PLANT FACT SHEET

Carya illinoinensis (Wang.) K. Koch

GENUS *Carya* **FAMILY** Juglandaceae

COMMON NAMES Pecan

EDIBLE PARTS AND USES

Edible parts: Nuts, Flavouring, Leaves - tea, Seeds - oil

The nuts are eaten raw or cooked. They are used in pies, candies, cakes, breads, ice cream, and to thicken soups. They are a source of an edible oil.
The leaves are used for tea.

DESCRIPTION

A large tree up to 55 m high. Trees lose their leaves during the year. Branches extend upwards giving the tree an open, rounded crown and the tree can be 8 m wide. The stem is stout and erect. The bark is grey and furrowed with an ornamental appearance. The leaves are bright green, compound leaves. The leaves are 30-50 cm long. The leaves are made up of 7-10 leaflets. These are long and curved sword shaped. The leaflets have short leaf stalks. The leaves turn yellow before they fall. The flowers are greenish and small. Trees normally have male and female flowers separately on the same plant, but because the flower parts develop at separate times, cross pollination normally occurs. Male flowers grow on catkins near the branches on the previous year's growth. The fruit are dark brown nuts that are carried in clusters of 4-12. The fruit can be 6 cm long. It has a thin shell. At maturity the fruit splits into 4 valves and reveal the smooth brown kernel. There are many cultivated varieties.

HABITAT

It is native to S. United States. It requires a dry subtropical climate. It suits the tropical highlands. It does best in loamy soil in an open sunny position. It is frost resistant but drought tender. They need to be in areas with warm summers. Trees grow naturally near streams in arid areas. They need deep fertile, well drained soil. Thick shelled varieties are more cold tolerant. Trees can tolerate temperatures above 38°C. Trees need to have 700 hours with a temperature under 7°C. Trees need 5,000 degree days above 10°C and a high level of sunlight during the 210 day growing season. It is grown extensively in China. It can grow with a pH between 5-8 but 6.5 is best. The soil needs to be well aerated. In PNG it is recorded between 1,400-1,600 m above sea level. It suits hardiness zones 6-11. National Arboretum Canberra.

PRODUCTION

Cultivation

Plants are normally grown from seeds. It can be grown from root-shoots. Seeds need to be fresh or they won't grow. Nuts which will grow, sink when put into water. Trees can be pruned to stop them growing too tall. Often trees are pruned to 15 m high. Trees easily suffer from zinc deficiency. Thin shelled selections are grown using

cuttings grafted onto seedlings. Cross pollination normally means better nut production. Different pollinating kinds are inter planted to ensure pollen is shed while female flowers are receptive. The flowers are wind pollinated. A spacing of 10 m is suitable.

Harvesting and Seed Production

Trees grow slowly at first while they form a taproot, then they grow more quickly. During the first 8-15 years they do not produce nuts. Trees can live for 1000 years. Grafted trees produce more quickly. A tree can produce 20-25 kg on nuts.

NOTES

There are about 14-25 Carya species.

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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