

A REVIEW: MULTIPLE USES OF PSIDIUM GUAVA

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ABSTRACT

Psidium guajava L. (Family- Myrtaceae) possess great medicinal importance. It is very important to standardize the plant part pharmacognostically for its utilization in different formulation. Guava (Psidium guajava Linn.) commonly known for its food and nutritional values throughout the world. The medicinal properties of guava fruit, leaf and other parts of the plant are also well known in traditional system of medicine, It is very effective in various conditions like-1)Skin infection 2)Respiratory infection 3)Malaria 4)Oral or Dental infection 5)pain 6) Immunostimulant 7)Woman problems 8) Kidney problem 9)Malnutrition 10)Hypertension and CVS 11)Liver problem 12)diabetes 13)Fever 14) Cancer.

KEYWORDS: Psidium guajava, myrtaceae, multiple activity.**INTRODUCTION**

Many plants have been used for the aim of decreasing risk factors related to the occurrence of chronic disorders and for several other reasons. It is popularly well known as guava (family Myrtaceae) and has been used routinely as a medicinal plant over the world for a number of illness. There are two most common types of guava: the red (*P. guajava* var. *pomifera*) and the white (*P. guajava* var. *pyrifer*). All Guavas (singular guava) are normal tropical fruits planted and liked in many tropical and subtropical regions. *Psidium guajava* (common guava, lemon guava) is a small tree in the Myrtle family (Myrtaceae). Other normal uses comprise broth of leaves to treat mental illness; thick broth of root as paste, applied on the painful region due to arthritis. The plant extract has ability to reduce headache, stop vomiting. It can be used as heart tonic and cures constipation, physical and mental deformities. The tincture of guava along with honey is curing dry cough, common cough due to cold. It cures indigestion, acidity, swelling of the stomach caused by indigestion. It is beneficial in diarrhea and dysentery in children and burning sensation. The seeds can be used with rose water and sugar candy in enlarged liver. It is very important to standardize the plant part pharmacognostically for its utilization in different formulation. The present study dealt with the pharmacognostically characterization along with preliminary photochemical screening for understanding the active components in the plant which may be helpful to develop the individual monograph. The most frequently eaten species, and the one often simply referred to as "the guava", is the apple guava (*Psidium guajava*). Guavas are typical Myrtoideae, with tough dark leaves that are opposite, simple, elliptic to ovate and 5-15

centimeters (2.0-5.9 in) long. The flowers are white, with five petals and numerous stamens. The fruits are many-seeded berries.

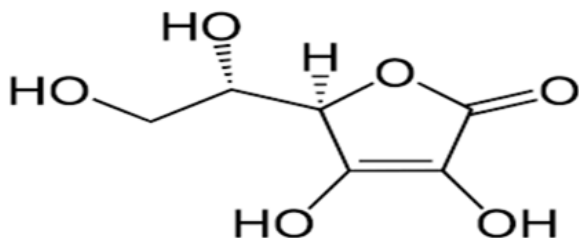
USING A GUAVA IN DIFFERENT DISEASE

1. Respiratory infection
2. Oral and dental infection
3. pain
4. skin infection
5. Immunostimulant
6. Womens problem
7. Kidney problem
8. Malnutrition
9. Hypertension and cvs
10. Liver problem
11. Diabetes
12. Fever
13. Cancer
14. Skin wrinkle

Chemical constituent of guava: β -sitosterol (2), uvaol (3), oleanolic acid (4), and ursolic acid (5) have been isolated from the leaves of *Psidium guajava*. limonene (42.1%) and β - caryophyllene (21.3%). hexanal (65.9%), γ butyrolactone (7.6%), (E)-2-hexenal (7.4%), (E,E)- 2,4-hexadienal (2.2%), (Z)-3-hexenal (2.0%), (Z)-2- hexenal (1.0%), (Z)-3-hexenyl acetate (1.3%) and phenol (1.6%), while β -caryophyllene (24.1%), nerolidol (17.3%), 3-phenylpropyl acetate (5.3%) and caryophyllene oxide (5.1%) were the major volatile constituents present in the hydrodistilled oil. Many compounds were identified for the first time in the guava fruit such as γ -butyrolactone (7.6%) in the headspace SPME and nerolidol (17.6%) in the oil. In addition some compounds such as (Z)-3-

hexenal, (E,E)-2,4-hexadienal, γ -butyrolactone, borneol, phenol, cuminyl alcohol could be identified only by the headspace method

Respiratory infection: In respiratory infection it is found that guava and guava leaf extract act as anti-cough and antimicrobial agents. Guava leaf extract is most helpful in providing relief from cold, fever and juice of raw guava fruit helping in by reducing mucus, disinfecting the respiratory tract, throat, lungs, and inhibit microbial activity with its astringent properties. Guava is only one of the richest sources of vitamin C and iron both are preventing from viral infection and cold.

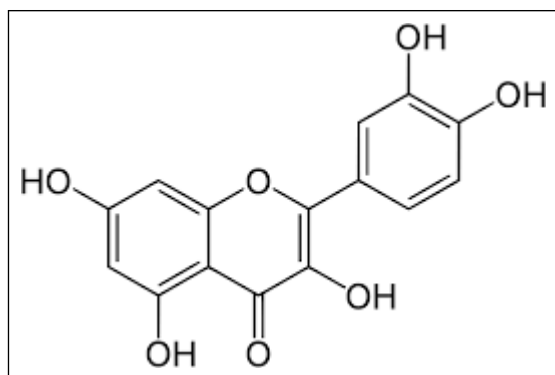


Oral and Dental infection

In oral and dental infection is found that guava and guava leaf extract use as anti-inflammatory, analgesic and antimicrobial agents. Guava leaves used to treat a painful tooth in boiling water and allow the solution to cool and rinse your mouth in it, or other way to chewing leaves of guava until the juice starts working on the affected areas of the oral and dental infection.

Pain

In pain is found that guava and guava leaf extract act as pain-relief agent. Guava leaf contain quercetin compound to treat pain of joint (arthritis). So daily intake of guava leaf tea is very helpful in joints pain. Guava is also help to reduce the pain cause by cut on skin by applying guava leaf extract directly on skin.

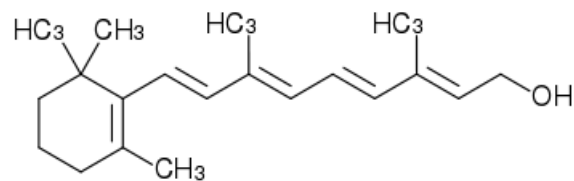


Quercetin

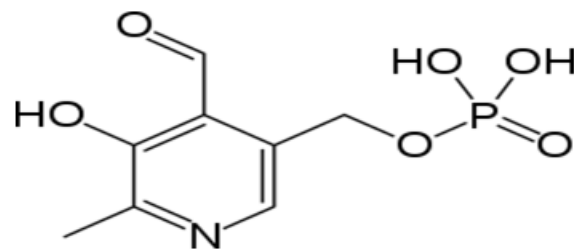
Skin infection

The skin infection is found that guava and guava leaf extract use as antioxidant, antimicrobial, and anti-inflammatory agents, anti oxidants agent. Guava leaf extract may even help treat acne, wrinkles and effective for killing acne-causing bacteria due to its antimicrobial,

anti-inflammatory properties. The wide range of vitamin A, B & C can help slow down the aging process



vit-A



VIT-B6

Immunostimulant

In immunostimulant is found that guava and guava leaf extract act as Immunostimulatory agent. The presence of active phenolic and antioxidant compounds in the leaves in both aqueous and ethanol extracts confers its immunostimulatory agent on guava leaves. Guava leaf extract and antioxidant compounds responsible for immunostimulatory activates.

Women problem

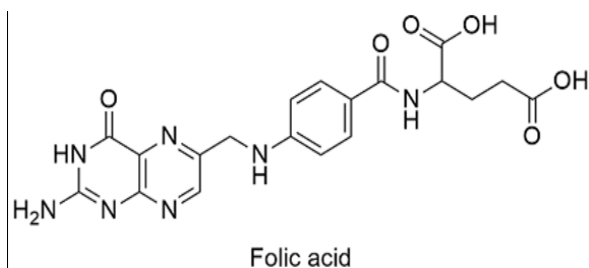
In women problem is found that guava and guava leaf extract act as anti-painkiller to reduce the pain of menstruation. Many women experience dysmenorrheal-painful symptoms of menstruation, such as stomach cramps. Guava leaf extract taking 6mg daily is resulted in reducing the pain intensity if menstruation cramps and more effective than some painkiller and also relieve from uterine cramps.

Kidney problem

In kidney problem is found that guava and guava extract use to treat kidney damages. Guava content low potassium, minerals, vitamin and these are consume by kidney disease patients. Guava fruit maintain the blood pressure and reduce the risks of kidney damages.

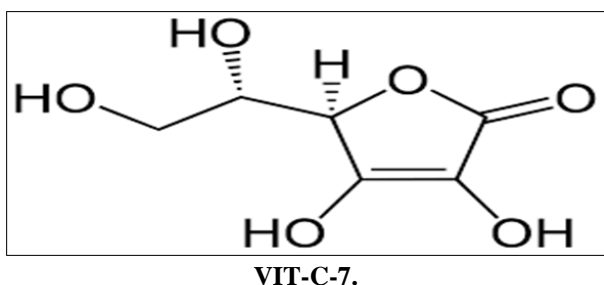
Malnutrition

In malnutrition is found that guava and guava leaf extract as a nutritional supplementary agent. Guava consist A & C, folic acid, dietary fiber, as well as dietary minerals such as iron, manganese, potassium, and copper. Guava is a single fruit contain about four times the amount of vitamin C as an orange and guava fruit is also known as "poor man's apple of tropics." The guava used to increasing levels of hemoglobin in children and anemia in antenatal women showed that is improved maternal hemoglobin.



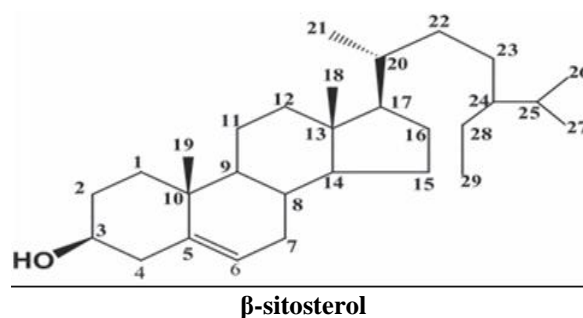
Hypertension and CVS

Guava leaves contain high level of antioxidants and vitamins it help to protect heart damage by free radicals. Its leaf extract lowers blood pressure, decreases bad LDL cholesterol which is linked to higher risks of heart diseases and stroke. It rises good HDL cholesterol. Higher level of potassium and soluble fibers in Guava improves heart health. By eating ripe guava before meals decrease in blood pressure 9.9%. Guava fruit or leaf extract may have a positive effect on heart health by lowering blood pressure, decreasing bad cholesterol, and increasing good cholesterol.



Liver problem: In liver problem is found that is guava and guava leaf extract act as antioxidant and anti-inflammatory agent. In liver problem cholestasis liver injury is a main leading cause of chronic liver diseases which is involved with oxidative stress change and inflammation. Guava mainly rich in antioxidant and anti-inflammatory compound which is play a vital role in preventing against the cholestatic liver damages.

Diabetes: In diabetes is found that guava and guava leaf extract act as anti-diabetic agent. The high fiber content in guava can help to manage diabetes by adsorption of sugar level in the blood. Guava leaf extract prevent of type 2 diabetes. Guava leaf contains β -sitosterol it gives an antidiabetic action. Guava leaf extract prevent the fluctuation in insulin, reduce glycemic index and glucose levels. by drinking guava leaf tea after meal reduces blood sugar level 10%

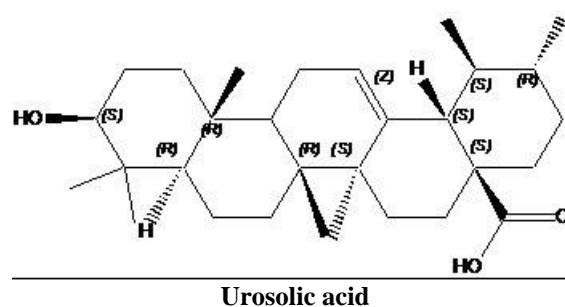


Fever

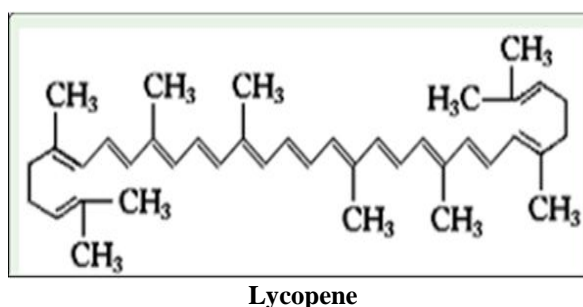
In fever (dengue fever) is found that guava and guava leaf extract use to treating the dengue fever by increasing the consumption of water and healthy eating. There is a guava fruit commonly used as dengue fever treatment, guava (*Psidium guajava*) about taking 100 gm of guava contains 337 mg of vitamin C.

Cancer

In cancer is found that guava and guava leaf extract act as anticancer agent. Guava extract can prevent and even stop the growth of cancer cells, this likely due to the high levels of powerful antioxidant that prevent free radicals form damaging cells, one of the main causes of cancer. Guava leaf oil is four time effective at stopping cancer cells growth than certain cancer drugs.



Skin wrinkle: guava contains Antioxidants which protects skin from infection and damage, which slow down its aging process, helping prevents wrinkles. Guava extract maintains healthy skin and also helps to treat acne by applying directly to skin. It killing acne causing bacteria with antimicrobial and anti-inflammatory activity.



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