PLANT FACT SHEET

Cyphomandra betacea (Cavanilles) Sendtner

GENUS *Cyphomandra* **FAMILY** Solanaceae

COMMON NAMES Tree tomato, Tamarillo

EDIBLE PARTS AND USES

Edible parts: Fruit, Seeds, Vegetable

The content of the berries is eaten. It can be eaten raw or cooked. The layer just under the skin can be bitter while the layer around the seeds is sweet. The seeds can be eaten, or strained out. The outside skin is easily removed by immersing fruit in boiling water for one or two minutes.
Sometimes the fruit is boiled to make a drink.
The fruit can be stewed, grilled, baked, pickled, or used in jams, jellies, chutneys, conserves, pickles, pies, preserves and sauces.

DESCRIPTION

This is a small fruit tree or shrub in the tomato and tobacco family. It grows as a shrub with soft wood and it grows up to 4 m high. The stem is 5-10 cm across. It is brittle and shallow rooted. The leaves are large (25 cm x 12 cm) and soft. They are heart shaped at the base. The flowers are 1-2 cm across with a sweet smell. They are in loose clusters near the ends of branches. Flowers are normally self pollinating but need wind. The fruit is about 6-12 cm long, the shape of a hen's egg and red or orange in colour. They hang off the ends of the branches. The skin of the fruit is somewhat tough but the flesh around the seeds is soft and juicy. The flesh varies between yellow and dark purple. The flesh is edible. The seeds are black, thin and nearly flat. They are edible. There are several named cultivated varieties.

HABITAT

Tree tomatoes are subtropical and the normal range is 750 m to 2200 m altitude in the equatorial tropics but can be up to 3000 m in continental tropical regions. They suit the tropical highlands. In Nepal it grows between 1000-1400 m altitude. It is slightly more hardy to cold temperatures than the tomato. They do best where average temperatures are about 15°-21°C. Plants don't fruit at low altitudes in the tropics. Plants do best where temperatures are above 10°C. Trees cannot stand much frost although mature trees will survive light frosts over short periods. They can't stand water-logging or drought. Trees can grow under shade but do better in the sun unless it is too hot and dry. Deep, fertile, permeable soil is best. The trees can be grown in shade as well as in full sunlight. They need garden sites that are clean of disease and fertile. Plants don't fruit at low altitudes in the tropics due to constant high temperatures. They are susceptible to frost damage. The brittle branches make them easily damaged by wind and therefore needing sheltered sites. They need shelter from strong wind. It suits hardiness zones 9-11.

PRODUCTION

Cultivation

They can be grown from seeds or cuttings. Seeds grow better is they are washed and dried then placed in a freezer for 24 hours before planting out. Seeds produce a high branched erect tree. Cuttings produce a lower bushier plant. Cuttings of 60-90 cm long stalks are suitable. Cuttings should be taken from 1 to 2 year old wood which is 1-2 cm thick. Root cuttings can also be used. It has shallow roots therefore needs careful weeding. A spacing of 3 m apart is sufficient.
Because the roots are easily damaged by nematodes, plants grafted or budded onto rootstocks that are resistant to nematode will live longer. The root rot fungus can mean it is difficult to get plants established in old gardens. The root knot nematodes also mean trees can die more quickly than they should, and sometimes this occurs in 3 or 4 years. High humidity can also cause stem rots.
Young plants can be pruned to produce lower branches and fruiting. As fruit is produced on new branches, branches which have borne fruit can be pruned out.
Flowers are self compatible so that pollination can occur within the one plant by wind.

Harvesting and Seed Production

It commences bearing in its second year, when grown from seed. Fruit production is continuous throughout the year. Trees can bear hundreds of fruit year round. The tree is short lived lasting 5 or 6 years. Yields of 20 kg per plant are possible. Fruit are ready to harvest when the red or yellow colour develops. Fruit can be stored in a refrigerator for 10 weeks provided they are not frozen (3°C). To remove the skin, pouring boiling water over the fruit and letting it stand for 4 minutes make this easy.

NOTES

There are about 30 Cyphomandra species. They are high in antioxidant activity. Fruit are reasonably high in folates 16µg/100.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



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