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NUTRITIVE VALUES OF WILD EDIBLE SPICES CONSUMED BY THE KHASI TRIBES OF INDIA

Article Id: AL202121

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he clearest way into the universe is through a forest wilderness. The absence of plants is another name of death not only for human but for the whole earth. Humans dependency on plants can be seen from the prehistoric ages. And in a country like ours, you can find hundreds of tomes related to plants. About 300 of the world species are found in die rich for stand, garden & nurseries of Meghalaya. Pari Passuthe highest number of orchid species is located in Mawsmai & Mawmluh. In route to Cherrapunji, the forest at Sohra is a botanist paradise.

Meghalaya is comprised of the South Garo Hills, West Garo Hills, East GaroHills, West Khasi Hills, East Khasi Hills, Ri-bhoi and Jaintia Hills districts lying between $25^{\circ}47'' - 26^{\circ}10''$ N latitude and $89^{\circ}45'' - 92^{\circ}45''$ E longitude and covers an area of 22,549 km2. The area is bounded on the North, East and West by Assam and on the South by Bangladesh. The Khasis, Jaintias and the Garos are a *Paleo-Mongoloid* people who were said to be one of the earliest waves of the Mongolian invaders.

The State possesses a great plant wealth that is yet to be fully utilized on a commercial scale. Such utilization could accrue abundant benefit to the farmers of the region. In fact, the region has great potential for the plantation of medicinal plants because of ideal agro-climatic conditions and suitable soil. Nature, in its generous abundance, had bestowed on Meghalaya a unique array of vegetation, ranging from tropical and subtropical to temperate or near temperate. The present study was conducted with an aim to enumerate wild edible plants used by the *Khasi* tribes of Meghalaya. This is an effort to provide baseline data that can be helpful in ensuring sustainable utilization

of wild edible fruits of Meghalaya.



Volume 2 – Issue 12 Online ISSN: 2582-368X www.agriallis.com

1. Drumstick- (Moringaoleifera)

Family - Moringaceae

Local name in Khasi-Diengtoh

Parts Use- Flower and Leaves.



It is one of the most useful tropical trees. Its leaves contain prosperous and essential rich disease-preventing nutrients for people of all the ages. Its leaves are edible like spinach and commonly cooked well for making soups and salads. It contains a huge load of the vitamin. A, C, calcium and which is more than the products these are known for a like carrot for Vitamin A orange lemon for vitamin C etc.

It is rich in phytosterols like stigmasterol

sitosterol act as for hormones required for reproductive health. Due to known for all properties, it's like the Miracle tree.

Nutritive and Medicinal properties-

- I. As it is planted full of important nutrient and anti-nutrient, but its leaves are a rich source of mineral listed Ca, K, Zn, Mg, Fe, Cu, Fiber, Proline.
- II. Vitamins Like A, B, C, D and mainly E is found.
- III. Phytochemicals like tannin, sterol saponins are also found.
- IV. It Contains properties like anti-cancerous anti-diabetic, mainly it also cures used in the treatment of disease like AIDS as gives boosting to the immune system of HIV^{+ve} in dividable.
- V. Shortly it can be used to cure more than 300 diseases.

Commercial Application-

i. Seed of Moringa are used to extract oil is known as bem oil is a source of oleic acid to tocopherols, sterols. This oil can be used for cooking, other than that also use a perfume by perfume industries and for lubricate too.



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- ii. Its seed also has a prominent coagulant property as the certain cationic protein that can clarify turbid water.
 - 2. White Jute (Corchoruscapsularis)

Family-Malvaceae,

Part Use- Leaves



It is the one of the sources of jute fibres considered to be finer quality than *Corchorusolitorius* another species of it. The leaves, fruits and roots of this used as traditional medicine beside its leaves are also used as a foodstuff, as a salad, older leaves are cooked as potherb which is rich in proteins amazed to know that even its dried leaves also can be used as a thickness of soups for making tea. It's an incredible

ingredient for hair and skin problems.

Nutritive and Medicinal properties

- I. The leaves of *C. capsularis* are rich in beta carotene, Ca, and Vitamin C. It is an antioxidants active plant with a significant alpha-tocopherol equivalent to Vitamin E.
- II. As it leaves used as vegetable which are very helpful in protection from chronic diseases like heart disease, cancer Diabetes, hypertension as well.

Other Benefits and use

- I. Leaves are appetizing, as an aid to digestion as laxative, stimulants.
- II. Leaves also play a role in reducing fever, liver disorders as well.

Commercial Application

- i. A rich, valuable fibre is obtained from stem for remarkable strength.
- ii. Use by industries for making gunny bags, ropes and carpets.
- iii. The pith leftoure after extraction of fibre is used by the paper industry and in preparation of alcohol.



iv. Use by skincare and hair care industries as well

3. Curry leaves (Murrayakoenigii)

Family- Rutaceae,

Parts use- leaves



It is the very commonly seen use in every Indian kitchen. Known for great flour to the curries leaves are used in aromatic and the fruits of it is a component of dessert in some eastern nation.

It also has medicinal and healthcare purpose product in rural and tribal areas. It is important to tribal communities. Its leaves are commonly known as curry leaves or sweet neem leaves. It is an impotent herb in Ayurveda and Siddha

medicine. Here they believe to poses anti-disease properties.

Nutritive and medicinal properties-

- I. The leaves contain anti-inflammatory, anti-amnesic memory enhance, fungal, antioxidants, skin pigmentation cures, anti-ulcer, anti-diabetic.
- II. Use in Tonic, stomachic, internally in vomiting.
- III. Role in cure piles, itching etc.
- IV. Heal wounds and burns
- V. Very rich in source or protein and beta carotene. So use to reduce hair loss by various industries or directly
- VI. Good for eye sight.

Commercial application

- i. Its oil is found to be used in cure the diabetes
- ii. Volatile oil of it use a fixative for soap and perfume.
- iii. Add an effective flavor in curries, pickles, soups and chutney.

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Volume 2 – Issue 12 Online ISSN: 2582-368X www.agriallis.com

4. Culantro (*Eryngiumfoetidum L*)

Family- Apiaceae

Local name in Khasi- Dhonia Khlaw

Parts use- leaves



It is the tropical herb which is commonly known as by different name like long coriander, maxi coriander, false coriander, fitweed etc. sometimes it is used as a substitute for coriander, has a much stronger taste. Leaves can be cooked or steamed and served with rice. It is an important medicinal herb having various medicinal properties which is very effective in chickenpox and measles well a spice plant with huge

important cultivated in India, Vietnam and Australia etc.

Nutritive and Medicinal properties

- I. Leaves contain 86-88% moisture, protein, fat, carbohydrates and very important leaves are excellence source of vitamin A
- II. It has been used in traditional medicine in various tropical region to treat burns, fever, hypertension, constipation, asthma, stomachache, worms, infertility complication, snake bite, diarrhea, malaria.
- III. It is also having anti cancerous, anti-diabetic and anti-viralproperties.
- IV. Boiled water of it leaves use as herbal bath for chicken pox measles.
- V. Oil is also extracted from seed of E. fortidum for various other uses.

Commercial applications-

- i. It is use a flavor/ fragrance agent is market.
- ii. Use is various restaurants over soups and garnishing.
- iii. Use for the various medicinal purpose by pharma industries



Volume 2 – Issue 12 Online ISSN: 2582-368X

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- iv. Having important volatile compound is a significant item perfume is cosmetic industries.
 - 5. Chameleon Plant (Houttuyniacordata)

Family - Sauruaceae

Local Name in Khasi- Jamyrdoh

Parts use - Fruit & Leaves



Houttuyniacordata, also known as fish mint, fish leaf, rainbow plant, heartleaf, fish wort, or Chinese lizard tail, it is an edible as well as a medicinal herb with an aromatic smell which has long been used in Asia to treat pneumonia, hypertension. It is a leaf vegetable which is commonly known as fish mint or fishy" *H. cordata* is commonly seen in salad, salsa, cooked with other vegetable and garnish various dishes leaves of *H. cordata* have a delicious orange like smell and make a

marvelousflavor to the salad.

Nutritive and Medicinal Properties

- I. Externally it is use for the treatment of snake bites and skin disorders. Internally to treat ailments like cancer, cough, dysentery, enteritis and fever.
- II. Juice of leaves of it uses to cure blood deficiency and blood purification.
- III. Plant has anti-bacterial, anti-inflammatory anti-viral diuretic and women's complaints/ disease properties.
- IV. And effective substance obtained from it is used in the treatment of stomach ulcer.

Commercial Application

- i. Used as medicine by pharma industrious in various processes.
- ii. Use in skincare treatment and in cosmetics
- iii. Use in salad, chutney and as garnishing



iv. Raw material is also used directly for eating and treatment purpose and dishes as well.

Conclusion

The examination demonstrated that this wild-consumable plants gathered from Meghalaya state in India are wealthy in protein, fat, sugar, and fibre and could give fundamental supplements required to keeping up ordinary bodywork. The dietary properties of these plants were additionally all around looking at and furthermore here and there superior to the basic vegetables. These wild species were likewise discovered an altogether valuable wellspring of different minerals. The minerals, especially Na, K, Ca, Fe, Cu, Mg, and Zn, were available in obvious amounts.

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