

Harvesting and Post harvest Handling

Fruits usually ripen over a period of 6-12 weeks. Top-quality mangosteen fruit is obtained by picking all fruits which have turned light red in color every two to three days.

Harvesters climb the tree to pick the fruit. They also use bamboo poles with a V-shape cut at the top to get the fruit. Harvested light red fruits ripen in five days, turning dark purple in color.

Despite its thick wall which hardens at the ripening stage, the fruit remains prone to damages. For instance, a fall of 20 cm can damage a freshly picked fruit. Thus, the fruits must be handled with care.

The fruit is often graded by size. Gamboge spots are also removed. Shelf life of ripe fruits is about one week.

The fruit is sold by weight, by bundle, or by piece

MANGOSTEEN

(Garcinia mangostana)



Reference: University of the Philippines Los Baños
(UPLB)



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MANGOSTEEN

(*Garcinia mangostana*)

Cultural Management

Propagation. Mangosteen is mostly propagated by seed. Attempts to use other methods of propagation like cutting, grafting, or budding failed. Grafting is not difficult but results in slower growth. The fruit also tends to be small. However, inarching proved to be a better alternative.

Sow seeds in nursery beds. Cover them a colored plastic sheet, or place them under shade. Apply animal manure or foliar fertilizer to improve growth.

Planting. Seedlings 25-30 cm tall or about two years old may be transplanted in the field. Prepare the field thoroughly. Set the stakes 8-10 m apart, and dig holes at the position occupied by stakes. Prune the leaves.

Then, carefully remove the seedlings from their containers to avoid distributing the root system before placing them in the holes. Fill the holes with top soil or compost. Out planting must be done at the onset of the rainy season.

Shade must be maintained for two to four years and then gradually reduced. Weed regularly, or put heavy mulch around the plants.

Irrigation. Mangosteen requires adequate and an uninterrupted water supply. If rainfall is not evenly distributed throughout the year, the use of an irrigation system can supply the needed amount.

The seedlings does not have an efficient root system. It is therefore m very important to keep the soil moisture at a high level, especially at the initial grown stage.

Fertilization. Like any fruit-bearing tree, the mangosteen also needs nutrients. These may be provided by organic (compost) as well as inorganic (urea, complete fertilizer) materials.

Experts advise the application of 50-100 g ammonium sulfate a month after planting, at the end of the rainy season, and after six months. When plants start bearing fruits, apply 500 g complete fertilizer at the start of the rainy season and every six months thereafter. Yearly application of at least 2 kg complete fertilizer per full grown tree is recommended.

Pests and disease. Caterpillars feed on the young leaves. Sucking insects can cause fruit drop. Among the fungal diseases identified, the red (*Phellinus noxuis*) and brown (*Ganoderma pseudoferreum*) root rots are sometimes serious. No control measures are however, known.

Gamboge, the yellow exudates from the bark, frequently spoils fruits. The white pulp turns translucent and becomes bitter as gamboge penetrates this segment. Gamboge is often found as yellow spots in the fruit skin.

Damage to the latex vessels causes gamboges. This may be due to over watching after drought, punctures of sucking insects (capsids), strong wind, rough harvesting and handling.

Regarded as the queen of fruits, mangosteen is one of the most delicious in the world. It is popular export product in countries like Thailand.

Description

The mangosteen is an attractive and sturdy tree, about 6-25 m high. Its leaves are thick and leathery with pointed tips. Leaf color combines olive green above and yellow green below with pale green midrib. One or two flowers are produced at the tips of young branches.

The fruit is readily acceptable by most people because of its delicate flavor and melting, juicy, and faintly aromatic pulp. It is round and slightly flattened weighing 75-100 g.

It turns violet or deep brownish purple on the outside and purplish violet inside when ripe. The edible pulp consists of five to seven white segments, each enclosing a developed or an undeveloped seed.

Users

The pulp is mostly eaten fresh. It can be made into a delicious preserve when boiled in sugar or a topping for ice cream and sherbet.

The leaves and bark are used as traditional herbal medicine to cure thrush, a fungal disease affecting the tongue and throat. It is also known to reduce fever.

The rind is effective against intestinal catarrh and dysentery. Likewise, it also contains tannin and is used for dyeing. The seed also contains valuable oil.

The dark red wood is coarse, heavy, and very strong. It makes good rice pounders. It may be used in carpentry.

Soil and Climatic Requirements

Deep, moist, well-drained, porous, and clay loam soil rich in organic matter is best for mangosteen.

Mangosteen requires a warm and humid climate. Rainfall should be well distributed throughout the year. Mangosteen can thrive at an elevation of up to some 1,500 m.