PLANT FACT SHEET

Spondias dulcis Parkinson

GENUS *Spondias* **FAMILY** Anacardiaceae

COMMON NAMES Golden apple, Polynesian plum

EDIBLE PARTS AND USES

Edible parts: Fruit, Leaves, Vegetable

Fruit are eaten after peeling. They are eaten raw or pickled. The fruit are also dried and used in curries.
The young leaves are edible raw or cooked. They are used as a souring agent.
The kernel of the seed may be edible.
(Some fruit are poor size and very sour.)
The fruit are also used for sweet drinks and made into jams and chutneys. Green fruit are pickled.

DESCRIPTION

Often a Golden apple tree grows to a large tree which can be up to 30 m high but is more often 15 m high in cultivation. It has a trunk 60 cm across which can have buttresses. The bark on the trunk of the tree is fairly smooth. The twigs break off easily. The wood is soft and not much use. The leaf is made up of 4 to 12 pairs of leaflets which have fine teeth around the edge. The leaves are 20-30 cm long. The leaves are smooth and dark green on top and pale green underneath. The leaves are alternate. The leaves of the tree fall off for a part of the year. The old leaves wither to a bright yellow colour. The flowers are produced near the ends of the branches and mostly the flowers develop before the new young leaves grow. The flowers occur as several flowers on long stalks. The flower panicle is 15 to 30 cm long. The flowers are small and white. They look something like a mango flower. The fruit is yellow, oval and up to 7 cm long and 4 cm across. Sometimes the outside of the fruit has a mottled black colour. There is one large stone inside divided into 5 cells with a seed in each. The stone is branched and has fibres.

HABITAT

It is a tropical plant. They occur in well drained soils or in dry forests. It occurs in the lowland rainforest and in valleys up to about 950 m altitude in the equatorial tropics. It suits humid locations. They suit warm tropical and subtropical climates and are frost tender. Flowering is normally during the dry season. This may be important for fruit set. The trees also grow in Indonesia, the Philippines, Thailand and a number of other Pacific countries. It has also been taken to other tropical countries. This species covers a full range from being a wild under-utilised tree in some areas to a planted, pruned and highly regarded village fruit tree in other areas. It is better suited to deeper alluvial soils and rarely occurs on limestone with a thin clay soil cover. Trees often grow as a pioneer tree on landslides. The wild trees are probably spread around by birds, pigs and people. At ECHO.

PRODUCTION

Cultivation

Trees are mostly grown from seed and often grows wild. Flowers are bisexual and there are no apparent pollination problems. The seeds do not produce true to type so that poor and sour fruit are often produced. Seed normally germinate within one month. It is possible to grow plants from cuttings although it is difficult. Large cuttings should be used. Doing this would enable better types of fruit to be re-grown. It can also be grown using budding. Seedling trees are larger and more vigorous than budded or grafted trees. Tree spacing varies from 7.5 m to 12 m. Young trees benefit by shade during their first year. The top can be cut off trees to give a lower and more spreading tree. Large cuttings can be used with difficulty. Trees can be topped to give a lower tree with spreading branches.

Harvesting and Seed Production

Trees may bear from 4-5 years old from seed. Cuttings take 2-3 years. Fruiting occurs seasonally from Jan. to April in the southern hemisphere. Fruit matures in about 200 days.

Planting instructions

Golden apple

Scientific name: Spondias cytherea

What is a Golden apple like?

Often a Golden apple tree grows to a large tree which can be up to 30m high but is more often 15m high in cultivation. It has a trunk 60cm across which can have buttresses. The bark on the trunk of the tree is fairly smooth. The twigs break off easily. The wood is soft and not much use.

The leaf is made up of 4 to 12 pairs of leaflets which have fine teeth around the edge. The leaves are smooth and dark green on top and pale green underneath. The leaves of the tree fall off for a part of the year. The old leaves wither to a bright yellow colour.

The flowers are produced near the ends of the branches and mostly the flowers develop before the new young leaves grow. The flowers occur as several flowers on long stalks. They are small and white. They look something like a mango flower.

The fruit is yellow, oval and up to 7cm long and 4cm across. Sometimes the outside of the fruit has a mottled black colour. There is one large stone inside divided into 5 cells with a seed in each. The stone is branched and has fibres.

Where do Golden apples grow?

This fruit tree occurs commonly both wild and cultivated in lowland rainforest areas throughout Papua New Guinea. It covers the full range from wild unused fruit trees in the forest to a planted, pruned and highly regarded village fruit tree. The wild trees are probably spread around by birds, pigs and people.

Naturally, trees mostly occur on deep alluvial soils and are rare on thin limestone soils. They are in well drained soils or in dry forests.

Trees grow from sea level up to about 950m altitude.

Trees can start to fruit after about 4 years. Fruiting is seasonal.

The trees also grow in Indonesia, the Philippines, Thailand and a number of other Pacific countries. It has also been taken to other tropical countries.

Names.

Some of the Tok Ples names for his plant are:-

Place Name
Manus drine
Kavieng kulis
Rabaul kru or kuris
Lake Kutubu kinaio
Madang huneg

The older scientific name for this plant was Spondias dulcis

How are Golden apples grown?

Trees are mostly grown from seed. The seeds do not produce true to type so that poor and sour fruit are often produced. It is possible to grow plants from cuttings although it is difficult. Doing this would enable better types of fruit to be regrown. It can also be grown using budding.

Young trees benefit by shade during their first year.

The top can be cut off trees to give a lower and more spreading tree.

How is Golden apple used?

The fruit are eaten raw after the sour skin is peeled off. Sometimes lime is added to the fruit. The fruit is sour. It has the texture of an apple. Sometimes the fruit is eaten with salt or mixed with coconut. Fruit production is seasonal probably early in the year.

The young leaves of the tree are eaten often raw but also cooked.

NOTES

In Cairns Botanical Garden as Eva dulcis.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

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