

“Etheno Medicinal Uses of Raphanus Sativus Linn”

*Sony upadhyay **Prashant Kumar Singh ***Pranav Upadhyay
****Rajiv Shukla

* *M.Pharma SEAT College of Pharmacy, Varanasi*

** *Asst. Professor, SEAT College of Pharmacy, Varanasi*

*** *Asst. Professor, SEAT College of Pharmacy, Varanasi*

**** *Director, SEAT College of pharmacy, Varanasi*

Date of Submission: 27-05-2023

Date of Acceptance: 08-06-2023

ABSTRACT:

The science of Ethnobiology deals with the relationship between man and surrounding biota, with a multidimensional approach, including multidisciplinary subject like Anthropology, Botany, Zoology, Sociology, History, Economics, Commerce, Medicine, Pharmacology, Animal husbandry and Archeology etc. (Dash, 1998), Many scientific themes are found to be concealed within folklore and local literature as well in religious practices which are regarded as indigenous knowledge (Alcorn, 1996) and study of the biological aspects of such knowledge is a new dimension in ethnobiological research. Radish is likely native to south Asia or Central Asia. Ancient Greeks and Romans about 2,500 years ago also used for food and medicinal purpose. Several thousand years ago, people began to cultivate the wild radish. Radishes are the good source of antioxidants and minerals like calcium and potassium.

KEY WORDS- Ethnobotany, Medicinal uses, Radish, Chemical Constituents, Ayurveda.

I. INTRODUCTION-

The Ancient inhabitants of Greece prized above all root crops. The root crop was a common food in Egypt long before the Pyramids were built and was popular in Ancient Rome as well. The

Word radish is a derivation of the Latin words a “radix” or root. *Raphanus sativus* Linn, known in Ayurvedic classic with underground tuberous root, flowers are white to purple coloured, fresh or dry root, leaves and seeds are used in different Conditions. It is traditionally known as Mulak and cultivated throughout the world for its pungent edible roots. It is used to cure hemorrhoids, burning sensation and eye disorders.

II. BOTANICAL DESCRIPTION-

The radish belongs to the Cruciferae family and its scientific name is *Raphanus sativus* Linn. It is an annual or biennial plant, it has a thick fleshy root, varying in shape and size, of a red, white pink or dark brown skin or tinged with multiple colors. Its taste is more or less pungent.

Raphanus sativus is a cultigen (a plant that has been altered by humans through a process of selective breeding). It is grown all over the world for its fleshy, edible taproot. Depending on the cultivator, it may be grown for its edible roots, leaves, seeds or seed pods. A wide variety of cultivars are available, producing taproots that range from 2cm to 1m long and from red to pink, white, purple or black in colour. The leaves are arranged in rosette with size ranging from 10-15cm-45cm in long.



RADISH



RADISH SEEDS



RADISH LEAF

III. CHEMICAL CONSTITUENTS AND ITS PROPERTIES-

Radish is a good source of Antioxidants like- Lutein, Pyrogallol, Vanillic acid and other phenolic compounds. The root also have a good amount of Vit C. Radish also contain glucosinolate and isothiocyanate that can help to regulate blood sugar levels, indole-3-Carbinol and 4-methylthio-3-butenyl isothiocyanate, which help the liver detoxify and heal against damage. These same compounds also help the kidneys flush out toxins. Radishes are rich in antioxidants and minerals like calcium and potassium. Together, these nutrients help lower high blood pressure and reduce the risk of heart diseases. It is also a good source of natural nitrates that improve blood flow. Other than these, sufloraphene, sitosterol, steric acid, Castasterone and brassinolide found in leaf and alkaloids, glucosinolates, brassinosteroids and flavonoids in root.

IV. MEDICINAL USES-

According to different Ayurvedic classic especially in Carak Sambita it is mentioned that tender root of radish is forbidden. Most of the nighantus described it and mainly used as vegetable. It indicated in Jvara (fever), Kasa (cough), Nasaroga (Nose Disorders), Netra roga (Eye Disorders), Arsa (Piles) and Gulma (Abdominal lump). In sotha (Oedema) mulaka and tila (sesmum seed) are given together, in Atisar (Diarrhea) mulak yusa (soup of radish) is very useful and in Arbuda (Tumor) the paste of sankha (conche) is mixed with ash of radish and applied locally. Modern researchers have the

opinion that Radish has many important chemical ingredients on the basis of that it is also used in liver detoxifying and heal against damage and detoxification of kidney too. It is also rich in antioxidants and minerals like calcium and potassium. Which lower the blood pressure and reduce the risk of heart disease. It is also a good source of natural nitrates that improve the blood flow. Radish leaves are rich in magnesium and Vitamin C and K, and they may help reduce memory loss and protect the lung tissues against oxidative stress and damage. Antimicrobial and antioxidant property of radish leaves help to remove toxins and helps to purify the blood as well as keep liver and kidney healthy. Radish possesses sweet mixed pungent taste with a lot of juice followed with fiber content, it is appreciated in the treatment of constipation and piles. Ayurvedic classics as well as modern dietetics recommend radish in Jaundice hemorrhoids, indigestion, constipation, fatty liver, asthmatic condition etc.

V. CONCLUSION-

Radish belonging to family cruciferae (Brassicaceae) It is popularly used in food as salad. It is high in water, fiber and low in fat and calories. Its root and leaf are commonly eaten. Radish root contains chemical that might help lower blood sugar and blood pressure that's why it can be use in Diabetes and high blood pressure, Radish leaves are varied ranging from treating diabetes to rheumatism. The high iron and phosphorus content of radish leaves increases immunity and reduces fatigue. It is also contains vitamins and minerals that's why it also act a detoxifying agent.

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