

Tamarillo or tree tomato: A potential fast growing fruit tree for hilly region of South India

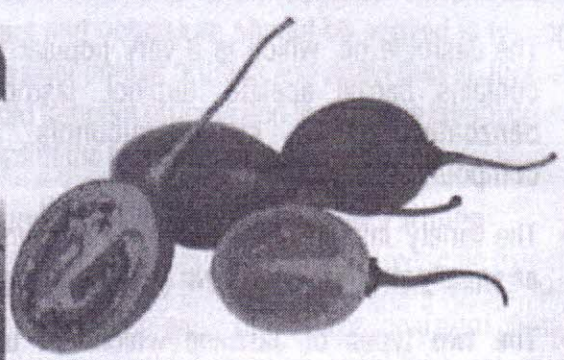
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Seedling stage



Matured tree



Fruits

Fig.1 Growth stages of tamarillo or tree tomato

Tamarillo or Tree tomato (*Cyphomandra betacea*), a fast growing fruit tree, belongs to the Solanaceae family. The plant is native of Andes of Ecuador, Colombia, Peru, Chile and Bolivia and now distributed throughout temperate and subtropical areas. It grows well in the temperature ranges from 14 to 20°C. The shrubby tree can attain a height of 3 to 4 metres and it should be maintained as a smaller tree, as the soft-wooded stem is especially susceptible to wind damage. Limb breakage is often a problem especially when the plant tends to bear heavy clusters of fruits at the tips of the long branches. The plant could be trained by pruning the long shoots and pinching shoot tips to induce a compact growth and the production of fruit clusters near the centre of the tree. The plant is adaptable to a wide range of soil conditions, but thrives best in well-drained soils. The roots are shallow, hence the plant suffers easily under water stress and should be irrigated frequently. The large leaves - up to 30cm in length - are simple, entire and elongated heart-shaped, with a short petiole; the young leaves are covered with soft pubescence (Fig. 1).

The succulent new shoots and the leaves have a somewhat unpleasant odour when crushed. The flowers are borne in pendant racemes at the tips of the branches and are very fragrant and white or light blue to pinkish in colour. There is no apparent pollination problem as the plant is self-

fertile. Pollen transfer is accomplished by bees or shaking of the branches by the wind. The plant is considered as combination of egg plant and tomato. Geometry of plant, physical nature of leaf, odour, fruit size and shape, stem structure has the similarity with egg plant but the taste and pulp of the fruit looks like tomato. Cooking of the raw berry for culinary purpose is like egg plant and the way the ripened fruit is used as dessert and preparation of jam and jelly is like tomato. The fruit was known as "tree tomato" and in the year 1967, New Zealand, which had become a commercial producing country of the fruit, named it as "Tamarillo" to avoid confusion with tomato. Tamarillo is cultivated in New Zealand, Australia, Columbia, Malaysia, Philippines, Puerto Rico, Venezuela, Costa Rica, Guatemala, Jamaica, Haiti, India, Rwanda, New Guinea, South Africa, Nepal, Hong Kong, China, United States and Bhutan. Tamarillo is cultivated commercially in New Zealand, Australia and Columbia. The major importers of the fruits are USA, Australia, Thailand, Japan, Pacific Islands, Fiji and Hong Kong. In India, Tamarillo is grown in hilly areas of North Eastern India, Tamil Nadu, Kerala, West Bengal, Assam and Himachal Pradesh.

The fruit is a traditionally cultivated and consumed by the people of Nagaland and "Naga tree tomato" got registration for Geographical Indication during 2014-15. In Tamil Nadu, the tree is cultivated in Nilgiris and Kodaikanal hills and it is