



Hanuman Phal- A Miracle Fruit for Curing Cancer and Heart Diseases

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Introduction

Annona muricata, commonly called as “Hanuman phal or prickly custard apple or soursop” due to the sweet and sour flavor of the large fruit, is a low land tropical fruit-bearing tree belongs to the family *Annonaceae*. The hanuman phal is native to tropical Central and South America and the Caribbean, but is now widely cultivated in tropical areas worldwide. Hanuman phal or Soursop trees are evergreen, bushy and short, only about 7.5-9 m tall. Young branchlets are rusty-hairy. The fruit is more or less oval or heart-shaped, though it tends to be lopsided or curved. The fruit is fairly variable in size, ranging from 10-30 cm long and up to 15 cm in width. They can weigh as much as 6.8 kg. The fruit is covered with a leathery-appearing skin which is covered with many flexible spikes. The inside of the skin is cream-coloured and granular white flesh which is fibrous, juicy and separates easily from the rind. The pulp smells a little like a pineapple, but the sweet, acrid flavour is unique and somewhat indescribable.

Nutritional Values: Acetogenins and phytochemicals isolated from the leaves, bark and twigs of hanuman phal or soursop are thought to be the active ingredients. A decoction of the young shoots or leaves remedy for gall bladder trouble, as well as coughs, catarrh, diarrhea, dysentery and indigestion; is said to "cool the blood," and to be able to stop vomiting and aid delivery in childbirth. The roots of the tree are employed as a vermifuge and the root bark as an antidote

for poisoning. Nutritionally, the fruit is high in carbohydrates, particularly fructose. The fruit also contains significant amounts of vitamin C, vitamin B1 and vitamin B2. The fruit, seeds and leaves have a number of herbal medicinal uses among indigenous peoples of regions where the plant is common.

Food Value per 100 g of Edible Portion

a.	Calories	53.1-61.3
b.	Moisture	82.8%
c.	Sugar	12.0%
d.	Protein	1.00g
e.	Fat	0.97g
f.	Carbohydrates	14.63g
g.	Fibre	0.79g
h.	Ash	60g
i.	Calcium	10.3 mg
j.	Phosphorus	27.7 mg
k.	Iron	0.64 mg
l.	Thiamine	0.11 mg
m.	Riboflavin	0.05 mg
n.	Niacin	1.28mg
o.	Ascorbic Acid	29.6 mg
p.	Tryptophan	11.0 mg
q.	Methionine	7.0 mg
r.	Lysine	60mg

Medicinal value: The juice of the ripe fruit is said to be diuretic and a remedy for haematuria and urethritis. If taken when fasting, it is believed to relieve liver ailments



and leprosy. Fruit, seeds, bark, leaves and roots have all been used to treat intestinal parasites, coughs (including asthma and bronchitis), liver ailments, inflammation, diabetes and hypertension. Among many uses; seeds and leaf extracts have been used to kill head lice and bedbugs. The seed oil also kills head lice. Extracts of fruit juice have documented antiviral, antiparasitic, antirheumatic, anti-inflammatory and antihyperglycemic properties. Acetogenins are the alkaloid compounds thought to be responsible for these effects, although other components, including quinolones, annopentocins and annomuricin may also be involved. Local populations of Amazon jungle have used the bark, leaves, roots, fruit, seeds and flowers for thousands of years to treat everything from arthritis to liver problems.

The name itself indicated that if hanuman phal is consumed, then person will acquire the strength to fight cancer and heart disease like fighting of god hanuman against the monsters. Secondly, the shape, texture and structure of the fruit also indicated that fruit has medicinal properties to fight against cancer diseases. There is a myth that shape of the hanuman phal fruit looks like heart indicating that it cures heart diseases. Similarly, prickly appearance of the fruit resembles the virus particles assuming that consumption of fruit cures many cancer diseases and helps in developing immunity to various diseases. The fruit and seeds are used for intestinal health and the elimination of parasites, hypertension and rheumatism. If women eat hanuman phal, it increases lactation. Teas made from root and bark help as a sedative or nerve tonic and can maintain healthy glucose levels. Almost certainly, like Noni and Aloe Vera, high polysaccharide content is responsible for many of its effects. Phytochemical alkaloids are active too. Several of the active ingredients (Acetogenins and phytochemicals) kill malignant cells of 12 different types of cancer

including breast, ovarian, colon, prostate, liver, lung, pancreatic and lymphoma.

Cultivation: Hanuman phal or soursop tree thrives well from sea level up to 300 to 400 meters. The trees are well adopted to regions of high humidity and warm winters. The temperature below 5°C is not congenial for the crop. The crop can be grown in a wide range of soils. However, it prefers loose, deep loamy, rich in organic matter and well drained soils with ideal pH ranging from 6.0 to 6.5. The most common propagation method is through seeds. However, air layering, budding and grafting are also possible methods of propagation. When it come to planting spacing, the seedlings may be planted in a distance of 5x5 or 7x7 meters. The common insect pests occurring on Hanuman phal are root grubs, fruit flies, mealy bugs and scale insects. To prevent any damage from the fruit flies, the fruits can be bagged with paper. For the management of sucking pests like mealy bugs and scale insects, neem-based insecticides, especially Azadirachtin 10,000 ppm @ 1.0 ml per litre can manage the pests.





Precaution: Precaution should be taken while using seeds for human consumption. The presence of the alkaloids such as muricine, muricinine and hydrocyanic acid in seeds is poisonous and irritant, causing severe eye inflammation and should be avoided. Research carried out in the Caribbean has established a connection between consumption of soursop seeds and a typical form of Parkinson's disease due to the very high concentration of Annonacin.

Hanuman phal tree, *Annona muricata*- a divine tree for cancer diseases
Hanuman phal, *Annona muricata*- a rare fruit for curing heart diseases

Conclusion

It can be concluded that Hanuman phal (Soursop) is native to South America and West Indies, boasts of multiple miraculous natural cancer cell killer 10,000 times stronger than chemotherapy. Hanuman phal is also hailed as the emerging fruit of the future. The soursop is propagated through seeds however, fibreless

varieties can be grafted. But now it is just another backyard tree with miraculous medicinal properties. The book, "Medicinal plants in Andhra Pradesh" explains the leaves and flowers of soursop are sudorific or sweat inducing. The soursop leaves and fruit also have earned a reputation as an anti-cancer agent. The flowers and their buds remedy catarrh and cough; the leaves, when infused treat fever dysentery, stomach problems and act as an antihelmintic. A root decoction is administered as an antispasmodic, parasitocidal and piscicidal.

A word of caution : Most of the studies have been conducted in vitro, not in mature systems, therefore an extensive clinical trials are required to study the association of soursop in cancer therapies includes slowing down the spread of cancer or aiding conventional chemotherapy to work better. The ideal way is to include soursop or graviola as a part of a healthy diet rather than a treatment option.

References

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