

## REVIEW ARTICLE

# A Study of Significance of Nine Selected Medicinal Plants of Jaipur, Rajasthan, India A Review Article

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### ABSTRACT

*In an era of advanced medical science and pills, not many people have put their faith on Ayurveda. The ancient medical science has looked after mankind for centuries. Hence, it is definitely worth a shot. Many think that medicinal plants are hard to find and can only be found in far-off forests or mountains. The advent of chemically synthesized drugs made the home pharmacy disappear with time. In the present study the significance of nine selective medicinal plants of Jaipur has been detailed viz. Tulsi, Neem, Sehjna, Gurhal, Pepal, Pomegranate, Gawar, Sadabahar and Aloe vera.*

**Keywords:** Jaipur, medicinal plants, ayurveda, pharmaceutical, cure

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## INTRODUCTION

Medicinal plants have been identified and used throughout human history. Plants make many chemical compounds that are for biological functions, including defence against insects, fungi and herbivorous mammals. At least 12,000 such compounds have been isolated so far; a number estimated to be less than 10% of the total. Chemical compounds in plants mediate their effect on the human body through processes identical to those already well understood for the chemical compounds in conventional drugs; thus herbal medicines do not differ greatly from conventional drugs in terms of how they work. This enables herbal medicines to have beneficial pharmacology, but also gives them the same potential as conventional pharmaceutical drugs to cause harmful side effects. Moreover, plant material comes with a variety of compounds which may have undesired effects, though these can be reduced by processing (1).

## MEDICINAL VALUES OF MEDICINAL PLANTS

9 selected plants from different areas of Jaipur were as follows:-

**1. Tulsi (*Ocimum tenuiflorum*):** There are four types of tulsi mentioned in ayurvedic texts ie Rama, Krishna, Vana & Karpoor Tulsi. For over the centuries Tulsi (the queen of herbs) has been known for its remarkable healing properties. Tulsi is taken as the herbal tea. The oil extracted from the Karpoor Tulsi is mostly used in the herbal toiletry. Its oil is also used against the insects and bacteria. The Rama Tulsi is the effective remedy for the Severe acute Respiratory Syndrome. Juice of its leaves gives relief in cold, fever, bronchitis and cough. Tulsi oil is also used as the ear drop. Tulsi helps in curing malaria. It is very effective against indigestion, headache, hysteria, insomnia and cholera (4). Its leaves 'major component, eugenol, in conjugation to justify the anticancer properties. Eugenol's anticancer properties are achieved in a number of ways, including triggering cell death, cell cycle arrest, inhibiting migration, metastasis, and angiogenesis in a number of cancers (5).

**2. Neem (*Azadirachta indica*):** Ayurveda have documented this plant as one of the most valuable. The extract of its leaves work as a sedative and cure analgesic, epilepsy, hypertension. Various parts of the neem tree have been used as traditional Ayurvedic medicine in India. Neem oil and the bark and leaf extracts have been therapeutically used as folk medicine to control leprosy, intestinal helminthiasis, respiratory disorders, constipation and also as a general health promoter. Its use for the treatment of rheumatism, chronic syphilitic sores and indolent ulcer has also been evident. Neem oil finds use to control various skin infections. Bark, leaf, root, flower and fruit to get her cure blood morbidity, biliary afflictions, itching, skin

ulcers, burning sensations and phthisis (6). More recently, the neem tree has gained attention from modern medicine and infectious disease researchers as a potential source for new antimicrobials, in addition to the applications of *A. indica* in the fields of oncology, dentistry, dermatology, and endocrinology, among others; for reviews on some of these individual topics, see (7 & 8).

**3. Aloe Vera (*Aloe vera*):** Aloe Vera is a major medicinal plant when it comes to treating and protecting the skin. Used externally, it is very effective on burns and sunburn, as well as a variety of skin diseases (eczema, pruritus, psoriasis, acne) – it is extremely constructive and protective. The aloe vera grows only under the sun with well drained dry or moist soil. Although the plant tastes like turd, it's still edible. The sap from aloe vera is extremely useful to speed up the healing & reducing the risk of infections for wounds, cuts, burns, reducing inflammation. Aloin is a natural sunscreen protectant from sun exposure. Speaking of skin, there are many aloe vera remedies that are good for all skin types from oily to dry (19). Aloe plant bioactivities are due to its antibacterial and antimicrobial, antitumor, anti-inflammatory, anti-rheumatoid, and anti-arthritis activities (10).

**4. Guava (*Psidium guajava*):** The guava's preparations are used its astringent and secant properties given by the large amount of tannins and flavonoids contained. The guava can be used in the form of tincture 20% following the general procedures of obtaining this preparation. To prepare it as talc, crush 50 g of dried leaves and mix it with 100 g of talc common. Guava leaves can be used as astringent baths for treating wounds, sores and skin ulcers. It must be taken 20 leaves specially selected and carefully washed. The leaves of the plant, especially, were found to contain various bioactive compounds that potentially have anticancer and chemopreventative activities (11).

**5. Pomegranate (*Punica granatum*):** The word "Pomegranate" (*Punica granatum*) comes from the Latin for "fruit of many seeds." In folk medicine, the fruit's astringent properties have been used to treat various ailments (cuts, sore throats, tapeworms, dysentery, and gum disease). Pomegranate juice is marketed in the United States as a major source of antioxidant nutrients that protect against heart disease and other ailments. Recent research has focused on its potential use as a treatment for cardiovascular disease, diabetes, and various forms of cancer. pomegranate seed and peel extracts showed cytotoxic effect on liver cancer cell line. (12)

**6. Gurahal (Chinarose) (*Hibiscus rosa-sinensis*):** China Rose is a bushy, evergreen shrub or small tree growing 2.5–5 m (8–16 ft) tall and 1.5–3 m (5–10 ft) wide, with glossy leaves and solitary, brilliant red flowers in summer and autumn. The 5-petalled flowers are 10 cm (4 in) in diameter, with prominent orange-tipped red anthers. China Rose is widely grown as an ornamental plant throughout the tropics and subtropics. As it does not tolerate temperatures below 10 °C (50 °F), in temperate regions it is best grown under glass. However, plants in containers may be placed outside during the summer months. The Root, leaves and flower of the China Rose plant is used for arterial hypertension, diabetes, burning sensation during urination, menstrual disorders, cough, fever, dandruff, and hair fall. Leaves, is one of the component of Chinese traditional medicine (18). *Hibiscus rosa-sinensis* flowers and leaves as sources of phenolics as well as the activity of their extracts as anti-aging agents that might be used as ingredients for functional cosmetic products (13).

**7. Peepal (*Ficus religiosa*):** Peepal tree is of great medicinal value. Its leaves serve as a wonderful laxative as well as tonic for the body. It is especially useful for patients suffering from Jaundice. It helps to control the excessive amount of urine released during jaundice. The leaves of Peepal are highly effective in treating heart disorders. It helps to control the palpitation of heart and thereby combat the cardiac weakness. Ayurveda makes an extensive use of the leaves of peepal due to the numerous benefits it provides. The Indian basil peepal works wonders in treating dysentery. Prepare a mixture of grinded coriander leaves, peepal leaves and sugar and chew it slowly. The leaf of a peepal plant is also considered valuable in the treatment of various kinds of skin disorders. Pipal leaves are of great use in getting rid of mumps. All one needs to do to avail the benefits of Peepal plant is smear the leaves of Peepal with ghee and then warm it on low flame. After that, bandage it over the swollen inflamed part of the body (3).

Some of the potential medicinal actions of *F. religiosa* that need to be explored include anti-stress, antitumor, antiproliferative, antimutagenic, and immunomodulatory actions (14).

**8. Sehjana (*Moringa oleifera*):** Moringa, also known as the *Miracle Tree*, is a multipurpose plant, as the leaves, pods, fruits, flowers, roots and bark of the tree can be utilized. It is also referred to as Drumstick Tree by the Britishers. In the Philippines, they are referred to as malunggay or malungay. Others refer to moringa as horseradish tree, benzolive tree, kelor, marango, mlonge, moonga, nébéday, saijhan, sajna or Ben oil tree (9). Moringa is a source of nutrition and medicine has been tested over time and is deeply rooted in Ayurveda, Siddha, Unani, and the traditional Chinese system of medicine (15).

**9. Sadabahar (*Catharanthus roseus*):** (Vinca) also known as the Madagascar periwinkle or rosy periwinkle or Sadabahar is grown as an ornamental plant in the garden. This is a 1m tall perennial herb with oppositely

arranged leaves In Ayurveda, the plant root and shoot are poisonous, yet used as medicine against several diseases *Catharanthus roseus* is a tropical plant used for medicinal purpose. It is also proved anti-diabetic (17) and anti cancer (Vincristin and Vinblastin ) drug .*Catharanthus roseus* also exhibited ordinary anti-microbial activity, and cytotoxic and anticancer properties (16).

## CONCLUSION

Medicinal plants selectively from Jaipur have a promising future because there are about half million plants around the world, and most of them their medical properties have not investigate yet, and their medical activities could be decisive in the treatment of present or future studies. Moreover, to clarify their role in the treatment of present diseases, and how they can be used to produce or synthesis more effective drugs (2).

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