorable Chairman Dr Prabhakar B Kore and Members, Board of Management, KLE Society, Belagavi and our Beloved Principal Dr. M.S.Yaragop for providing facilities and encouragement.

REFERENCES:

- E. B. Sedamkar (2019):** Traditional and Indigenous Uses of Medicinal Plants by Local Residents in Haveri Dist, Karnataka, India. *Shodhmanthan* Vol. X, Sp. Issue No. 6 Page-55-58, ISSN: (P) 0976-5255 (e) 2454-339X.
- Jain SK. 1991:** Dictionary of Indian folk medicine and ethonobotany, New Delhi, Deep Publications.
- Kamaraj VP, 2000:** Herbal medicine. *Curr Sci*, 78: 35-39.
- Khare C.P. (Edt) 2007:** Indian medicinal plants-An illustrated Dictionary, Springer publications, New Delhi.
- Maikhuri RK, Nautilal S, Rao KS, Saxena KG, 1998:** Role of medicinal plants in traditional health care system: a case study form Nanda Devi Biosphere Reserve. *Curr Sci*, 77: 152-157.
- Saldanha, C.J. 1984.** Flora of Karnataka. Vol. 1, Oxford & IBH Publishing. Co. Pvt. Ltd. New Delhi.
- Saldanha, C.J. 1996.** Flora of Karnataka. Vol. 2, Oxford & IBH Publishing. Co. Pvt. Ltd; New Delhi

Shalini Vidyarthi, Sher S. Samant and Pankaj Sharma.2013: Traditional and indigenous Use of Medicinal Plants by local residents in Himachal Pradesh, North Western Himalaya, India. *Int Jr of Biodiversity Science,Ecosystem Services & Management*, Vol 9, No.3,185-200.

Singh, N.P. 1988. Flora of Eastern Karnataka, Vol. 1 & 2, Mittal Publications, New Delhi