

# The East London Garden Society

## Plant Facts

### Graviola



Graviola, also known as Soursop, is widely used by many indigenous cultures for a variety of physical ailments. Many parts of the Graviola tree are used including the leaves, fruit, bark and seeds, each providing its own set of healing properties.

Ongoing studies into the health benefits of Graviola may reveal this natural elixir as a possible cancer treatment.

#### **Habitat**

The Graviola tree, indigenous to the rainforest regions, is a broadleaf, evergreen tree that produces flowers and fruit. The trees grow in areas with high humidity and warm temperate winters, including Cuba, Mexico, South America, Central America and the Caribbean. The Graviola belongs to the muricata species of trees which is classified in the Annona subdivision of the Annonaceae tree family. It goes by the scientific or Latin name, *Annona Muricata*. Common names associated with Graviola include Soursop, Guanaba, Corossol, Brazilian paw paw and Guanavana.

The Soursop designation is actually the name of the fruit produced by the Graviola tree. The fruit appears in large, heart-shaped forms with a yellow-green, spiky skin and white fleshy interior. Much like the name implies the fruit is fairly acidic with a taste that resembles a mix of strawberry and pineapple. Not unlike other types of fruit, Soursop contains essential vitamins and minerals which make for a healthy addition to anyone's diet.

## Health Benefits

Soursop fruit contains a high level of carbohydrates and fructose, which is a natural sugar. Significant levels of vitamins B1, B2 and C are also found in Soursop. In areas native to the Graviola, the fruit, leaves and seeds serve a variety of medicinal purposes for the people in these regions.

Pulverized Graviola seeds are used as skin astringents, to kill off bedbugs and head lice and to reduce muscle spasms. Concoctions made from Graviola leaves are used for a range of treatment remedies, some of which include alleviating arthritis pain, reducing joint inflammation, reducing inflammation in nasal passages and the respiratory tract as a whole, as a tranquilizer or sedative and to treat skin conditions like eczema.

The juice from the Graviola fruit or Soursop is often used as a diuretic. People who reside within the South America, Central America and Mexico regions also use the juice for other conditions such as scurvy and dysentery. The bark leaves and root portions of the tree can be used as a sedative or tranquilizer and are also used to treat symptoms related to diabetes.

## Cancer Treatment Potential

Laboratory research studies conducted on mice show promise for Graviola leaf, seed and fruit extracts as potential treatments to reduce or eliminate the spread of cancer cells in the body. The active ingredients contained inside these portions of the plant are known as Annonaceous acetogenins and only exist within the Annonaceae plant family. Ongoing studies conducted by Purdue University and the National Institute of Health have examined the anti-tumour properties of Annonaceous acetogenins and uncovered some conclusive findings on Graviola's cancer treatment potential.

Acetogenins are active compounds capable of preventing abnormal or cancer-type cells from producing the energy they need to grow and reproduce. They do this by interfering with the enzyme processes involved in producing ATP, the energy molecules that fuel cell activity. Without these molecules, cells are unable to carry out the basic functions that keep them alive and allow them to reproduce. These compounds also inhibit blood flow to abnormal cell bodies which work to cut off their nutrient supplies. Studies conducted by the National Cancer Institute also show these effects of Graviola extracts on several forms of cancer, some of which include breast cancer, pancreatic cancer, lung cancer, liver cancer and prostate cancer.