



PLANT FACT SHEET

Canavalia ensiformis (L.) DC.

GENUS *Canavalia* FAMILY Fabaceae

COMMON NAMES Jack bean

EDIBLE PARTS AND USES

Edible parts: Seeds, Leaves, Young pods, Spice, Flowers, Vegetable

The leaves and top shoots are eaten.

The very young pods are boiled and eaten.

The flowers can be eaten.

The young seeds are eaten boiled, roasted, or peeled and cooked. The seeds are also fermented.

The ripe seeds are roasted and used as a coffee substitute.

CAUTION The ripe seeds can contain poison and need to be well cooked and the water changed before eating.

They are also often left under running water or fermented.

DESCRIPTION

A perennial climber, although short kinds do occur. Often it is a more bushy plant than the sword bean. Plants up to 1.5 m long. Stems can be hairy. Leaves have 3 leaflets. The leaflets are oval and 5.7-20 cm long by 3.2-11.5 cm wide. The leaf tends to be wedge shaped at the base. The leaf stalks are 2.5-11 cm long. Flowers are red/purple. They occur on flower clusters 5-12 cm long and with flower cluster stalks which are 10-34 cm long. The individual flower stalks are 2-5 mm long. Pods are long and sword shaped. Pods can be 15-35 cm long. Seeds are white with a light brown hilum half as long as the seed. Seeds are 2 cm long, by 1 cm across.

HABITAT

It grows in tropical and subtropical places. It requires a fairly high temperature (15°-30°C). It will possibly grow up to 1,600 m altitude. It is fairly drought resistant and also has some resistance to water-logging and salt in the soil. It can tolerate shade. It can tolerate pH from 4.5 - 8.0 but does best at about 6.1. The optimum mean annual temperature is 14.4°-27.8°C. Seed germinate between 24-27.5°C. It is a short day plant growing well with a daylength of 10-12 hours of sunlight. It can grow in arid places. In Argentina it grows below 500 m above sea level. In XTBG Yunnan.

PRODUCTION

Cultivation

It is grown from seeds. Seeds need to be 2 cm deep. A spacing of about 60 cm is suitable. Plants preferably need a support to climb over. It benefits from a fertile soil but adding nitrogen depresses yield.

Harvesting and Seed Production

Green pods are produced in 3-4 months, but ripe seeds need 6-9 months. Yield of seeds can range from 700 to 5,400 kg / ha.

NOTES

There are about 50 *Canavalia* species. Chemical composition (acid content) (Nigerian sample): oil = 1%; component esters (wt. %): 16:0 = 17%. 16:1 = 2%. 18:0 = 2%. 18:1 = 49%, 18:2 = 18%. 18:3 = 7%. 20:0 = 1%. 22:0 = 1%. 24:0 = 2%. Reported to have a high Threonine value.

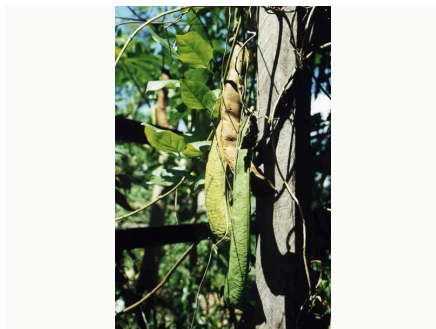
PICTURES



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