PLANT FACT SHEET

Pometia pinnata J. R. & G. Forster

GENUS *Pometia* **FAMILY** Sapindaceae

COMMON NAMES Ton, Fijian longan, Pacific lychee

EDIBLE PARTS AND USES

Edible parts: Fruit, Seeds, Vegetable

The fleshy layer (aril) around the seed is eaten raw.
CAUTION The edible form of ton must be chosen. The actual seeds have been reported to be poisonous.
The seed are roasted and eaten in parts of the Solomon Islands. They are like sour cheese in taste and smell. The seeds can be dried and stored.

DESCRIPTION

An evergreen tree. It can grow into quite a large tree up to 40-50 metres high. At the base of the tree there are often large buttresses and the bark is a bright orange brown colour and rough and scaly. The hard timber is widely used. The young leaves and twigs of the tree are bright red. The lowest pair of leaflets are small and clasp the stem like stipules. There are often 5-11 pairs of leaflets along a stalk and the leaflets at the centre are often the largest. The leaflets droop from long stalks. The flowers are produced in clusters on stalks that are up to 50 cm long and grow near the ends of the branches. The flowers are small and yellowish green and do not have any scent. The skin of the ripe fruit peels off like a mandarin. The edible part is a clear layer around the seed, like in a rambutan. An inedible kind also occurs. The fruit is about 6 cm across and the seed about 3 cm across.

HABITAT

A tropical plant. It suits the hot humid tropical lowlands. It is native from Malaysia to Polynesia. It occurs in lowland and lower montane forest. They occur from sea level to 800 m altitude. They grow along riverbanks and near swamps. (The inedible kind occurs on the ridges and is the more useful timber tree.) In Samoa it grows from sea level to 500 m altitude. It usually grows in areas with an annual rainfall of 1500-5000 mm. It can grow in soils with a pH from 5 to 8. In XTBG Yunnan.

PRODUCTION

Cultivation

Plants can be grown from seed. Dispersal of self sown trees is probably by bats or fresh water. Trees are produced from seeds. Seedlings are transplanted from a nursery site. The aril around the seed is eaten raw. Roasted seeds are recorded as eaten in other countries.
Ton are planted from seed. Also self sown seedling are transplanted and some trees occur wild in the bush. The seeds are probably spread around by fruit eating bats. It probably takes about 5 years from planting until the trees bear fruit.

Harvesting and Seed Production

Plants grow quickly. Fruiting is distinctly seasonal with a short and clearly defined season, early in the year. There also appears to be a significant fluctuation between years on the amount of fruit set. This does not follow a clearly biennial pattern. In Santa Cruz it has been observed that fruit set does not always follow flowering. The cause is not known. The season is very short and is between November and March.

Planting instructions

TON
Pometia pinnata

Names

The tree that is called Ton (or Taun) in Tok Pisin was first described in 1776 by the botanists J.R. & G Forster. They gave it the scientific name Pometia pinnata. The name Pometia comes from a Latin word "pomum" which means fruit or apple. The other part of the name, pinnata, describes the way the leaflets grow opposite each other along a stalk. In many people's minds, these two things are typical of the tree - leaflets drooping from long stalks and a very enjoyable fruit.

Ton trees can vary a lot, and different forms or types of the tree have been described, Some types do not have edible fruit. Two main types are called:-

Pometia pinnata JR & G Forster forma pinnata
and Pometia pinnata JR & G Forster forma tomentosa.

In some books these were described as two different species. They are in the plant family called Sapindaceae.

The tree.

A ton tree can grow into quite a large tree up to 40metres high. At the base of the tree there are often large buttresses and the bark is a bright orange brown colour and rough and scaly. The young leaves and twigs of the tree are bright red.

The lowest pair of leaflets are small and clasp the stem like stipules. There are often 5-11 pairs of leaflets along a stalk and the leaflets at the centre are often the largest.

The flowers are produced in clusters on stalks that are up to 50cm long and grow near the ends of the branches. The flowers are small and yellowish green and do not have any scent.

Several varieties of ton occur, but the main part that varies is the colour of the fruit. Young fruit are green, but as they get ripe the colour can change to green, yellow, red or purple depending on the variety. They all taste much the same.

The fruit

In Papua New Guinea in coastal areas and on the islands this is one of the most popular fruits. The fruit is a bit like a rambutan, or a litchi, two fruits that are better known from Malaysia and China. The edible part is a white shiny layer around the seed. Scientists call this layer the aril. When a ton fruit is ripe, the skin peels off very easily, just like peeling a mandarin.

Where do the trees grow?

Ton trees only grow in SE Asia. The trees occur in Sri Lanka, Malaysia, Indonesia, Philippines, Papua New Guinea and some Pacific Islands.

The tomentosa type does not have fruit which can be eaten or if it is eaten it is much less attractive. It tends to grow on hill slopes and ridges between an altitude of 900 and 1200 metres. It is normally in well drained positions. The type that has edible fruit is more commonly in the lowland rainforest, on river banks and in poorly

drained places. It is this second type that is an important food plant.

Fruit production

Ton fruit are produced seasonally. The season is near Christmas, (December/January) and it tends to be short and a very distinct season with few trees bearing early or late. Sometimes there is a minor season in mid year about June and July. These fruit are not as sweet. The season does not exactly coincide in different provinces of the country, and it can be a month or two later in New Ireland. As well, trees do not fruit equally well each year. On Manus Island, ton trees only produce a lot of fruit every few years. These good seasons then become times of great excitement and happiness. (Yen, in his study of this tree in the Solomon Islands said that flowers formed later in the year often did not set fruit. It appears that some fruit setting problem occurs, which needs study.)

Growing ton.

Ton are planted from seed. Also self sown seedling are transplanted and some trees occur wild in the bush. The seeds are probably spread around by fruit eating bats.

It probably takes about 5 years from planting until the trees bear fruit.

In the Solomon Islands, and in Malaysia, ton seeds are eaten after they are roasted. Also in the Solomons, ton leaves are chewed with lime. It is not known if either of these practices occur in Papua New Guinea. The actual seeds have been reported as poisonous without treatment.

NOTES

There are 2 Pometia species. TON
Pometia pinnata

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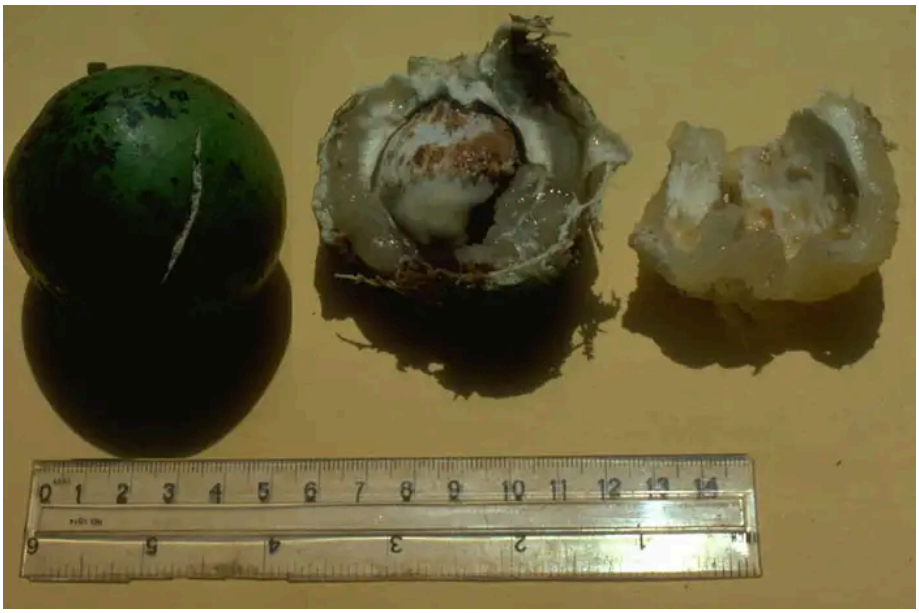
PICTURES



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