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A REVIEW ON : CALOTROPIS PROCERA ITS PHYTOCHEMISTRY AND TRADITIONAL USES.

AUTHOR NAME : *BORKAR VAISHNAVI SITARAM .

BAGAL KAMINI RAJENDRA .

H.S.B.P.V.T.S, GOI, COLLEGE OF PHARMACY, KASHTI, SHRIGONDA, AHMEDNAGAR, MAHARASHTRA, INDIA, 414701.

H.S.B.P.V.T.S, GOI, COLLEGE OF PHARMACY, KASHTI, SHRIGONDA, AHMEDNAGAR, MAHARASHTRA, INDIA, 414701.

Corresponding Author

Name : BORKAR VAISHNAVI SITARAM .

Contact: 9373317727

Email : vaishnaviborkar890@gmail.com

1. Abstract :

Calotropis procera is considered a medicinal plant in the Asclepiadaceae family and is distributed in India and other tropical regions. Common names for C. procera are Arka, Akanal, and Akanda. Based on morphological features, C. procera leaves are characterized as ovate, obovate, ovate-rectangular, or elliptical. Medicinal properties are the pharmacological properties of this plant associated with the milky sap. Procera leaves are said to be an important antidote for snake bites, stings, rheumatism, mumps, and bacterial infections. proves its importance. These active molecules have an important pool for therapeutic potential and drug discovery. Medicinal plants are widely used in developing countries such as India, Pakistan and South America. This is because it is cheaper, most effective, and readily available than modern medicines. They have been used for thousands of years to treat and prevent health ailments and infectious diseases.They are also used to flavor and preserve food. They play a golden role in the development of human culture. Plants produce a variety of secondary metabolites that are involved in plant biological functions that are used worldwide Medicinal plants have been used as the main source of medicine since ancient times. In fact, many of the currently available drugs are available directly in the form of extracts or in modified synthetic forms. As phytochemicals used to perform protective biological functions, we have the ability to synthesize products that are useful to us.Plant ingredients derived from natural products are the most successful strategy for discovering new drugs. is one of Calotropis procera is a plant used in traditional medicine and folklore systems to cure various ailments, as reported in Hindu literature. At the dawn of civilization, people worshiped plants, and plants were preserved as genetic resources and used as food, feed, fiber, fertilizer, fuel, antipyretic, etc.

Keywords :

Calotropis gigantea, Sweta Arka, milkweed, crown flower, economic value, inflammatory perennial shrub, medicinal plant.

2 . Introduction :

From prehistoric times to modern times, plants, animals and other natural objects have had a profound impact on human culture and civilization in many parts of the world and in India. Since the beginning of civilization, people have worshiped plants. Such plants are preserved as genetic resources and used in food, food, fiber, fertilizer, fuel, antipyretic, and in every way other than his Calotropis gigantea of such plants.

In ancient Ayurvedic medicine, Calotropis gigantea is known as 'Sweta Arka' and Calotropis procera as 'Raktha Arka'. Both are often botanically similar and have similar pharmacological effects.

Calotropis procera

Since ancient times, people have sought medicine in nature in search of cures for ailments. Medicinal plants have been known to people since time immemorial. Humans have relied heavily on plants for their needs such as shelter, medicines, fragrances, food, fragrances, clothing and fertilizers. Awareness of medical and financial support for these plants is increasing in both developed and developing countries (WHO, 1998). The trend toward traditional medicine, which has already made fruitful contributions to modern medicine from plant sources, has been increasing for thousands of years.

- Botanical name : calotropis procera

Rank	Description
kingdom	Plantae - plants
Subkingdom	Tracheobionta- vascular plants
Superdivision	Spermatophyta- Seed plants
Division	Magnoliophyta- flowering plants
Class	Magnoliopsida- dicotyledons
Subclass	Asteridae
Order	Gentianales
Family	Asclepiadaceae- Milkweed family
Genus	Calotropis R. Br. -calotropis

Leaves :

Its common names are Akra, Akanal and Madar. Calotropis procera leaves are said to be a valuable antidote for snakebites, sinus fistulas, rheumatism, mumps, injuries and body pain. Calotropis procera leaves are also used to treat jaundice.For treatment of albinism (skin disease) Antidote for rapid cure of rabies, poultice, migraine treatment, fever, eczema, leprosy, elephantiasis, asthma, cough, rheumatism, etc. will be

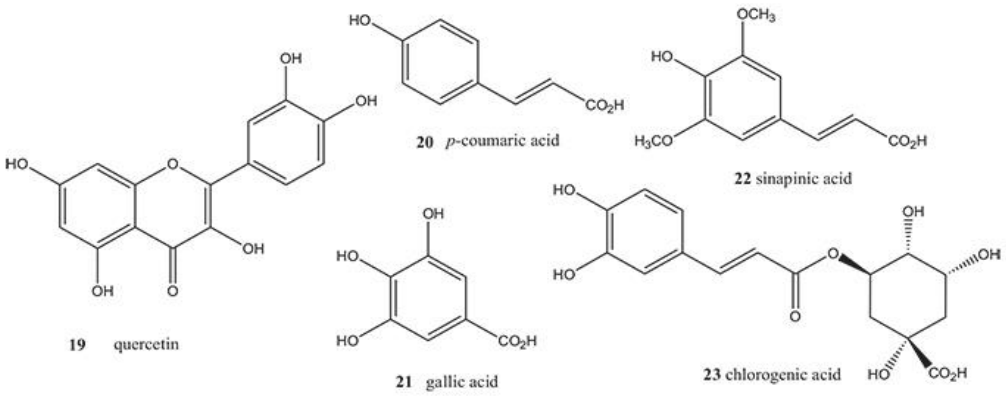
Flower :

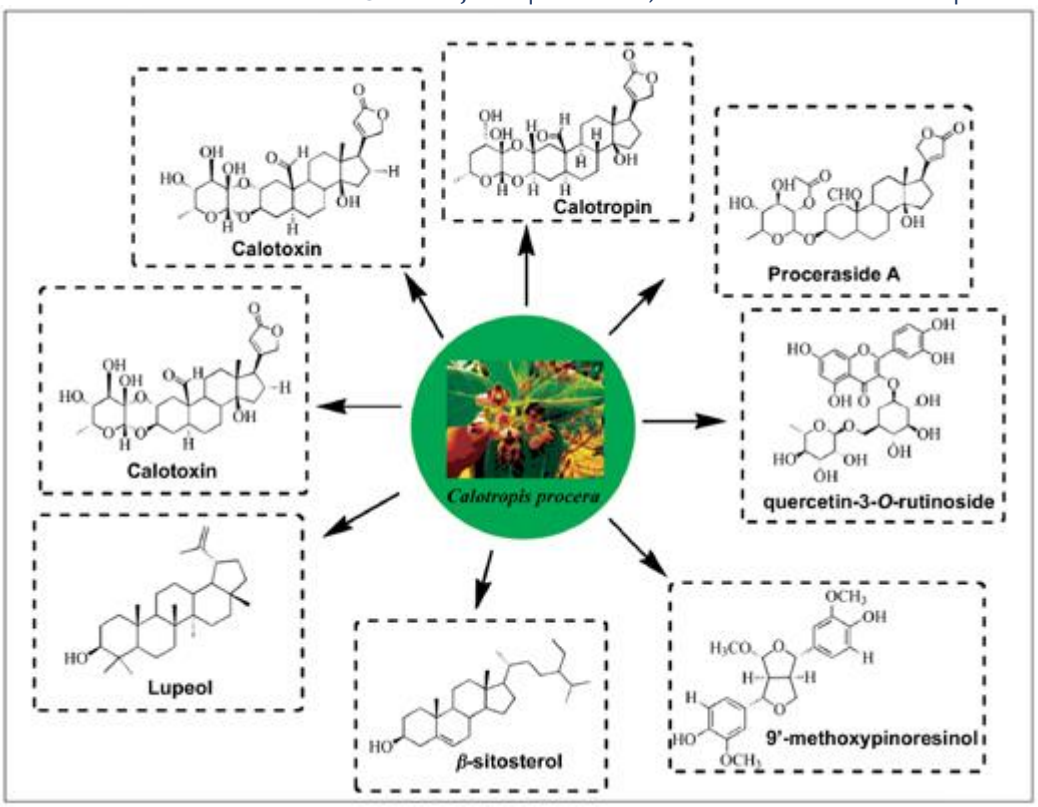
Calotropis is a genus of plants in the Apocynaceae family, first described as a genus in 1810. It is native to South Asia and North Africa. They are commonly known as spurges because of the latex they produce.Calotropis species are considered a widespread weed in some parts of the world. The flowers are fragrant and are often used in mainland Southeast Asian cultures to create flower clusters. The fibers of these plants are called madar. Calotropis species are commonly found on abandoned agricultural land.

Root :

Root as digestive aid to treat body aches, malaria, eczema, leprosy, elephantiasis, asthma, cough and rheumatism. Calotropis procera (Aiton) W.T. It is a spreading shrub or medium-sized tree with a secondary root system with woody lateral roots that can quickly regenerate adventitious buds if it is damaged.

Chemical constituent of calotropis procera :





PHYTOCHEMICALS AND TRADITIONAL USES :

The plant leaves have secondary metabolites such as phenols, flavonoids, terpenoids, sugars, alkaloids, tannins, cardenolides, glycoside, saponins and steroids including bitter contents as calotropin ,calotoxin calactin and uscharin also produces volatile organic compounds All parts of the plant are used in folk medicine and treat various diseases like fever, leprosy, eczema, diarrhea , dysentery and jaundice Latexhas pharmacological property because it is a mixture of biologically active compounds including calotropin, calotoxin, caoutchouc, uscharin, trypsin, calactin, voruscharin, syriogenin, uzarigenin, and proceroside. However, the latex shows the toxic effect for mammals the latex of leaves of C.procera plant used for joint pain and its oil is used for parts of the body which paralyzes . the latex used in antifungal drugs to treat tinea capitis in children the flowers mostly have flavonoids compounds the flowers are bitter have medicinal activities i.e. stomachic, astringent, tonic, anti-inflammatory, digestive, and useful to treat asthma,catarrh, colds.

The laticifer fluid of calotropis and founds to have strong proteinase and aspartic protcinase due to the presence of these components, the plants are resistant to phytopathogens and insects mainly in leaves where the latex circulates abundantly. The milky latex of the plant is rich in lupeol, calotropin, calotoxin, and uscharidin, the latex protein. Sharma and Sharma studied the most important phytochemicals. alkaloids, carbohydrates, glycosides, phenolic compounds/tannins, proteins and amino acids, flavonoids, saponins, sterols, acidic compounds, calotropis flowers, buds, root resins

Conclusion :

With the rapid erosion of our country's traditional knowledge systems in the current scenario, there is an urgent need to catalog and record all ethnobotanical information in various communities. A vast database of traditional plants may be easier to find for future generations. The medicinal properties are due to the production of secondary plant substances. In terms of natural product chemistry, there are multiple research areas, including the remarkable diversity of chemical structures and biological properties of secondary metabolites, their therapeutic needs, and the effectiveness of unique bioactive ingredients as biochemical probes. includes aspects of Calotropis is one of the most widely distributed geographical regions of the world. All information regarding the use of C. procera around the world has been collated with the available literature. It is often mentioned in Indian Materia Medica. There is a wide range of classifications according to their various uses in pharmacological and traditional uses. Literature shows that it is the plant that has been forgotten over

time.The quality and quantity of the active ingredient, which is important for many complaints, is influenced by many factors such as climate, soil, etc. Thus, standardization of phytochemicals by these factors is of great importance for establishing more effective utilization of plants.

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