PLANT FACT SHEET

Echinochloa crus-galli (L.) P.Beauv.

GENUS *Echinochloa* **FAMILY** Poaceae

COMMON NAMES Barnyard grass, Barnyard millet

EDIBLE PARTS AND USES

Edible parts: Leaves, Seeds, Cereal, Vegetable

The young shoots are eaten as a vegetable.
The seeds can be boiled and eaten. They can also be popped like corn.
They can be ground into flour and used to make bread, cakes and porridge. They are used for macaroni and dumplings. They can be steamed and made in porridge.
Roasted seeds are used as a coffee substitute.

DESCRIPTION

An annual millet grass It grows 1-1.5 m tall. It can be erect or lean over. The leaves are long and narrow and flat. They are about 35 cm long and 1 cm wide. The leaves do not have hairs except for a few hairs at the base. The flower arrangement is open and up to 25 cm long by 8 cm wide. The flower arrangement is pinkish. There are 3 or 4 irregular rows. The lower flower stalks are 10 cm long and they get shorter higher up. The spikelets are 2-4.5 mm long. It does not have a ligule or row of hairs where the leaf sheath joins the stem. One plant can produce 7000 seed.

HABITAT

A tropical plant. It grows in wet places and paddy fields. It grows in wetlands. It also grows in temperate places. Seed germinate most easily at 20°C. It grows in water-logged soils which are medium to heavy. It can grow in arid places. In Argentina it grows from sea level to 800 m above sea level. Tasmanian Herbarium. In Yunnan.

PRODUCTION

Cultivation

Plants are grown from seed.

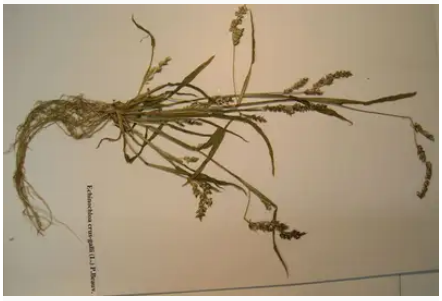
NOTES

There are about 35 Echinochloa species. They grow in tropical to warm temperate regions. It is a weed problem in rice. It is probably the wild form from which Japanese millet developed. It has anticancer properties.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

REFERENCES

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 188

Bandyopadhyay, S. et al, 2009, Wild edible plants of Koch Bihar district, West Bengal. Natural Products Radiance 8(1) 64-72

Beckstrom-Sternberg, Stephen M., and James A. Duke. "The Foodplant Database." http://probe.nalusda.gov:8300/cgi-bin/browse/foodplantdb. (ACEDB version 4.0 - data version July 1994)

Blamey, M and Grey-Wilson, C., 2005, Wild flowers of the Mediterranean. A & C Black London. p 526

Burkill, I.H., 1966, A Dictionary of the Economic Products of the Malay Peninsula. Ministry of Agriculture and Cooperatives, Kuala Lumpur, Malaysia. Vol 1 (A-H) p 903

Bussman, R. W., et al, 2021, Unity in diversity—food plants and fungi of Sakartvelo (Republic of Georgia), Caucasus. Journal of Ethnobiology and Ethnomedicine (2021) 17:72 p 12

Cobley, L.S. (rev. Steele, W.M.) 2nd Ed., 1976, An Introduction to the Botany of Tropical Crops. Longmans. p 56

Dashorst, G.R.M., and Jessop, J.P., 1998, Plants of the Adelaide Plains & Hills. Botanic Gardens of Adelaide and State Herbarium. p 172

Duke, J.A., 1992, Handbook of Edible Weeds. CRC Press. p 90

Ess. Agrostogr. 53, 161, 169. 1812 "crus galli"

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 175

Flora of Australia Volume 49, Oceanic Islands 1, Australian Government Publishing Service, Canberra. (1994) p 482

Flora of Pakistan. www.eFloras.org

Flora of Solomon Islands

GAMMIE, (As Panicum crus-galli)

Geng, Y., et al, 2016, Traditional knowledge and its transmission of wild edibles used by the Naxi in Baidi Village, northwest Yunnan province. Journal of Ethnobiology and Ethnomedicine. 12:10

Grubben, G. J. H. and Denton, O. A. (eds), 2004, Plant Resources of Tropical Africa 2. Vegetables. PROTA, Wageningen, Netherlands. p 561

GUPTA & KANODIA, (As Panicum crus-galli)

Hussey, B.M.J., Keighery, G.J., Cousens, R.D., Dodd, J., Lloyd, S.G., 1997, Western Weeds. A guide to the weeds of Western Australia. Plant Protection Society of Western Australia. p 52

Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 288

Hwang, H., et al, 2013, A Study on the Flora of 15 Islands in the Western Sea of Jeollanamdo Province, Korea. Journal of Asia-Pacific Biodiversity Vol. 6, No. 2 281-310

Hwang, HS, et al, 2014, Distribution characteristics of plant in the Ungseokbong Mountain, Gyeongsangnam-do, Korea. Journal of Asia-Pacific Biodiversity. 7(2014) e164-e178

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 2

Khanal, R., et al, 2014, Documenting abundance and use of underutilized plant species in the mid hill region of Nepal. ECOPRINT 21: 63-71, 2014

Khasbagan, Hu-Yin Huai, and Sheng-Ji pei, 2000, Wild Plants in the Diet of Athorchin Mongol Herdsmen in Inner Mongolia. Economic Botany 54(4): 528-536 (Also as Echinochloa caudata and Echinochloa crus-galli var. mitis)

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 117, 118

Kuhnlein, H. V., et al, 2009, Indigenous Peoples' food systems. FAO Rome p 148

Kuo, W. H. J., (Ed.) Taiwan's Ethnobotanical Database (1900-2000), http://tk.agron.ntu.edu.tw/ethnobot/DB1.htm

Lamp, C & Collet F., 1989, Field Guide to Weeds in Australia. Inkata Press. p 108

Lamp, C.A., Forbes, S.J. and Cade, J.W., 1990, Grasses of Temperate Australia. Inkata Press. p 144

Lazarides, M. & Hince, B., 1993, Handbook of Economic Plants of Australia, CSIRO. p 86

Long, C., 2005, Swaziland's Flora - siSwati names and Uses http://www.sntc.org.sz/flora/

Macmillan, H.F. (Revised Barlow, H.S., et al), 1991, Tropical Planting and Gardening. Sixth edition. Malayan Nature Society. Kuala Lumpur. p 351

Mal, B., S., et al, (Eds), 2010, Minor Millets in South Asia. Bioversity.

Malezas Comestibles del Cono Sur, INTA, 2009, Buernos Aires

Manandhar, N.P., 2002, Plants and People of Nepal. Timber Press. Portland, Oregon. p 211

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 194

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 194 (As Panicum crus-galli)

Mishra, N., et al, 2016, Indigenous knowledge in utilization of wetland plants in Bhadrak district, Odisha, India. Indian Journal of Natural Products and Resources. Vol. 7(1) pp. 82-89

Ochse, J.J. et al, 1931, Vegetables of the Dutch East Indies. Asher reprint. p 335

Paczkowska, G. & Chapman, A.R., 2000, The Western Australian Flora. A Descriptive Catalogue. Western Australian Herbarium. p 102

Peters, C. R., O'Brien, E. M., and Drummond, R.B., 1992, Edible Wild plants of Sub-saharan Africa. Kew. p 21

Phon, P., 2000, Plants used in Cambodia. © Pauline Dy Phon, Phnom Penh, Cambodia. p 267

Plants for a Future database, The Field, Penpol, Lostwithiel, Cornwall, PL22 0NG, UK. http://www.scs.leeds.ac.uk/pfaf/

Plants of Haiti Smithsonian Institute http://botany.si.edu/antilles/West Indies

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