PLANT FACT SHEET

Echinochloa colona (L.) Link

GENUS *Echinochloa* **FAMILY** Poaceae

COMMON NAMES Jungle rice

EDIBLE PARTS AND USES

Edible parts: Seeds, Leaves, Cereal, Shoots, Grain, Stems, Roots, Vegetable

The seed is ground into flour and cooked for bread or porridge.
Young shoots are eaten raw or cooked. The plant is also burnt as a spice.
The seeds are boiled and eaten as a substitute for rice.
The seeds are ground into flour and then mixed with maize or beans before making bread.
The seeds are sun dried then crushed and winnowed before being cooked with salt and eaten with beans.
It is used in kreb a grain mixture eaten in Chad and Sudan.

DESCRIPTION

An annual grass. It forms tufts. The stems are slender. It grows up to 60 cm high. Sometimes the plant has a purple tinge. In dry areas the stems can lie along the ground and root at the nodes. The leaves are narrow. They are 0.5-0.7 cm wide. The narrow towards the tip. The flower is yellow. The flower develops in the axils of the leaves. The flower has a rough texture. The flowering heads have several short thick spikes. These have 4 crowded rows of spikelets.

HABITAT

It grows in temperate, subtropical and tropical zones. It grows in wet areas. It grows on clayey soils. It grows on black arable soils and near swamps and the edges of streams. It grows from sea level to 2,000 m above sea level. It can grow in arid places. In Argentina it grows from sea level to 1,700 m above sea level. In Sichuan and Yunnan.

PRODUCTION

Cultivation

It can be grown from seed. Seed should be sown shallowly.

NOTES

There are about 35 Echinochloa species. They grow in tropical to warm temperate regions. Chemical composition (Sudan sample): Protein (crude) = 10.6% (dry). Oil = 5.9% (dry). Fibre (crude) = 12.3% (dry). Ash (insoluble) = 8.7% (dry). Fibre (crude) = 12.3% (dry). Carbohydrate (soluble): Starch) = 51.1% (dry). Sucrose = 1.0% (dry). D-glucose = 0.4% (dry). D-fructose = 0.4% (dry). Amino acids (g [16g N]-1): Aspartic acid = 5.2g.

Threonine = 3.5g. Serine = 4.7g. Glutamic acid = 25.3g. Proline = 8.2g. Glycine = 2.6g. Alanine = 10.3g. Valine = 5.8g. Cysteine = 0.8g. Methionine = 1.6g. Isoleucine = 4.6g. Leucine = 10.8g. Tyrosine = 4.3g. Phenylalanine = 6.9g. Histidine = 2.1g. Lysine = 2.1g. Arginine = 41.g. Fatty acids (g/100g) (saturated): 14:0 = 0.1g. 16:0 = 16.9g; (saturated): 18:0 = 3.1g. 22:0 = 0.3g. 24:0 = 0.2g.; (monounsaturated): 16:1 = 0.1g. 18:1 = 27.4g. 20:1 = 0.4g; (polyunsaturated): 18:2 = 50.5g. 18:3 = 1.0g. Minerals: Sulphur = 0.11% (dry). Potassium = 0.41% (dry). Magnesium = 0.22% (dry). Calcium = 0.05% (dry). Na = 0.01% (dry). K = 0.30% (dry). Zinc = 50 mg/kg-1(dry). Iron = 108 mg/kg-1 (dry). Manganese = 28 mg/kg-1 (dry). Copper = 4 mg/kg-1 (dry). Aluminium = 88 mg/kg-1 (dry). Chemical composition (after Paton & Dunlop) (grams per 100g): Protein = 10.68g. Fat = 5.20g. Carbohydrate (soluble) = 51.16g. Fibre = 14.68g. Ash = 7.35g. Water = 10.93g. Calories = 301.

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