PLANT FACT SHEET

Elaeis guineensis Jacq.

GENUS *Elaeis* **FAMILY** Arecaceae

COMMON NAMES African Oil palm

EDIBLE PARTS AND USES

Edible parts: Seeds, Nuts, Cabbage, Fruit, Palm heart, Sap, Vegetable, Seeds - oil

The outer layer of the fruits yields an orange cooking oil.
The kernel also produces oil.
The palm cabbage is edible.
The sap tapped from the male flower is used to make wine.
The oily fruit are sometimes eaten but can cause nausea.
The leaves are burnt and used as a vegetable salt.

DESCRIPTION

An unbranched palm with a stout erect stem. The stem is rough due to the leaf bases which remain attached. It grows to 20-30 m tall. The trunk is about 75 cm across. The crown consists of about 40 open leaves. These hang downwards. The leaves develop from the bud as a tightly rolled shoot which later opens. The palm crown spreads 5-9 m across. Casual roots grow from the lower 1 m of the base of the trunk. Many roots also grow just under the soil and spread out for 20 m around the palm. The leaves are about 7.5 m long. The leaves have spines along the leaf stalk. These leaves are made up of many leaflets (100-160 pairs). These are slender, long and thin and rich green. These are held at different levels along the midrib (Almost two rows). The flowers are of one sex only. The male flowers occur with a spiny tip. The female flowers are on long stalks. They are 30-45 cm long. The fruit is a large round bunch of small fruits. These are 4 cm long by 2 cm across. There can be 200 fruit in a bunch.

HABITAT

A tropical plant. They need a temperature above 18°C. They suit the hot humid tropics. They grow between 16°N and 15°S in Africa. These palms do well in rich moist soil. A rainfall above 2,000 mm is needed for good production. They need a sunny position. They are drought and frost tender. It grows from sea level to 900 m above sea level. It grows in areas with a mean annual temperature between 27-35°C. It grows in areas with a mean annual rainfall between 2,000-3,000 mm. Plantations are established in West New Britain in Papua New Guinea and palms occur in some other areas of the country. In Cairns Botanical Gardens. It suits hardiness zones 10-12. In Yunnan.

PRODUCTION

Cultivation

They are normally grown from seed in a nursery then transplanted. Because seeds germinate slowly they are treated before planting. The seed are soaked for 7 days then sown into warm ground. Seeds are slow to germinate. Heat treatment is often used to ensure even germination. Seed germinate in 2-5 months under hot conditions. Seed are sown in plastic bags and sometimes a second nursery transplant is used before eventually planting in the field 1.5 to 2 years later.
For heat treatment they are heated to about 40°C for for 10-12 weeks and then soaked in cold water for 3 days changing the water each day. They are then dried and allowed to germinate in shade. Plants are usually spaced at 9 m spacing.

Harvesting and Seed Production

The early growth of seedlings is slow. Palms commence bearing after about 4-6 years. When mature they produce 2-6 bunches per year. The flower bud does not develop until about 9 months after the leaf containing it has opened. Bright sunny weather helps the development of female flowers. Male flowers are more common in wet cloudy weather. Fruit matures 5-9 months after flowering. A bunch can weigh 18-25 kg. Palms live for many years. Individual trees can live for 200 years.

NOTES

There are 2 Elaeis species.

PICTURES



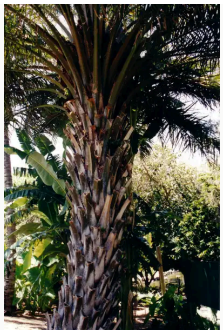
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