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Review on Nutritive Values and Therapeutic Uses of Wild and Esculent Vegetables



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ABSTRACT

The Momordica dioicais plant which is commonly known as karkrol, spiny gourd, or teasle gourd .native to Asia. This plant is extensively distributed in India and Bangladesh. The medicinal property of Momordica dioicais seed, root, and fruit are well-known from the ancient period in the traditional system of medicine. In the present review the chemical composition, food, and nutritional value, ethnomedicinal and pharmacological activities of Momordica have been discussed to provide collective information on its multipurpose commercial values. As macronutrients and micronutrients play a vital role to assess the medicinal value of a plant and therapy in health and disease. These nutrients are essential in sufficient quantities for nutritional, enzymatic reactions, and metabolic processes. Holarrhena pubescens: (kuda bhaji), these shrubs are abundant in Konkan & very effective medicine against bleeding, colic pain & chronic lungs disease. Leea macrophylla (dinda), is a plant that is used as food, medicine & dye. A native of India, Srilanka. The study of the above plants will focus on plants, their importance and easy availability of plants, awareness of the medicinal use of these plants, and their therapeutic use.

INTRODUCTION

The present review tries to cover all the information available on research work of these plant

in yesteryears in a nutshell with the intention to serve as a literature platform for further

researches on these plant.

Momordica dioica is used not only as preventive and curative agent for various diseases but

also as vegetable with a significant nutritional value over thousands of years. Kakrol is

considered as an underutilized vegetable, although having significant presence of certain

compounds containing higher nutritional value than many frequently consumed vegetables.

Holarrhena pubescens is a species of flowering plant in the family Apocynaceae these seeds

are sold as indraja for Ayurvedic medicine in India. It is one of the best drug for Diarrhoea. In

chronic diarrhoea & to check blood coming from stool, it should be given with Isobgol, caster

oil or Indrayav. According to Ayurveda, the bark is useful in treatment of piles, skin diseases

and biliousness. The bark is used externally in case of skin troubles. The bark is mostly

mixed with cow urine and apply it in affected parts. In treatment of urinary troubles, the bark

is given with cow milk. The fresh juice of bark is considered good to check the diarrhoea. In

Bleeding piles Decoction of Kutaj bark with sunthi checks mucus & blood. Application of

this herb is useful in Rh. Arthritis & Osteoarthritis.

Leea macrophylla (dinda), is a plant that is used as food, medicine & dye. A native of India,

Sri Lanka. The study of the above plants will focus on plants, their importance and easy

availability of plants, awareness of the medicinal use of these plants, and their therapeutic

use.

1.1 Momordica dioica: (Karkrol) 1

Kingdom:

Plantae

Clade:

Tracheophytes

Clade:

Angiosperms

Clade:

Eudicots

Clade:

Rosids

Order: Cucurbitales

Family: Cucurbitaceae

Genus: Momordica

Species: M. dioica



Momordica dioica: Karkrol is a common name for this drug also known as, spiny gourd or teasle gourd, this plant is native to Asia with extensive distribution in India and Bangladesh, it is a perennial, dioecious, cucurbitaceous climbing creeper. This plant has not only medical uses but is also used as a nutritive supplement. Nutritive contents present in fruits are protein 5.44 %, crude lipid: 3.25%, crude fiber: 22.9%, and carbohydrate: 59.31%. One more study observed values as nutritional contents reported per 100 g edible fruit is reported to contain 84.1% moisture, 7.7 g carbohydrate, 3.1 g protein, 3.1 g fat, 3.0 g fiber, and 1.1 g minerals and small quantities of essential vitamins like carotene, thiamin, riboflavin and niacin not only its fruits have diuretic, laxative, hepatoprotective, antivenomous, antihypertensive, antiinflammatory, antiasthmatic, antipyretic, antileprosy, antidiabetic, and antidepressant properties but also its leaves have antihelminthic, aphrodisiac, anti hemorrhoidal, hepatoprotective, anti-bronchitic, antipyretic, antiasthmatic, and analgesic properties. The root of the male plant is used in snake bites and scorpion stings. The superficial use of root paste over the whole body is useful to act as a sedative in high fever with delirium. Besides the superficial and oral administration of leaf paste for skin disease, tender fruits are rubbed on skin for pimples and acne and roasted seeds are used for eczema and other skin problems. A preparation called "Panchatikta ghrita" is made by boiling 800 g each of neem bark, leaves of Momordica dioica, Solanum surattense, Tinospora cordifolia, and bark of Adhatoda vasica, in 5-6 liters of water up to its reduction to quarter and then adding of 3.5 liters of

butter and about 3 kg myrobalans and is recommended as one tablespoonful with little hot milk internally twice daily in chronic skin diseases.

1.2 Holarrhena pubescens: (kuda bhaji) ²

Kingdom Plantae

Phylum Tracheophyta

Class Magnoliopsida

Order Gentianales

Family Apocynaceae

Genus Holarrhena

Species Holarrhena pubescens Wall. ex G.Don



Holarrhena pubescens (Kuda) is an excellent medicine, Root bark, and seeds are used in bleeding, consuming a pinch of bitter saffron powder every day improves appetite, improves digestion, and prevents flatulence and worms. H. pubescens extracts show the presence of several bioactive compounds, such as conessine, isoconnessine, conessimine, conimine, conessidine, conkurchicine, holarrhimine, the plant is used for treating diseases like amoebic dysentery, liver disorders, irritable bowel syndrome, diarrhea and bleeding piles in Indian system of medicine. Due to its astringent and bitter taste, this plant is used traditionally to treat several diseases and there are clinical and pharmacological studies suggesting its use for various enteric, skin diseases and diabetes.

1.3 Leea macrophylla (dinda)³

Kingdom- Plantae

Phyllum - Tracheophyta

Class- Magnoliopsida

Order - Vitales

Family - Vitaceae

Genus- Leea

Species - Leea macrophylla Roxb. ex Hornem



Leea macrophylla is a perennial plant with stems that becomes more or less woody. The plant is often shrub-like, and occasionally tree-like.

The plant is harvested and its local use as a food, medicine, and dye, this plant is found in Sri Lanka for its medicinal use. Leea macrophylla Roxb. . a traditional medicinal plant remedy for diseases . Phytochemical constituents such as alkaloids, steroids, glycosides, saponins, carbohydrates, proteins, and tannins. Moreover, it has significant therapeutic effects and various preclinical studies have been conducted on the plant to elucidate its pharmacological response which includes antidiabetic, hepatoprotective, antioxidant, antimicrobial, anti-inflammatory, antiurolithiatic commonly known as Gajkarni or Hattikaan is an erect herbaceous shrub widely distributed to sub-Himalayan tract and Western Ghats of India. The leaves of the Plant look like Elephant's ear. Hence, it is traditionally named

hathikarna o nociceptive, cytotoxic, antithrombotic, neuroprotective, and wound healing and cardiotonic activity.

CONCLUSION:

There is a lot of scope for usage of Momordica dioica, Holarrhena pubescens (Kuda) & Leea macrophylla in pharmacological activity as well as in research work. These plants are generally easily available in rainy season. There is need to explore these plant so as to make use of its medicinal and pharmaceutical properties to its fullest.

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