



## REVIEW ARTICLE

### GARCINIA GUMMIGUTTA – A TRADITIONAL MEDICINAL HERB

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#### ABSTRACT

The practice and significance of medicinal plants and traditional health systems in answering the health care problems of the world is ahead cumulative attention. As of this revival of interest, the investigation on plants of medicinal importance and applications is growing phenomenally at the international level, often to the detriment of natural habitats and mother populations in the countries of origin. Garciniagummi-gutta is medicinal plant with medicinal applications. In this review article described the features of Garciniagummi-gutta.

## INTRODUCTION

Garciniagummi-gutta belongs to the family Guttiferae (Clusiaceae) and it is commonly known as "Malabar Tamarind". Garciniagummi-gutta is ageless, seed-grown plants start comporment after 10-12 years whereas grafts from the third year onwards and will achieve the stage of full manner on the oldness of 12- 15 years. It distributed in worldwide generally flowering happening in the period of January – March and also off season bringers are also reported. The fruits harvested after maturation, which indicates orange yellow color. The peel is unglued for treating straightaway after harvest. The plant flowers in the dry season due to the pollination by wind, bees and small weevils.

### Distribution

*Garciniagummi-gutta* is widely distributed worldwide especially Indonesia is the native of *Garcinia* and Sri Lanka. In India, presence of *Garciniagummi-gutta* occurring Western Ghats throughout in South and central sahyadrispecially in the region of Karnataka and Kerala. The tree is very much adapted to both hilltops and plain lands, but its performance is best in riverbanks and valleys.

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## Description

*Garciniagummi-gutta* is an ageless, small or medium-sized dioecious, understorey tree, 5 –20 m tall, about 70 cm dbh, with a rounded crown and horizontal or drooping branches. The bark is dark and smooth. Leaves opposite, petiolate, dark green, shining, 13-18 by 4-8 cm, elliptic to obovate, glabrous; petiole 1.2-2.2 cm. Flowers in clusters of 4-20, are usually red, but some trees have yellow ones. Petals normally 4, each about 12 mm wide 11 mm long; anthers attached to a pistillode with a non-functional stigma. Female flowers occur singly or in clusters of up to 4. The stigmatic surface is normally enlarged, and there is no style. Pistillate flowers have rudimentary and non- functional staminodes. Neither male nor female flowers produce nectar. Fruit a green, ovoid berry, 5 cm in diameter, yellow or red when ripe, with 6-8 grooves. Seed 6-8, smooth, large, about 5 cm long and 2 cm wide surrounded by a succulent aril, (Maheshwari, 1964)

## Phytochemical Compounds

Phytochemical constituents include bioflavonoid, x anthone and benzophenones, alkaloidslactones, triterpenes, organicacids, isoprenylated xanthones, carbohydrates, coumarins, proteins, phytosterol sglycosides, phenols, steroids and terpenoids, saponinand phenolic acids (Madappa and Bopaiah, 2012). The main component of the fruits is hydroxyl

citric acid and fruit rind and seed of *Garciniagummigutta* consist of chemical constituents such as Copper, Iron, Chromium and Nickel. The fruits of the plant are commercially important for its valuable chemical components like tartaric acid, camogin, euxanthone, gucinol, reducing sugars and fats, (Carlos *et al.*, 2008; Naveen and Krishnakumar, 2012; Lim, 2012). The dried rind is used for polishing gold and silver and as a substitute for acetic or formic acid in coagulating rubber latex.

### Medicinal Applications

*Garciniagummigutta* possesses many medicinal applications such as antibacterial, antifungal, antihelminthic, tumour, antiviral, ovicidal, larvicidal activity and also a remedy for typhoid (Tharachand *et al.*, 2013). It is used for the treatment of skin infections, wounds, diarrhea and antidiabetic and veterinary medicine as a rinse for diseases of the mouth in cattle. It has also been widely promoted as potential weight-loss aids and potential cholesterol lowering agents (Oluyemi *et al.*, 2007). The fruit has been used historically to treat respiratory infections such as sore throat and cough. (Dmitriy Obolskiy *et al.*, 2009) Fruit extracts are used for various treatments such as astringent, demulcent, rheumatism, bowel complaints and purgative. *Garcinia* facilitates digestion, purifies the blood and fights cholesterol and genus *Garcinia* have been displayed both anti-HIV and cytotoxicity activity. (Mishra *et al.*, 2006; Tao *et al.*, 2009)

### Side effects

Commonly *Garciniagummigutta* consumed directly should not hold any side effects. Though, no product can genuinely claim “no side effects” as each person is different. The side effects which have been informed, which are associated with taking extra of the product than endorsed are: nausea, digestive tract discomfort, diarrhea and headache.

### Conclusion

*Garciniagummigutta* is an evergreen plant commonly known as “Malabar Tamarind” has been used for centuries in South-east Asia to make meals more satisfying. Studies are focusing on the most effective form of Hydroxycitric acid (HCA) to take for maximum therapeutic benefit and it contributes to endurance exercise.

There are no identified side effects for consuming this herb. Still, it is not suggested for diabetics or people with dementia syndrome, including Alzheimer's and in pregnant and lactating women. The ability of the substance HCA present in the *Garciniagummigutta* possessing this amazing natural medicine.

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