

MEDICINAL IMPORTANCE OF SOME COMMON INDIAN VEGETABLES PART I

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Received: June 21, 1983

Accepted: March 24, 1984

ABSTRACT: *The article reviews here the medicinal properties of some of the commonly used India Vegetables minutely.*

Nature has its own various remarkable and valuable ways of curing diseases. Endowed with a wide diversity of agroclimatic conditions, India is virtually a herbarium of the world. Hence, judicious utilization of the natural resources will provide better medicinal aid to mankind.

Naturopathy, a drugless system of medicine, makes use of regulation of diet. The common vegetables, which form part of our daily meals, have various medicinal properties. The utilization of the common vegetables properly, can prevent many of the human ailments and retain health and vigour.

1. *Colocasia esculenta* (Linn.) Schott.
Syn: *C. antiquorum* – Schott.

Vernacular Names:

Sand. – Kachu; Beng. – Bankachu, Charakachu, Gurikachu, Kachu; Hindi-Arvi; Mar.- Alu; Tam.- Seppan-kizhangu; Tel.- Chamadumpa, Chemagadda; kan.- Kachchi, Shamagadde; Mal.- Shembu; Uriya – Saru.

All parts are edible. Young leaves and stalks are used like sag. The tubers are eaten after peeling, slicing and cooking.

The tuber contain protein – 3%, fat-0.1%, mineral matter – 1.7%, carbohydrates-22.1%, calcium – 0.04%, iron – 2.1 mg., carotene – 40 I.U., vitamin B₁ – 80 I.U./100gm. and vitamin C.

It is rich in carbohydrates and proteins and about one and a half times more nutritious than potato. Steamed corms (contain 30% starch and 3% sugar) is a high energy food. The leaves and petioles are good sources of vitamin A and vitamin C.

The pressed juice of the petioles is used as a styptic or astringent, and may be used to arrest arterial haemorrhage. It is some times used in earache and otorrhea, and also as an external stimulant and rubefacient. The juice of the leaf stalks with salt is used as an absorbent in cases of inflamed glands and buboes. Internally it acts as a laxative, and is used in cases of piles; it is also used as an antidote to the stings of wasps and other insects.

2. *Alocasia Indica* (Roxb) Schott.

Vernacular names:

Sans. – Manaka; Beng. And Assam – Mankachu; Hindi- Mankanda; Mar-Alu.

The Stems and rhizomes are edible after boiling and washing thoroughly.

The underground stem of this plant is a common domestic remedy in gout and rheumatism. The flour obtained from the stem is a light nutritious food, suitable for invalids. The root- stock is useful in leprosy and diseases of the abdomen and spleen.

3. *Benincasa htspida* (Thumb.)
Cogn. Syn : *B. Cerifera Savi.*

Vernacular names:

Sans. – Kooshmanda; Beng.- Chal-kumra; Hindi-Petha; Mar.- Kohala; Tam.- Pushani Kai;-Tel – Budi-da- gummadi; Kan-Budagumbala Kayi; Mal.- Kumbalangai.

The young fruit is used as vegetable and the ripe fruit is used for the preparation of pera. Young leaves are also used as vegetable. Fried seeds are eaten.

The fruit contain-protein-0.4%, fat-0.1%, carbohydrates-3.2%, mineral matter-0.3%, vitamin B₁-21 I.U./100 gm.

It is a source of vitamin B₁. The fruit is laxative, diuretic, tonic, aphrodisiac; it cures strangury, urinary diseases. In Ayurveda, it is said to be a heart tonic. The fruit possesses alternative and styptic properties and is popularly known as a valuable antimercurial. It is considered to be a specific for haemoptysis and other haemorrhages from internal organs. The seeds have anthelmintic properties.

It is used in “Kushmanda”, an Ayurvedic preparation.

4. *Amorphophallus campanulatus*
Blume

Vernacular names:

Sans. - Arsaghna, Balukand; Beng.-Ol; Hindi-Zaminkand; Guj. and Mar.-Suran; Tel. – Kanda; Tam.-Karnai-Kilangu; Kan.-Suvarna gadde; Mal.-Chena.

After long washing the corms are used for edible purposes.

The corm contains- protein – 1.2%, carbohydrates-18.4%, mineral matter-0.8%, iron – 0.4 mg., vitamin A-434 I.U., vitamin B₁ – 20 I.U./100gm.

It is a source of vitamins A and B₁. The tuber is appetizer, stomachic, carminative and tonic. It is used in piles, enlargement of the spleen, tumours, asthma, bronchitis, vomiting, abdominal pain, blood diseases and elephantiasis.

It is used in the Ayurvedic preparation ‘Suranvatak’.

5. *Boerhaavia diffusa* Linn.
Syn. *B. repens* Linn.

Vernacular names:

Sans. And Tel.-Punarnava; Beng.-Punarnaba; Hindi-Sant; Mar.-Tambadi vasu; Guj-Vakha khaparo; Tam.-Mukaratte-kirei.

Leaves are used like sag.

The active constituent is an alkaloid, punarnavine. Large quantities of potassium

nitrate and other potassium salts are present in this plant.

It is a rich source of potassium. It is useful in biliousness, blood impurities, leucorrhoea, jaundice, anaemia inflammations, asthma and in heart diseases. The root of the plant has laxative and diuretic properties. In large doses it acts as an emetic. It is given in gonorrhoea and in enlargement of the spleen and liver. The plant, in combination with other drugs, is prescribed for snake-bite and scorpion – sting.

It is used in a number of Ayurvedic preparations – “Punarnavarishta”, ‘Punarnavadi Quath’, ‘Sudarshan Churna’, ‘Punarnava Mandur’, etc.

6. *Carica papaya* Linn.

Vernacular names:

Beng.-Pappaiya, papaya, Hindi and Mar.-Papaya, Papeeta; Guj.-Papayi; Tam.-Pappali, Pappayi; Tel.-Boppayi; Kan.-Parangimara.

Unripe fruits are consumed as Vegetable.

The fruits contain – proteins – 0.5%, carbohydrates – 9.5%, mineral matter – 0.4%, iron – 0.4%, vitamin A- upto 0.76 mg., and ascorbic acid – upto 136mg/100gm. The leaves contain vitamin C- 286 mg. and vitamin E-36 mg/100gm. The milky exudates of green fruit contain papain, a digestive enzyme.

A glycoside, carposide, and an alkaloid, carpaine, are found in the leaves.

Almost all the parts of the tree have medicinal value. The fruit is a rich source of vitamins. The green fruit is a rich source of vitamins. The green fruit has mildly laxative, diuretic and ecboic properties. The ripe fruit is appetizer, digestive, carminative and diuretic. It cures inflammations and enlargement of the spleen. The milky juice of the green fruits is anthelmintic, particularly effective in the expulsion of lumrici. Sometimes, it is used as cosmetic to remove freckles and other blemishes from the skin.

The roots are used to cure yaws and piles, and act as a generative tonic. The milky juice is applied locally for abortion, Syrups, wines, elixirs, made from ripe fruit, are expectorant, e.g. ‘Zanduzyme tablet’, etc.

7. *Elaeocarpus serratus* Linn

Vernacular names:

Sans.-Chiribilva; Beng. – jalpai; Tam.-Ulangkarei, Utraccham; Kan.-Perinkara; Mal.-Avil, Nallakara, Valiya-kara; Uriya-jolopari.

Edible part is the fleshy portion of drupe surrounding the stone.

It contains – protein – 0.69%, carbohydrates 19.5%, total sugar – 9.8%, mineral matter-0.59%, and vitamin C-47 mg./100 gm.; vitamin C content of dry leaves is 257 mg./100 gm.

It is a good source of vitamin C. the fruits are used in dysentery and diarrhoea. The leaves are used in rheumatism and as an antidote for poison.

8. *Ipomoea aquatic* Forsk

Syn: *I. reptans* Poir

Vernacular names:

Beng.-Kalmisak; Hindi – Kalmisag, Karmi, Patuasag; Mar.- Nadishaka; Guj.- Nalanibhaji, Tel.-Tutikura; Tam.- Vellaikeerai.

The young terminal shoots and leaves are used as vegetable.

The leaves contain – protein – 2.9%, fat-0.4%, carbohydrates – 4.3%, mineral matter-2.1%, iron-3.9mg., vitamin A-3300 I.U., vitamin B₁ – 87mg., vitamin B₂-120mg., nicotinic acid – 0.6 mg., vitamin C 137 mg. and vitamin E-11.8.mg./100gm.

It is a very good source of minerals and vitamins especially vitamin A. It is useful in fever, jaundice, biliousness, bronchitis and liver complaints. The juice of the plant is used as an emetic in cases of opium and arsenical poisoning. Dried juice is said to be purgative. In cambodia, the buds are used in the treatment of shingles; the stems and leaves are prescribed in febrile delirium.

9. *Marsilea minuta* Linn.

Vernacular names:

Beng - Susnisak; Tel.-Mudugo-tamara, Chick-Lintakura; Tam.- Araikeerai; Kan.- Chitigina-soppu; Kashmir-paflu.

The leaf are used as vegetable.

The leaves are said to have sedative action. So it can be given as vegetable to persons requiring sleep. The leaves are useful in rheumatism and cough. Its seeds are

beneficial to patients having difficulty in urine discharge.

10. *Moringa oleifera* Lam.

Syn.: *M. Pterygosperma* Gaertn.

Vernacular names:

Sans.-Shobhanjana; Beng.-Sajina; Hindi-Mungna, Sainjna, Shajna; Mar.- Achajhada, Shevji; Guj.- Midhosaragova, Saragavo; Tam.- Murungai; Kan.- Nugge; Mal.- Murinna, Sigru, Moringa; Assam- Saijna, Sohjna; Orissa – Sajina.

Its leaves, flowers and fruits are used as vegetables.

The pods contain protein- 2.5%, carbohydrates – 3.7%, mineral matter – 2.0%, Calcium – 30mg., iron – 5.3mg., Vitamin a-184 I.U., nicotinic acid – 0.2 mg., ascorbic acid – 120 mg./100 gm., and a number of amino acids.

The leaves contain – vitamin A- 11300 I.U., vitamin B₁ – 210 mg., nicotinic acid - 0.8mg., ascorbic acid – 220 mg., and tocopherol - 7.4 mg/100 gm. Pterygospermin, an antibiotic, is present in the roots.

All parts of the tree have medicinal value. They are used in the treatment of ascites, rheumatism, venomous bites and as cardiac and circulatory stimulants. The pods are source of vitamins and are said to act as a preventive against intestinal worms. The flowers are tonic, diuretic and increase the flow of bile. The leaves are a good source of vitamins A and C and are useful in Scurvy and catarrhal affections; they are also emetic. The root of the young tree is

prescribed in intermittent fever, hysteria, palsy, chronic rheumatism, dropsy, enlargement of the spleen and dyspepsia.

The bark is used in the Ayurvedic preparations like 'Dashang lepa Churna', 'Sudarshan Churna', etc.

11. *Spinacia oleracea* Linn.

Vernacular names:

Sans. – Chhurika, Chiritchhada, Gramini, Palankya; Beng.- Palan; Hindi, Mar.& Guj.& Punjabi- Palak; Tel.- Dumpa-bachhali, Matturbachhali; Tam.-Vasayleykiray; Kan.- Spinachsoppu, Spinaksoppu; Oriya- Palaksag; Assam-Palangsag.

Leaves and tender stems are edible portions.

It contains protein – 2%, fat – 0.7%, mineral matter – 1.7%, carbohydrates – 2.9%, calcium – 73 mg., potassium – 206mg., iron- 109 mg., vitamin A-9300 I.U., vitamin B₁ – 0.03 mg., nicotinic acid -0.12 mg. /100 gm. and also vitamin K.

It is a rich source of minerals, vitamin A, Vitamin B Complex and vitamin C. it is also an important natural source of vitamin K. it is cooling, anti-emetic, anthelmintic, laxative and alexipharmic, laxative and alexipharmic; and is useful in the diseases of the blood and the brain, asthma, leprosy, biliousness and jaundice. It is said to be of value in urinary calculi. The fruits are demulcent and diuretic.

12. *Ipomoea batatas* (Linn.) Lam.

Vernacular names:

Sans. – Kandagranthi; Beng. – Lal alu, Ranga Alu; Hindi- Mitha alu, Shakarkand; Guj- Kanangi, Sakaria; Tel.- Chelagada; Tam.- Sakkareivelleikilangu; Mal.- Chakarakilangu; Kan.- Genasu; Oriya – Kanda.

It is used as food after boiling, baking or frying. Young leaves are used as vegetable in the Philippines.

It contains – protein – 1.2%, fat – 0.3% carbohydrates – 31% mineral substances – 1%, vitamin A-5.4 -7.2 mg., -0.05 – 0.1 mg., and vitamin C- 16-22mg./100 gm. They are rich in starch. A number of enzymes have also been reported to be present in the tubers.

It is a source of carbohydrates, proteins, minerals and vitamins. The root is laxative, cooling and aphrodisiac. In Malaya, a drink prepared from the root is given to allay thirst in fever. The leaves are also a source of vitamins. They are used as a maturative capaplastm. A paste of roots or leaves is applied to scorpion bites.

13. *Momordica cochinchinensis* Spreng.

Vernacular names:

Sans. – Gangeruka, Karka, Karkaphala Beng. – Kakroal, Gol – Kakra; Hindi – Gangerua, Gulkakra; Mar.-Kakana; Tel – Adavi kakara; Guj.- Karapata.

The fruits of the plant are use as vegetable.

The fruit is a rich source of vitamin C. the unripe fruit is appetizer. The ripe fruit is laxative. The seeds are useful in the treatment of ulcers, sores and obstructions of

liver and spleen. Fruits and leaves are used externally in lumbago, ulceration and fracture of bones. In China, the seeds are considered useful in the treatment of tumours and malignant ulcers. In Hong-Kong, the plants are used as an alterative bitter drug in place of Strychnos.

14. *Daucus carota* Linn. Var. Sativa.

Vernacular names:

Sans.-Shikhamula; Beng. – Hindi, Punjabi, Guj.-Gajar; Mar.- Gazara; Tel.-Gajjaragedda, Pitakanda; Tam. – Gajjarakkilangu, Karetukizhangu; Kan.-Gajjari.

Carrot roots are used as a vegetable for soups, stews, curries, pies, salad and pickle.

It contains- protein-0.9%, fat -0.1%, carbohydrates – 10.7%, mineral matter-1.1% iron-1.5 mg., vitamin A 2000-4300I.U., Vitamin B₁-60-I.U., nicotinic acid-11 mg., vitamin B₂-60-I.U., nicotinic acid – 11 mg., vitamin B₂ – Upto 90 mg. and vitamin C-3 mg./100 gm.

Vitamins A,B₁,B₂, C and D are present in carrot. It is the rich source of vitamin A and iron. It increases the quantity of urine and helps the elimination of uric acid. Increase in the quantity of carrot in the diet has a favourable effect on the nitrogen balance. Carrot is appetizer, anti-dysenteric, carminative and cardiogenic. It cures leprosy piles pins, burning sensation, thirst, biliousness and tumours. The seeds are aromatic, stimulant, carminative and are useful in the diseases of the kidney and in dropsy.

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