PLANT FACT SHEET

Camellia sinensis (L.) Kuntze

GENUS *Camellia* **FAMILY** Theaceae

COMMON NAMES Tea

EDIBLE PARTS AND USES

Edible parts: Leaves - tea, Flowers, Seeds - oil

The leaves are used for tea.
The leaves are fermented and eaten in Myanmar. They are prepared as a vegetable by mixing with garlic, salt, oil and other ingredients.
The oil from the seeds is used as a sweetish seasoning and cooking oil.

DESCRIPTION

An evergreen tree. It grows to a height of 10-15 m and spreads 4 m across. Trees are normally pruned into bushes. The stem is slender. The bark is yellowish grey. It has a strong taproot and side roots just under the soil. The leaves are dark green and glossy. They are elongated and leathery. They can be 5-30 cm long. The leaves taper towards the base and the tip. The edges of the leaves have fine teeth along them. The leaf stalks are short. The flowers are white and small. They can occur either singly or in broad flat clusters. The fruit is a woody capsule. It can be 1.5 cm across. There are over 350 named cultivated varieties.

HABITAT

A tropical and subtropical plant. It suits warm temperate climates. It needs light, humus rich soils. Soils should be well drained. A pH less than 6 is best. It requires an open sunny position. It is damaged by drought and by frost. It is common in the wet highlands of many tropical countries. A rainfall over 1,500 mm is suitable. Temperatures in the range 13°-30°C are suitable. In Nepal it grows between 450-1200 m altitude. It suits hardiness zones 10-12. Hobart Botanical Gardens. In Sichuan and Yunnan.

PRODUCTION

Cultivation

Plants are normally grown by cuttings or layering. They can be grown from seed. Because the seed out breed, this produces a mixture of plants. For seed production special trees are kept and not pruned. The capsule matures after 9-12 months. Seed need to be sown fresh. Seeds can be sown in a nursery and transplanted, or sown and staked in the field. When seedlings are about 3-4 years old they are pruned back to about 10 cm from the ground then transplanted. From cuttings short stem cuttings with a single leaf and its bud in the leaf axil are used. These are grown in moist, shaded propagating nurseries. The cuttings are transplanted after about 1 year. Tea is commercially planted at 5,000-7,000 plants per hectare. That is a spacing of 1.2 m by 1.5 m. Trees are

pruned to encourage side branches. The bush height is normally pruned to about 60 cm. The leaves grow in flushes at 70-90 day cycles. Two to four leaves are plucked each 7-14 days from the tree but only every 70-90 days from any one branch shoot. Plants are pruned back each 2-5 years.

Harvesting and Seed Production

Young tips are plucked, then wilted on trays for 18-24 hours, then crushed between rollers and fermented for 18-24 hours before drying at 100°C for half an hour. A shrub can live for 100 years.

NOTES

Green tea is made from freshly cut leaves and black tea is made from leaves which have been fermented. There are about 250-300 Camellia species. Tea contains about 50 mg of caffeine per cup. It has anticancer properties. Green tea probably helps against Cardiovascular Disease. Black tea has 21.1 mg per 100 g dry weight and 18.3 mg fresh weight of alpha-tocopherol (Vitamin E).

PICTURES



Credit: Food Plants International (Bruce French)



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