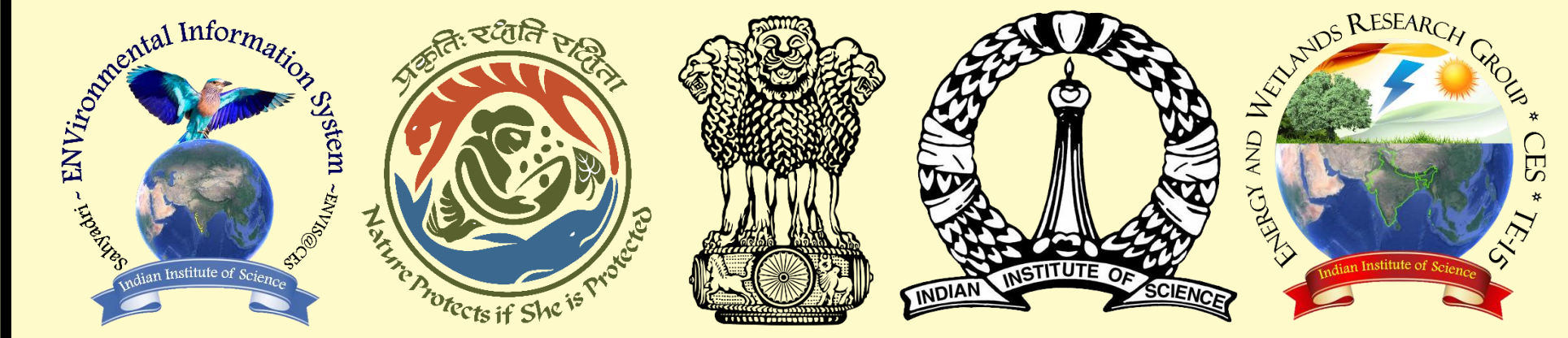


Nutraceutical and Medicinal values of some medicinal plants in Western Ghats of South India- A Review

Sayantani Chanda and T. V. Ramachandra

Energy & Wetland Research Group, Centre for Ecological Sciences
Indian Institute of Science, Bangalore-560012, Karnataka, India.



Introduction :

Nutraceuticals are "naturally derived bioactive compounds that are found in foods, dietary supplements and herbal products, and have health promoting, disease preventing and medicinal properties." Plant derived Nutraceuticals/functional foods have received considerable attention because of their presumed safety and potential nutritional and therapeutic effects.

Study method-

Information on nutraceutical value of medicinal plants collected from the papers where experimentally determined. Data has been analysed for generating baseline information on nutraceutical & medicinal values.

HEALTH BENEFITS OF VITAMIN C

Organic Facts
www.organicfacts.net



Helps to prevent scurvy

Aids in lowering hypertension

Reduces risk of cancer

Reduces risk of cardiovascular diseases

Helps to reduce symptoms of asthma

Protects against cough and common cold



Effective in curing cataracts

Aids in controlling diabetes

Helps to cure lead toxicity



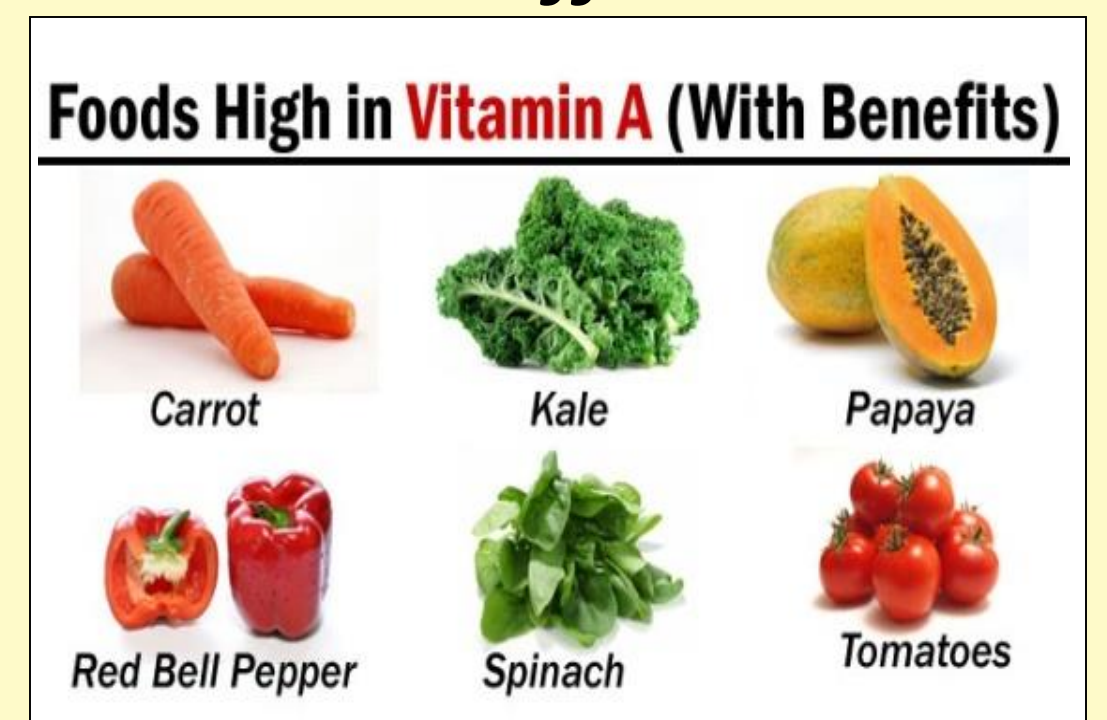
www.facebook.com/organicfacts | pinterest.com/organicfacts | http://goo.gl/P8i0be | twitter.com/OF_organicfacts



Syzygium cumini



Emblica officinilis



Species	Local Name	Biochemical Composition	Nutraceutical and health aspects
<i>Morinda citrifolia</i>	Noni	The fruit protein content is very high (11.3 %).The amino acids present are aspartic acid, glutamic acid and isoleucine.The main minerals contained in leaves are calcium (0.55 %), potassium (0.12 %), magnesium (0.06 %), manganese (4.47 ppm) and copper (2.23 ppm).	Fruits and Leaves have high nutrition values. Medicinal values of fruit juice:Cures arthritis, diabetes, high blood pressure, gastro ulcers, cancer & AIDS.
<i>Glycyrrhiza glabra</i>	Athimathuram	The mineral content in <i>Glycyrrhiza glabra</i> are sodium(169.02ppm),potassium (137.06ppm),magnesium (219.06ppm) and zinc (39.738ppm).	Whole plant have nutritional properties. Medicinal values of bark : Cures cough, asthma, arthritis, bronchitis, peptic ulcer and for allergic complaints.
<i>Gymnema sylvestre</i>	Sirukurinjan	The minerals content in <i>Gymnema sylvestre</i> (186.75 ppm),arepotassium(457.37ppm),magnesium(571.10ppm) and zinc (87.120 ppm).	Whole plant have nutritional properties. Medicinal values of leaf : Cures diabetes mellitus, constipation, gas trouble, wounds ,cough, rhinitis and asthma.
<i>Solanum trilobatum</i>	Thuthuvalai	The minerals content in <i>Solanum trilobatum</i> (357.26 ppm) are ,potassium (244.14 ppm),magnesium(426.28 ppm) and zinc (40.850ppm).	Whole plant have nutritional properties Medicinal values of leaf : Cures asthma, cough, and tuberculosis.
<i>Alpinia calcarata</i>	Chitraratta	The minerals content in <i>Alpinia calcarata</i> (238.24 ppm), are potassium (359.09 ppm),magnesium (197.25 ppm) and zinc (13.061ppm).	Whole plant have nutritional properties Medicinal values of rhizomes : Cures headache, lumbago, rheumatic pains, sore throat, stuttering, pain in the chest.
<i>Centella asiatica</i>	Vallarai	The minerals content in <i>Centella asiatica</i> (276.43 ppm), are potassium (499.06ppm),magnesium(358.09 ppm) and zinc (71.835ppm).	Whole plant have nutritional properties. Medicinal values of leaf : Cures cough, consumption, diseases of voice, insanity and jaundice.
<i>Syzygium travancoricum</i>	Poriyal	The leaves contained vitamins such as thiamine (13.6 µg/g), Niacin (26.3 6 µg/g), riboflavin(59.6 6 µg/g),vitamin-E(8.09 µg/g) and Vitamin-C (15.2 µg/g).The leaves contained carbohydrate (28.45 %), Protein(12.06%), amino acids (1.02 %),fatty acids(0.1).	Leaves have high nutrition value. Medicinal values of leaves: Cures diabetes and arthritis.
<i>Tinospora cordifolia</i>	Seendhil	The minerals content in <i>Tinospora cordifolia</i> sodium(0.45%),potassium (0.845%),magnesium(6.41%) and zinc (0.12%) etc.	Shoot have high nutrition values. Medicinal values of of whole plants : Cures Diabetes, joint pain, health tonic, vomiting, fever and rheumatism.
<i>Emblica officinalis</i>	Nelli	Fruits are highly nutritious as it contains carbohydrates, fibre and minerals like calcium, prosperous, iron, vitamin C and vitamin B complex.	Fruit have high nutrition value. Medicinal values of leaf, bark, fruit : Cures Stomach-ache, jaundice, diarrhoea, indigestion dysentery and biliousness.

Conclusion:

Evidences signify that the mechanistic actions of natural compounds involve a wide array of biological processes, including activation of antioxidant defenses, signal transduction pathways, cell survival-associated gene expression, cell proliferation and differentiation and preservation of mitochondrial integrity also beneficial in coronary heart disease, obesity,diabetes, cancer and other chronic diseases.It is very imperative that the nutrients found in many foods, fruits and vegetables are responsible for the well documented health benefits.

References : i) International Journal of Herbal Medicine 2016; 4(6)2; Jan'17;PP 32-37,ii) International Journal of Botany Studies , Volume 3; January 2018; iii) Journal of Medicinal Plans,Volume 8, Supplement No. 5, Winter 2009 iv) International Journal of Research in Pharmacy & Pharmaceutical Sciences,Volume 2; July 2017. PIC collected from internet.