PLANT FACT SHEET

Borassus aethiopum Mart.

GENUS *Borassus* **FAMILY** Arecaceae

COMMON NAMES African fan palm, African Palmyra palm, Borassus palm

EDIBLE PARTS AND USES

Edible parts: Fruit, Cabbage, Sap, Seeds, Palm heart, Vegetable, Young roots, Seedling

The sap from the fruit stalk makes a pleasant drink.
The fruit are eaten either ripe or unripe. The juicy pulp of ripe fruit is added to porridge to improve flavour.
The immature seed kernel is eaten. The seed sprouts are eaten cooked.
The stems of young seedlings are eaten.
The growing point or palm cabbage is edible. (This kills the palm!)
The long fleshy "sinker" root from the seed is eaten as a vegetable.

DESCRIPTION

A solitary fan palm. It grows up to 25 m tall. It has separate male and female trees. The trunk is bottle shaped and smooth. Older trees have a swelling on the trunk above the middle which helps distinguish it from Palmyra palm. The bark is grey. Young trees have leaf bases which cling to the tree. The leaf scars are prominent. The terminal crown is a cluster of fan-shaped leaves. The leaves are up to 4 m long including the leaf stalk. The leaf is divided about the middle into folded segments. The leaf stalks are black with hooked spines along the edges. The flower comes from between the leaf stalks. The male flower spike is 2 m long with branches which are 25 cm long by 4 cm across. The female flower spike is 1.5-3 m long and unbranched. There are 20-50 fruit. The fruit are round and about 15 cm across. They are green to orange. The base of the fruit are enclosed in 6-7 cup shaped bracts. The fruit contain 3 hard coated seeds. The individual fruit is about 1 kg weight and the seeds 100 g.

HABITAT

A tropical plant. It grows in the lowlands and the highlands. It grows in the semi-arid and sub humid tropics. It grows in the Sahel. Plants are often spread by elephants after they eat the fruit. It requires good sunlight. It cannot grow in waterlogged soils. It grows from sea level to 1850 m with temperatures of 18°C to 30°C. It is most common is areas with 500-1,200 mm rainfall but also grows in slightly higher rainfall areas. It can grow in arid places and savannah. It suits hardiness zones 11-12.

PRODUCTION

Cultivation

Plants are grown from seed. Seeds germinate in about one month. Seeds can only be stored for a short time before they will not grow. Seed should be sown directly where the palm is to grow as the long taproot makes transplanting difficult. Trees need to be 5 m apart. Seeds germinate quickly if they are well soaked before

planting.

Harvesting and Seed Production

Plants take about 10 years to become fully established. Plants are mainly pollinated by insects. A female palm can produce 20-50 fruits per flower stalk. Fruit can weigh 1 kg each. Fruit take 12-13 months to reach maturity. The fruit are sprouted by covering them in a pit and are ready to eat in 2 weeks. For palm wine tapping the terminal bud is cut and the sap collected. The cut is renewed twice a day for 3 to 4 weeks until the palm is exhausted and dies. It can yield 200-250 litres of sap. Fruit are collected after they fall.

NOTES

There are 7-10 Borassus species. Chemical composition: Protein (crude) = 2.8% (dry). Fat = 0.5% (dry). Ash (insoluble) = 3.5% (dry). Fibre (crude) = 16.8% (dry). Amino acids (g [16g N]-1): Aspartic acid = 9.3g. Threonine = 3.6g. Serine = 3.9g. Glutamic acid = 8.9g. Proline = 5.0g. Glycine = 5.0g. Alanine = 5.0g. Valine = 5.0g. Cysteine = 0.1g. Methionine = 1.2g. Isoleucine = 3.6g. Leucine = 6.1g. Tyrosine = 2.8g. Phenylalanine = 3.6g. Lysine = 3.9g. Histidine = 2.1g. Arginine = 2.4g. Minerals: Sulphur = 0.04% (dry). Potassium = 0.09% (dry). Magnesium = 0.10% (dry). Calcium = 0.08% (dry). Na = 0.01% (dry). Zinc = 4 mg/kg (dry). Iron = 488 mg/kg (dry). Manganese = 8 mg/kg (dry). Copper = 2 mg/kg (dry).

PICTURES



Credit: Food Plants International (Bruce French)

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