ISSN: 0976-3031

Available Online at http://www.recentscientific.com

International Journal of Recent Scientific Research
Vol. 6, Issue, 8, pp.5875-5879, August, 2015

International Journal of Recent Scientific Research

RESEARCH ARTICLE

MEDICINAL PROPERTIES OF WILD LEAFY VEGETABLES AVAILABLE IN MAHARASHTRA STATE IN RAINY SEASON

Atram Seema

Department of Dravyaguna, R.A. Podar Government (ayu.) Medical College, Worli, Maharashtra, India

ARTICLE INFO

Article History:

Received 2nd, July, 2015
Received in revised form 10th, July, 2015
Accepted 4th, August, 2015
Published online 28th, August, 2015

Key words:

Wild vegetables, medicinal use, ethanobotanical uses.

ABSTRACT

Man has influence by wild edible plant from ancient time as they are valuable source of nutrition and healthy. By consuming ample amount of plants on a regular basis provide us considerable amount of protein, lipids, carbohydrate and other essential components for the body function, proper supplementation of all necessary vitamins, minerals and other compounds is require for the better health and due to their medicinal property we can develop a new drug in future.

This present paper focus on ethanomedicinal property of some non cultivated green leafy vegetables from Maharashtra. On the basis of collected ethanobotanical information through literature study. It is observed that these plant posses useful medicinal activity. These plant are cheap source of protein, carbohydrate, iron and other essential micronutrients. Thus indirectly they act as a alternative source of medicinal drug. Which are easily available in natural habitat. So by analyzing their active constituents they may be introduce as future herbal medicine.

INTRODUCTION

Most of wild edible vegetable species have medicinal property and can be used to keep people healthy and fit. Further phytochemical and neutraceutical studies of these edible species may provide better nutritional source. Apart from the source for food, human also utilize plants for dyes, ornaments and medicines. Wild edible plant are source for nutrition but also posses higher medicinal property. These wild plant are grown in forest region without Chemical / Fertilizer. Most of wild vegetable are grown naturally without proper cultivation technique in forest area; Specifically during monsoon season and collected by tribal people. Tribes are part of nature, they fulfill their need through wild resources. Their knowledge based upon traditional source. Consuming wild edible is food habits of people. Various reports also noted that many wild edibles are nutritionally rich and can supplement nutritional requirements, especially vitamins and micronutrient. Nutritional analysis of wild vegetable demonstrate that the nutritional quality of wild vegetable is comparable and in some cases they are superiors to domesticated verities. Many medicinal values of certain vegetables yet to be documented, so there so need of explore, analyze and document the wild vegetables which posses medicinal values.

The major nutritional compounds that are present in wild plants are carbohydrates in the form of starch and sugars, protein, lipid, in the form of oil, vitamins, minerals, etc. Apart from these antioxidant, like ascorbic acid, phenols such as cholorogenic acid and its polymers are available in plant because of these component, the wild vegetable most have potential to improve physical as well as mental health, help in reduce the risk of disease. Present work is an attempt to explore the traditional knowledge of wild edible plants / vegetable available in Maharashtra state.(Aberoumand, A, *et al*, 2009).

Bharangi*: *Clerodandrum serratum

The plant belong to the family *Verbenaceae*. It's one of the important plants from traditional system of medicine found all over the world. The leaf and root of this plant have great medicinal value. Root bark contains mainly saponins, While leaves contain flavanoids and phenolic acid[2]. Root is pungent bitter, acidic, dry, anti-inflammatory, digestive, carminative, depurative, expectorant, antispasmodic, stimulant, appetizer and antihelminthic. It is used clinically in the treatment of bronchitis, leaves are uses in fever and hiccough. Its boiled leaves are used in cephalgia and opthalmia where as its seeds are boiled in butter milk is used as aperients. Ayurveda has been propagated the use of *C. Serratum* as effective treatment against asthma, body ache, cholera, eye disorder, ulcer, snakebite, wound tuberculosis, epilepsy(Rastogi R, *et al*, 1993).

Corresponding author:* **Atram Seema
Department of Dravyaguna, R.A. Podar Government (ayu.) Medical College, Worli, Maharashtra, India

Fondshi*: *Chlorophytum borivilianum

Also known as safed musali from *Asperagaceae* family, is a traditional rare Indian medicinal herb which has many therapeutic application in Ayurvedic, Unani and Homeopathic system of medicine. It is used to cure physical illness and weakness as an aphrodisiac agent, revitalizer, as general sex tonic, remedy for arthritis, diabetes. (Singh D, *et al*, 2012).

Ghol: Portulac oleraceae

It is also known as Purslane commonly used in turf grass areas as well as in the field crop. It has wide acceptability as a potherb in central Europe, Asia and Mediterranean region. It is an important component of green salad and its soft stem and leaves are used raw alone or with other greens. Purslane is also used for cooking or used as pickle. Its medicinal value is evident from its use for treatment of burns, headache, and disease related to intestine, liver, stomach, cough, shortness of breath and arthritis, its use as a purgative, cardiac tonic, emollient, muscle relaxant, anti-inflammatory and diuretic treatment makes it important in herbal medicine. purslane also used in treatment of osteoporosis and psoriasis. It has better nutritional quality than the major cultivated vegetables, with higher beta carotene, ascorbic acid and alpha-linoleum acid. Purslane has been shown to contain five times higher omega-3 fatty acid than spinach, omega-3 fatty acid is a group help in maintenance of healthy immune system. It is rich in vitamin A which has a natural antioxidant value. It can play role in vision healthy mucus membranes and to protect from lungs and oral cavity cancer. (M. Kamal uddin *et al* 2014).

It is consider an blood cooling and haemostatic properties hence it can use in bleeding condition. The seeds decoction is considered as excelled diuretic. It's used in polydypsia. The leaves are infused in linseed oil as a liniment for stiff neck. In India this plant is used for treating excessive menstrual flow, stomached, hemoptysis and inflammation of stomach. The fresh leaves bruised are applied to the templates to allay excessive heat and pair it is also used as a cooling external application in erysipelas and an infusion is given as a diuretic. Herb is useful in scurvy, liver, spleen, kidney and bladder disease. The leaves are employed in anti – hemorrhagic poultice. (Arshiya Sutana *et al*, 2013).

Kurdu*: *Celosia aregentea

Its belong to *Amaranthaceae* family also known as Red spinach. It contain celosian, nicotinic acid, celogenamide and celogenamide A. It is a herbaceous plant grown locally in various region, it had been discovered to have a lot of medicinal value apart from the nutritive value. It is generally known for on this basis it has ability to cure disease. it contain flavanoids, saponins, glycosides, tannin in it. Stem and leaves of celosia bruised and applied as poultice is used for treating infected sores wound, skin eruptions, Poultice of leaves smeared with honey, used as cooking application to inflamed areas and painful attentions such a abscess. Seeds traditionally used for treatment of jaundice, wounds, fever. Whole plant used as antidote for snake – poison decoction of seeds with sugar is prescribed against dentistry. it is used internally for haematological and gynecological disorder and externally to treat inflammation and as a disinfectant. The whole plant is used to treat dysentery and dysuria. used externally as poultices for broken bones. The plant is used for eye and liver ailments in Yunnan, China and also for treatment of mouth sores and blood diseases. The petioles are used to treat sores, wounds, boils and swellings. The seeds are used for the treatment of conjunctivitis and hypertension. (Koh Hwee Ling *et al*, 2009).

Chakramarda: Cassia Tora

Its belong to *Cissalpinioide*ae small annual herb growing as a common weed in asian Country. It constitutes an Ayurvedic preparation "Dadrughna vati" which in one of the successful antifungal formulations. Ayurveda formulation is chakramadha Tailam. Seeds and leaves contain amino acid fatty acids, aloe emodin, chyrosomphenol, emodin, rhein and sitosterol. Decoctions of parts of plant are used as analgesic, anticonvolusant, antipyretic, antifungal, autihelminthic, diuretic, expectorant, laxative, purgative and skin disease, ring worm and itch. Many medicinal preparation such as antimicrobial, antihepatotoxic and antimutagenic activities has been attributed to plant. It is used as a coffee substitute and has a maturing and anodyne action. It is very useful in treating skin diseases like ring worm, itching body scratch and psoriasis. The alcoholic or vinegar maceration of pounded fresh leaves is used externally to treat eczema and dermatomycosis. Decoction of the fruit of *Cassia tora* is used in the treatment of fever. Since herbs act as a kapha and vata dosha suppressant. It act as a nerve tonic. it is consumed in worm infestation and cures the infections occurring in the body. the plant act as a liver stimulant, mild laxative and heart tonic. The herb helps, the body in maintaining the normal level of cholesterol. Its paste is used for treating skin ailments and also for getting rid of chronic ulcers. The juice extracted from its leaves is used in case of skin ailments, rashes and allergies. It is also used as an antidote in case of poisoning. The leaves and seed of *cassia tora* are useful in leprosy, flatulence, dyspepsia, constipation, cough, bronchitis, and cardiac disorders (Shakyawar Y, *et al*, 2011)

Kakad*: *Garuga Pianata

Its belongs to Burseraceae family. A leaf juice its astringent, given with honey in asthma, also given with the leaf juice of *Adhatoda zeylanica* and *viteax trifolia*. fruits are stomachic and expectorant. Stem juice dropped into the eyes to cure opacities of the conjunctivitis. Decoction of the roots of give for the treatment of pulmonary affections. Leaves contain amento flavone, stem bark extract gave positive test for steroids, terpens, alkaloid. flavanoids and saponins (Sachan K, *et al*, 2009)

Korla: Bauhinia Malabarica

It is a small or moderate sized deciduous tree belongs to Caesalpinoideae family. Fibrous, red inside. has medicinal property. Leaves are used as flavoring for meat and fish applied to the forehead in fevers. Good source of calcium and iron. Decoction of two plant root bark used for liver problem. Root

and stem of this plant used for the treatment of cholera would heal diuretic and dysentery.

Kartula: Momordica diocia

Momordica diocia is a perennial, dioecious, cucurbitaceous climbing creeper commonly known as Kakrol, Spiny gourd or teasle gourd belons to *Cucurbitaceae* family. It is used not only as preventive and curative agent for various diseases but also as vegetable with significant nutritional value over thousands of years. The fruit content crude protein 5.44%, crude liquid 3.25%, crude fiber 22.9% & carbohydrate 59.31%. The fruit has high energy value (285.25 Kcal/100g) in dry weight. Its mineral range (mg/100 g dry wt isK-4.63, Na-1.62, Ca-7.37, Iron-5.04, Zn 3.83) and small quantities of essential vitamins like carotene, thiamine, riboflavin and niacin. The alkaloids present in seed and root were called momordicin and momordica foetida. The fruits are diuretics, laxative, hepatoprotective, antivenomous, antihypertension anti-inflammatory, antihistaminic, antipyretic, analgesia properties, fresh fruit juice and cooked fruit in small amount of oil are prescribed for hypertension and Diabetes mellitus. The juice of leaves are mixed with coconut, pepper, red sandalwood, to form an ointment and applied to the head to relive pair. The superficial use of root part over the whole body is believe to act us a sedative in high fever with delirium. beside the superficial and oral administration of leaf paste for skin disease, tender fruits are rubbed on skin for pimples and acne and roasted stems are used for eczema. Root powder is also applied for softening skin and reducing preparation. (Satya talukian, 2014)

Varahi kand: Diascoria burbiflora

It belongins to Diascoreaceae family. It is a perennial vine with left twining stems and broad leaves. Stem smooth and subalate. usually single, subglobose without defined stalk, it forms bulbies in the leaf axila of the twining stem. roundish, warted. The tuber is bitter in taste. The bitterness is due to some anti-nutritional factor such as tannins, phenols, calcium oxalate and phytic acid. Tubers are rich in carbohydrate, protein, fiber, fat and moisture. Tubers are macerated with water and make paste which in externally applied against skin infections. mature tuber macerated and make juice with little bit salt and sugar is used to cure stomach pain. leaves are crushed with water and make semisolid water extract and then applied as an ointment to cure piles.

The fresh bulbie are eaten raw two times in a day for one week to treat stomach helminthes as antihelminthic. The rhizomes of costus specious along tuber of *Diascoria bulbifloria* by using oil of *Pongamia pinnata* used against eczema. The powder of dried tubes is used as contraceptive. The antimicrobial activities and other pharmacological activities shown by the bulb, may be due to the presence of diverse bioactive compounds in tuber. Such bioactive compound belongs to phenolic groups, alkaloids, steroid, saponine, flavanoids. (Sanjeet kumar *et al*)

Kavla: Smithia sensitive

it is a low growing annual plant with slender, many branched, ascending to decumbent stem. belongs to family *Fabaceae*. The plant is harvested from wild for local use as food and medicine. the whole plant is traditionally used as refrigerant and galactogogue. The juice of root is used in treatment of fever. A decoction of the herb is given as a treatment for gravel and difficulty in micturation. leaves are febrifuge galacatogogue. A lotion made from the leaves is applied to the head to relive headaches. (Sreena K, *et al*, 2012)

Diascorca Pentaphylla

Tubers contain alkaloids diascroine and upto 80.77% carbohydrate. a paste of the leaves made with mustard oil rubbed into affected areas for the treatment of rheumatism . Tubers are cooked and eaten. Tuber are tonic, used in swelling, rheumatism and used as hair wash for killing lice. plant is used in dropsy.

Hastikarni*: *Leea macrophylla

Leea microphylla is perennial herb, shrubs on small trees. Leaves variable in shape and size. Flora of India book informs that fruit in edible and is also of medicinal importance. The root is reported to be a remedy for ringworms and guinea worm. It is also applied as poultice on obstinate sores and sprains. It is used traditionally by the local tribes to treat body ache, dysentery. it's also believed to be anticancer us the leaf juice is recognized as local anti inflammatory agent and used to gout and rheumatism. The paste is applied to cuts and wounds. Roots are used in fracture and healing cut and wound. injury Roots are used externally to ally pain. use as astringent, styptic and antiseptic activity. plant part used by tribal people in cold, cough, headache, body pair, rheumatic paint etc. it has also ethanobotanical uses in goiter, gastric tumor, lipoma and tenatus (Vishwakarma R , 2011)

Punarnava*: *Borehavia diffusa

it is a herbaceous member of the family Nyctaginaceae is a wild perennial herb. The whole plant and preferably root are effectively used to use several disease. plant rejuvenate liver male reproductive system and other organ system; detoxifies liver and skin, aphrodisiac increases libido it cleanses the kindly and help to get rid of renal calculi (kidney stone). externally it is used for alleviate the pain and swelling. The fresh juice of its root instilled into eyes, mitigates the ailments of the eye like night blindness and conjunctivitis. The paste applied on wands dried up oozing. It is best herb to alleviate swelling. Due to its potent diuretic property if effectively reduces fever especially in malaria it is beneficial in obesity liver, Kidney disorder, dropsy, asthma. (Banjare Laxmi, *et al*, 2014).

Nalli: Ipomea aquatica

The plant ipomea aquatica is a common trailing vine with milky sap belongs to family convolvulaceae. The plant is grown wild and grown consumed as a vegetable in different region in Asia. In rural area of India, it is generally used as green leafy vegetable. It is used in treatment of liver disease, constipation, diabetes. The dried juice possess potent purgative

property. The plant is used in treatment of hypertension, antiepileptic, nervous debility. (Malakan chitrajitt 2015).

Ghetan: Digera muricate

Diegera muricata belongs to family amaranthacere. This annual herb. The leaves and younger shoots of this plant are locally used as a vegetable and given to relive constipation, flowers and seed are used to treat urinary disorder. leaf paste is applied to prevent pus formation. The leaves are used for treatment of diabetic, specially use for boiled root infusion given to mother after child birth to increase lactation. The whole plant is used in digestive system disorder. Leaves and young shoots of this plant are locally used as a vegetable and given to relive constipation. The decoction given for kidney stone, leaf paste is applied locally to prevent pus formations. The crushed plant is used as mild astringent in bowel complaint and antibilious. This is antiperiodic, coolent and stomachin (Sharma N, 2013)

Dadmari : Ammannia baccifera

A B also known as monarch redstem is species in the family Lytraceare. It is annual and herbaceous, can found in marshy, rice fields and water course at low elavation.

The herb is an appetizer, stomachic, and is useful in treating stomach pain, constipation, excessive flatulence. the leaves are beneficial for removing phelgm from lungs and trachea the herbal extract is good remedy for tuberculosis and typhoid fever. The plant juice mixed with ginger extract helpful in curing fevers. The leaves are acrid and used for the treatment of Rheumatic pain, as laxatives, rubefacient and external remedy for ring worm (Kirtikar K 1981)

Mayalu : Basella alba

Basella alba is wildly ultimate, cool season vegetable with climbing growth habit, belonging to basellaceae family. The leaves of are traditionally used to bring sound refreshing slip when it is applied on head about half an hour before butting. Sap is applied to acne eruption to reduce inflammation. Decoction of leaf used as mild laxative effect, pulp leaves applied to ball and ulcers. Sugared juice of leaves is useful for catarrhal afflictions leaf juice mired with butter its soothing and working when applied to horns and scalds. Roots and leaves has been used for the removal of after birth, stomach pain and increased milk production.

The mucilaginous qualities of the plant make it an excellent thickening agent in soups, stews etc. leaves are used in poultice, fun local swelling, intestinal complaint, leaves are used in constipation, sores, urticarea. maceration is taken orally for infertility, pelvic inflammatory disease, orchitis, spurious labour.(Adholavi R.A, *et al*, 2012).

Traditional vegetables are valuable source of nutrition. They provide good nutrition at lower cost. These wild vegetable are easy to cook having good taste without addition of any spices, gives very good taste even without cooking oil and food additives. They are inexpensive and high quality nutritive.

DISCUSSION

Leafy vegetables are herbaceous, shrub where leaf is edible part. It is observe that the knowledge of wild leafy vegetables may be lost in near future, unless efforts are made to educate new generation about their medicinal importance government policies should be renewed to improve the wild vegetable status, whose potential source of nutrition is currently undervalued / Nutrition is basic need of body. Nutrition is gained by proper diet hence proper chief is essential at every stage of life for growth development and active life. Green leafy vegetables are occupied important place in diet due to this high nutritional value.

CONCLUSION

As wild vegetables always intake as food they posses good medicinal property which can be useful in various disorder. So it is believed that these plant contain some bioactive component by further analycing this constituent these plant can be introduce as future medicinal plant, these wild vegetable are used traditionally by people in householder hence they have no or less side effect. To conserve this traditional knowledge there is need of public awareness about the natures gift.

References

Aberoumand, A, (2009).studies on nutritional value of some wild edible plants from Iran and India. Pakistan J. of Nut 8, 26-31.

Adholavi R.A. 2012, review on medicinal importance of Basella alba L. *Int J. of pharmaceutical sciences and dury research* & 4(2); 110-114.

Arshiya Sutana, 2013, *Portulaca oleraces* Linn: A global panacea with ethanomedicinal and pharmacological potential. *Int. J of pharmacy and Pharmaceutical Sciences* Vol.5, Supp 2,

Banjare Laxmi, *et al*, 2012; Boerhaavia diffuser from traditional use to scientific Assessment – A review. *Int J of Pharmaceutical and biological archives* 3(6):1346 – 1354.

Jatin Sharma, *Clerodandrum Serratum (L)* , Pharmatutor – ART-1149, School of Pharmaceutical Science shobhit university.

Kirtikar K, Basu B, Indian medicinal Plants. Vol.II. Dehradun. International Book Distributor; 1981:1071-1073.

Koh Hwee Ling, A guide to medicinal plant, World Scientific Publishing and Co. Pte Ltd. 2009. 42-43

M. Kamal uddin *et al*, 2014, Purslane weed (*Portulaca Oleracea*): A prospective plant source of Nutrition, Omega-3 fatty acid and antioxident Attributes, *The Scientific World journal* Vol. Article ID 951 019.

Malakan chitrajitt, 2015, pharmacological potentiality and medicinal uses of lpomoea aquatica, Forsk; A Revied, *Asian Journal of Pharmaceutical and clinical research* 8(2), , 60-63.

Rastogi R, Mehrotra B N. Compendium of Indian Medicinal plants. Vol. 3. New Delhi, India: Central Drug Research Institute, Lucknow and National Institute of Science Communication; 1993.

Sachan K, *et al*, Evaluation of antiulcer activity of hydroalchoholic stem bark extract of *Garuga pinnata roxb*, *journal of pharmaceutical, chemical and biological sciences*, 2014, 1(1): 33-38.

Sanjeet kumar, pita dlel (*Diascorea bulbflora L*) of simpli pal biosphere reserve forest, diversity and ethanobotenical value with its role in Health cook, academic, edu Industrial and environmental biotechnology.

Satya talukian, 2014, Phytochemcal, phytotherapeutical and pharmacological study of *Momordica diocia* Evidence based complementary and alternative medicine .Article ID 806082, pg 11.

Shakyawar Y, *et al*, 2011; Pharmacognostical properties and their traditional uses of *Cassis tora* linn; *Int J of pharmaceutical and biological archieves* 2(5): 1311-1318.

Sharma N, (2013); A Review on Digera muricate (1) mant. a great varsatile medicinal plant, Int J. Pharm sa Rev. & Res. 20(1) pp. 114-119.

Singh D, *et al*, 2012, Phytopharmacological aspect of *Chlorophytum borivilianum* (SafedMusali) : A review, *International J. of Research in pharmacy and chemistry*, 2(3), 853-859.

Sreena K, *et al*, 2012, Anti inflammatory and anti arthritic activity of Smithia sensitive, *International J. of pharmaceutical and chemical sciences*, 1(4): 1401-1404.

Vishwakarma R, 2011-12, Phytochemical evaluation and invitro antioxident study of various extracts of the leaves of Leea macrophylla(Vitaceae), 11-13.

How to cite this article:

Atram Seema., Medicinal Properties Of Wild Leafy Vegetables Available In Maharashtra State In Rainy Season. *International Journal of Recent Scientific Research Vol. 6, Issue, 8, pp.5875-5879, August, 2015*

****