PLANT FACT SHEET

Ziziphus spina-christi (L.) Desf.

GENUS *Ziziphus* **FAMILY** Rhamnaceae

COMMON NAMES Christ's thorn, Crown of Thorns

EDIBLE PARTS AND USES

Edible parts: Fruit, Leaves, Seeds, Flowers

The pulp of the fruit is dried and milled into flour. It is then cooked with steam.
The ripe fruit are also eaten raw.
The kernel of the seeds is eaten raw.
The leaves are cooked and eaten as a snack.

DESCRIPTION

A shrub or a tree. In desert places it grows 2 m high. It can grow to 15-20 m high. The trunk is 50 cm across. It is prickly or thorny. The leaves are oval and alternate. There are 3 almost parallel veins easily seen underneath the leaf. The flower stalks are hairy. The flowers are 2-4 mm across. They are in clusters in the axils of leaves near the ends of branches. The fruit is small and orange or red. They are oblong. They are 13-18 mm across. The fruit are edible.

HABITAT

A tropical plant. It grows in very dry plains and hill slopes. It grows in the Sahel in watercourses that occasionally get flooded. It grows in areas that have a rainfall between 50-300 mm per year. It can grow in arid places. It is highly salt tolerant. In Ethiopia it grows up to 2,400 m above sea level.

PRODUCTION

Cultivation

Plants can be grown by seeds. It can be cut back and will re-grow.

NOTES

Chemical composition (after Berry-Koch) (per 100g) (fruit, dried): Protein = 4.8g. Fat = .9g. Calcium = 140mg. Fe = 3.0mg. Vitamin B1 = .04mg. Vitamin B2 = .13mg. Niacin = 3.7mg. Vitamin C = 30mg. Chemical composition (after Abdelmuti): Protein (crude) = 5.6% (dry). Fat = 2.1% (dry). Ash (insoluble) = 4.4% (dry). Fibre (crude) (dry) = 4.1%(dry). Carbohydrate (soluble): Starch = 21.8% (dry). Sugars: Sucrose = 21.8% (dry). D-glucose = 9.6% (dry). D- fructose = 16.0% (dry). Amino acids (g [16g N]-1): Aspartic acid = 15.1g. Threonine = 2.2g. Serine = 3.9g. Glutamic acid = 17.6g. Proline = 5.3g. Glycine = 3.1g. Alanine = 3.4g. Valine = 3.1g. Cysteine = 0.5g. Methionine = 0.4g. Isoleucine = 2.3g. Leucine = 3.9g. Tyrosine = 1.8g. Phenylalanine = 2.2g. Lysine = 2.3g. Histidine = 0.9g.

Arginine = 3.4g. Sulphur 0.04% (dry). Potassium = 0.13% (dry). Magnesium = 0.12% (dry). Calcium = 0.61% (dry). Na = 0.01% (dry). K = 1.91% (dry). Zinc = 9mg/kg-1 (dry). Iron = 20mg/kg-1 (dry). Manganese = 13mg/kg-1 (dry). Copper = 5mg/kg-1 (dry).

PICTURES



Credit: Food Plants International (Bruce French)



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