PLANT FACT SHEET

Gleditsia triacanthos Linn.

GENUS *Gleditsia* **FAMILY** Fabaceae

COMMON NAMES Honey locust, Thorny locust

EDIBLE PARTS AND USES

Edible parts: Pulp, Seeds, Fruit, Seeds - coffee

The young seed can be eaten raw or cooked. They are sweet. They are also used for a fermented drink. They are roasted as a coffee substitute.
The pulp of the pod can be eaten. A sweet drink can be made from the seed pods.
CAUTION: The twigs and the leaves contain the alkaloids gleditschine and stenocarpine. Stenocarpine has been used as a local anaesthetic whilst gleditschine causes stupor and loss of reflex activity. The leaves are under investigation as potential cancer cures.

DESCRIPTION

A deciduous tree. It grows to a height of 30 m and spreads to 5-20 m across. The trunk can be 90 cm across. The stem is erect and straight. It has thorny branches and a broad crown. The leaves are glossy dark green and sword shaped. They have 10 to 12 pairs of leaflets. Some forms have more compound leaves. The leaflets have saw like teeth around the edge. The male and female flowers are on the same tree but separate. The flowers are small and greenish yellow. They occur in clusters. Flowers are pollinated by insects. The fruit are brown, curved and twisted pods. They are 45 cm long and burst open naturally. The seeds are oval and 8 mm long. The pods fall without opening. There are several named varieties.

HABITAT

A warm temperate plant. It will grow on most soils if there is adequate moisture. It does best in a protected sunny position. They cannot tolerate shade. It is damaged by drought but resistant to frost. It prefers long hot summers so seed are not always produced in coastal regions. Trees are frost tender when young but withstand heavy frosts once established. It can grow on alkaline soils. It grows from sea level to about 2,000 m above sea level in Africa. It can grow in arid places. It suits hardiness zones 3-10. Hobart Botanical Gardens.

PRODUCTION

Cultivation

Plants are grown from seed. The seeds have a hard coat. The seeds need treatment to help them start to grow. They should be pre-soaked for 24 hours in warm water before sowing. Filing the seed coat can also assist. The seeds can also be put in acid. Plants can be budded or grafted. If cuttings are taken from shoots of only one sex they will only produce those flowers and not fruit. Plants can be cut back and will re-grow.

Harvesting and Seed Production

A fast growing tree. Seed germinate in 2-4 weeks at 20°C. Trees start to produce seed when 10 years old and can produce for 100 years. Trees can live for 120 years.

NOTES

Seeds contain 10.6 - 24.1% protein, 0.8 - 4.3% fat, 84.7% carbohydrate, 21.1% fibre, 4% ash, 280 mg calcium and 320 mg phosphorus per 100g[218]. There are about 14 Gleditsia species. Also as Caesalpinaceae.

PICTURES



Credit: Food Plants International (Bruce French)



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