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A Marvel Versatile, Multipotential Plant Murraya Koenigii: A Review

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Abstract: - The adage goes, "Let food be your medicine and medicine be food." Popularly referred to as "Curry leaves" and "Meetha neem" is Murraya koenigii. Curry Leaf has a significant place in conventional Ayurvedic therapy. According to the Indian ancient medical system of Ayurveda, herbal remedies can treat and manage a wide range of illnesses. It belongs to the family of plants known as the Rutaceae.. Crash curry leaves have a distinct flavour and aroma and is glossy and dark green in colour. The antinociceptive, antioxidant, anti-diabetic, and antibacterial activities of the roots, fruits, leaves, and bark of the plant have been related to the high concentration of carbazole alkaloids found in certain parts of the plant.. In Indian cuisine, its leaves are frequently used to spice meals. It is of Indian origin, is readily available all year long, and has long been an ingredient in many Ayurvedic medications. It is widely used in cooking and one of the key ingredients in traditional Ayurvedic preparations. As beverages, syrups, cordials, and flavoured teas can be prepared. Improved stomach and small intestine function, better-quality digestive juices produced during digestion, and higher salivary production are just a few of the health advantages of curry leaves. The entire plant is utilized for its stomachic and tonic effects. Morning sickness, kidney pain, stomach distress, and dysentery diseases were all treated with Murraya koenigii. As a result, it has the ability to make oils, inhalers, balms, and more. Indian-born Murraya koenigii is a significant culinary plant. A review of the literature suggests the plant has some important pharmacological properties. The review takes into account curry leaves' potential in the future. The current study's objective is to review curry leaf categorization, origin, physical

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characteristics, and traditional uses around the world. This paper describes the structural characteristics, background, ecology, composition, and therapeutic uses of this amazing plant.

Key words: Curry leaves, Medicinal Plant, Traditionally, Morphological Character, Health Benefits.

Introduction:

MurrayaKoenigii, often referred to as "Kari patta" or "Meethineem" in regional dialect, is the scientific name for curry leaves. Curry Leaves are a member of the Rutaceae family, which mostly has 150 genera and 1500 species. [1] It is a tiny, aromatic, deciduous tree or shrub that can reach heights of 6 to 9 metres and altitudes of up to 1500 metres. Due to its scent and aroma, it is a crucial element in Indian food. The highest concentration of carbazole alkaloids are reported to come from this plant [2]. Curry Leaves' plant description is as follows: Bitter smell Clearly Aromatic Shape and Dimension: Averaging 2-4 centimetres in length and 1-2 centimetres in breadth, they are tiny, long, slender, oval, and pointy. Green with a dark green to brownish main stem. The white blossom Fruit: The fruits are extremely minute, glandular, and oval in shape. They have a thin pericarp that contains one or two green seeds.. They grow in dense clusters. Stem: Small trees that are 7 metres tall and have a diameter of 14 to 42 cm [3]. It may be found all over India and is grown in places like Sikkim, Assam, the Western Ghats, etc.

Moist woods between 500 to 1600 metres in height are where you can find Murraya koenigii trees, particularly in S. Hainan, Guangdong, S. Yunnan, Nepal, Sri Lanka, Laos, Vietnam, Bhutan, and Thailand. The curry leaves go from South India to Malaysia, South Africa, and Reunion Island. [4,5] Curry leaves also include antioxidants, antimicrobials, and antibacterials [6, 7,8]

Biological Source:

The botanist Johann Konig is honored with the naming of this species. Johann Andreas Murray was a Swedish physician and botanist who passed away in 1791. He is remembered in the Murray genus as its namesake. As a consequence of this, the scientific name for curry leaves is Murraya koenigii. A number of different biological activities are known to be supported by various components of the M. koenigii plant, including the leaves, root, bark, and fruit. The flavor and other features of the aromatic bioactive component of M. koenigii leaves are preserved even after the leaves have been dried.. [9, 10, 11, 12, 13, 14].

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Taxonomic Classification [15]

Kingdom	Plantae
Subkingdom	Tracheobionta
Superdivision	Spermatophyta
Division	Magnoliophyta
Class	Magnoliopsida
Subclass	Rosidae
Family	Rutaceae
Genus	*Murraya J. Koenig* ex L.
Species	*Murraya koenigii (L.)*Spreng.

Vernacular Name:

English	Curry leaves
Hindi	Karipatta, Mitha neem
Sanskrit	Girinimba
Gujarathi	Mitholimado
Tamil	Kariveppilai

Cultivation of Curry Leaves:

Between the middle of April and the middle of May, flowers begin to bloom. The final week of April was found to be the highest flowering period. It was noted that the fruiting season persisted from the middle of July to the end of August. India is the home of the curry leaf. Tiny trees to large shrubs. They may grow in either direct sunlight or light shade. Because seeds are delicate, they should be handled carefully [16].

Active Compounds of Curry Leaves and their activities [17].

Constituent	**Source**	**Biological activity**
Lutein	Leaves	Antioxidant activity
Tocopherol	Leaves	Antioxidant activity, Hepatoprotective
Carotene	Leaves	Antioxidant activity
Koenimbine	Leaves	Antioxidant activity
Isomahanine	Leaves	Anticaries

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Mahanine	Stem and bark	Anti-microbial
Murrayanol	Leaves	Mosquitocidal, Anti-microbial
Murrayanine	Stem and bark	Anti – fungal
Girinimbine	Stem, Bark,	Anti-cancer,

Medicinal importance:

Antioxidative, antimicrobial, antibacterial, antiulcer, and cholesterol-lowering properties of this plant have been identified.[18] Escherichia coli and Salmonella typhi were both resistant to the essential oil produced from M. koenigii leaves. [19] Leaves are used to treat vomiting and stomach problems. [20] Bark and roots are stimulants, and the entire plant is used as a tonic and stomachic. [21]

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Traditional Uses:

Medical professionals utilize the roots and bark as stimulants. Calcium shortage can also be treated using curry leaves. Morning sickness, nausea, and vomiting brought on by indigestion and an excessive intake of lipids can be effectively treated with fresh curry leaf juice combined with lime juice, honey, and other ingredients. [22] Fresh leaves, dried leaf powder, and essential oils are some of the most popular ways to impart flavor into a variety of foods, including soups, curries, fish and meat meals, egg dishes, and other ready-to-use culinary preparations. [23] The curry leaves are first boiled in coconut oil until they are reduced to a blanked residue, which is then applied to the hair as a superb tonic to retain the hair's natural tone and encourage hair development. [24] Curry leaves are traditionally used to cure a number of illnesses, including diabetes mellitus, body aches, inflammation, nausea,

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and kidney pain. Additionally, they are utilized to treat piles and blood abnormalities [25, 26]. Curry leaves are additionally used to cure toxic animal bites. [27]

Potential Uses of curry leaves for diabetes

Curry leaves' effectiveness in controlling blood sugar. The leaf extract's ability to reduce blood sugar levels may aid with blood sugar levels. This action could be similar to that of insulin, which would lower blood sugar levels by either increasing pancreatic insulin production or cell uptake of glucose.[28,29,30]

Uses of curry leaves for Skin

Curry leaves and their essential oil have the advantage of perhaps acting against inflammatory cells. Additionally, curry leaf oil may be useful for treating skin conditions like athlete's foot, boils, acne, pimples, itching, and ringworm. [28, 29, 30]

Other Potential Uses of curry leaves (KadiPatta)

'Datum' is the name for Murraya koenigii's branches. They can be used to clean teeth and strengthen gums.[31]

Conclusion:

People are increasingly focused on foods that are high in active functional compounds as a result of growing awareness of the nutritional value of foods. Thus, the review's findings suggest that curry leaves contain a variety of useful chemicals.

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