Medicinal uses of Roselle (*Hibiscus sabdariffa*)

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Abstract
Roselle is an annual herbaceous shrub which belongs to the family Malvaceae. More than 300 species of Hibiscus are grown over the world. Tropical Africa is considered as the centre of this origin. It is being cultivated in warm countries particularly in Philippines, Malaysia, Indonesia, India, Cuba, Central America, California, Florida, Egypt, Sudan, Nigeria, West Indies and Sri Lanka. In India it is cultivated in Punjab, Bihar, Uttar Pradesh, West Bengal, Assam, Orissa, Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu. Most of the Hibiscus species are used as ornamental plants. Among them *Hibiscus sabdariffa* is having certain medicinal properties. It is mainly grown for its fleshy calyx (sepals), which is the commercially valuable part of the plant. The color of the calyx plays an important role in determining the quality of karkade. It is used in form of sauces, jams, juices, jellies, syrups, flavoring and coloring agent for food and drinks.

Keywords: Roselle, medicinal and traditional uses.

1. Introduction
Roselle scientifically known as *Hibiscus sabdariffa* belongs to the family Malvaceae. The fresh calyces contain moisture 88.26%, acid 3.74-4%, pectin 3.19%, crude protein 1.45%, ether extractives 1.97%, carbohydrates 5.86%, crude fibre, ash 0.87%, calcium 0.108%, phosphorus 0.052%, iron 0.021%, manganese, aluminium, sodium and potassium in traces, reducing sugars 0.82%, sucrose 0.29%, mucilage, gossypetin, hibiscitin chloride, ascorbic acid and anthocyanins. The seeds contain moisture 12.9%, nitrogen 3.29%, fatty oil 16.8%, cellulose 16.8%, pentosans 15.5%, starch 11.1%, myricetin, quercetin, protein 3.28% and lipids 21.1%. In addition, eighteen amino acids have also been identified and quantified.

![Fig 1: Roselle crops](image1)

Fig 1: Roselle crops

![Fig 2: Flowers of Roselle](image2)

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![Fig 3: Roselle capsule](image3)

Fig 3: Roselle capsule
Botanical Description
It is an erect, mostly branched annual shrub. Stems are reddish in color and grows up to 3.5 m tall. Leaves are dark green to red in colour, alternate, glabrous, long-petiolate, palmately divided into 3–7 lobes, with serrated margins. Flowers (Fig. 2) are red to yellow with a dark center containing short-peduncles. The flowers have both male and female organs. Seedpods are enclosed in their red, fleshy calyces which are commonly used for making food and tea. Apart from its wide range of uses, roselle is becoming increasingly important because of the growth in the export as a source of natural dye obtained from the dried calyces. Acids, pectin, mucilage, crude protein, carbohydrates, ascorbic acid, anthocyanins, minerals etc., are extracted from the calyces. Roselle tolerates a warm, humid tropical and subtropical climate and is susceptible to frost.

Maintains Healthy Teeth and Gums
Calcium present in Roselle protects teeth by keeping the jaw bone strong and sturdy throughout your life, which in turn ensures tight fitting teeth where bacteria cannot thrive. Its intake should be high, especially at young ages, so that children naturally grow up with strong teeth.

Healthy Pregnancy
Pregnant women should consume more iron rich foods than anyone else. So including iron rich food like roselle is quite beneficial for pregnant women as they require around 27 mg daily and this is often covered in a pre-natal multi-vitamin. Also, pregnant women should consider consuming more healthy fat and folate rich foods during pregnancy.

Treatment to the Common Cold
Roselle consists of Vitamin C which helps to enhance the immune system of our body, which protects us from cold and cough. Apart from this it also facilitates the absorption of iron and thus strengthens the body’s resistance to infection. It also fight against viruses.

Prevents constipation
Magnesium present in Roselle provides quick relief from constipation. The laxative property of this vitamin help to relaxes the intestinal muscles, thus helping to establish a smoother rhythm while passing bowels. It also has another property of attracting water, which in turn softens the stool and helps it to pass easily. Roselle consists of 29 mg of magnesium which is actually 6.90% of the daily recommended value.

Weakness
Roselle consists of phosphorous that has the ability to remove minor health problems like muscle weakness, numbness, fatigue and other similar ailments. Normal levels of phosphorous in the body are a great way to remain fit and active. A normal amount can be around 1200 mg for adults, according to experts and from suggestions of various health practitioners. Sexual weakness can also be cured with healthy supplementation of phosphorous into the body, so issues like loss of libido, frigidity, impotence and sperm motility can be boosted by having an adequate supply of phosphorus in your system.

References