PLANT FACT SHEET

Use with caution

This plant can be harmful if it is eaten raw, in large amounts or without the right preparation. Read the whole fact sheet before use.

Cycas revoluta Thunb.

GENUS *Cycas* **FAMILY** Cycadaceae

COMMON NAMES Dwarf Sago Palm, Sago cycas

EDIBLE PARTS AND USES

Edible parts: Seeds, Nut, Stem, Starch

The trunk is chopped in small sections and dried and leached. It is fermented.
The seeds are crushed, washed, cooked and eaten. They are also dried and ground into a powder then mixed with rice and fermented into a miso.
The root tubers contain starch.
CAUTION: A toxic glucoside, cycasin, has been isolated from the seed kernels. This is toxic and causes cancer.

DESCRIPTION

A palm-like plant. It is evergreen. There can be a single trunk, several trunks or a branched trunk. The stems are 0.3-1.5 m tall. The fronds are stiff. The leaflets are 12-16 cm long by 0.4-0.7 cm wide. Male and female plants are separate. The seeds or nuts are large and orange nuts. The nuts grow in a cluster atop the stems of the plant.

HABITAT

A tropical plant. It is very hardy. It can resist frost. It suits hardiness zones 9-12. Coffs Harbour. In XTBG Yunnan.

PRODUCTION

Cultivation

Plants can be grown from seed. They can also be grown from suckers at the base.

Harvesting and Seed Production

It is slow growing and long lived. Composition of the trunk/stem is higher in male plants than in female plants, but varies in both according to season. Starch content in the male plant was observed to range (calculated to dry substance from 27% in October, to 61% in June, averaging 50% over the year. Female plant trunk/stems average 26% annually. In the female plant, trunk/stem starch content is affected by seed production.

NOTES

There are about 20-40 Cycas species. Chemical composition (fresh seeds): ca. 0.0164% to 0.220% of combined CH20. After being crushed and dried in the sun, the seeds contained 0.250 to 0.327% of total CH2O of which more than 96% was free. Air-dried starch content was analysed at 44.5%, with 9.15% crude protein. A toxic glucoside, cycasin, has been isolated from the seed kernels.

PICTURES



Credit: Food Plants International (Bruce French)



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REFERENCES

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 153

Bodkin, F., 1991, Encyclopedia Botanica. Cornstalk publishing, p 311

Brickell, C. (Ed.), 1999, The Royal Horticultural Society A-Z Encyclopedia of Garden Plants. Convent Garden Books. p 326

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 729

Chen Jiarui; Dennis Wm. Stevenson, CYCADACEAE, Flora of China,

CLEYER,

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 449

Etherington, K., & Imwold, D., (Eds), 2001, Botanica's Trees & Shrubs. The illustrated A-Z of over 8500 trees and shrubs. Random House, Australia. p 248

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 90

Flora of Pakistan. www.eFloras.org

HARDING,

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 256

Hibbert, M., 2002, The Aussie Plant Finder 2002, Florilegium. p 79

Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 275

Kermath, B. M., et al, 2018, Food Plants in the Americas: A survey of the domesticated, cultivated and wild plants used for Human food in North, Central and South America and the Caribbean. p 346

KOBAYASHI & NAGAHAMA,

Lord, E.E., & Willis, J.H., 1999, Shrubs and Trees for Australian gardens. Lothian. p 95

Marinelli, J. (Ed), 2004, Plant. DK. p 366

Menninger, E.A., 1977, Edible Nuts of the World. Horticultural Books. Florida p 162

NAKAMURA & NAKAJIMA,

NISHIDA,

NISHIDA,

Pham-Hoang Ho, 1999, An Illustrated Flora of Vietnam. Nha Xuat Ban Tre. p 214

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

Schuler, S., (Ed.), 1977, Simon & Schuster's Guide to Trees. Simon & Schuster. No. 20

Staples, G.W. and Herbst, D.R., 2005, A tropical Garden Flora. Bishop Museum Press, Honolulu, Hawaii. p 67

Sukarya, D. G., (Ed.) 2013, 3,500 Plant Species of the Botanic Gardens of Indonesia. LIPI p 826

THIERET,

Vander Velde, N, 2003, The Vascular Plants of Majuro Atoll, Republic of the Marshall Islands. Atoll research Bulletin. No. 503. Smithsonian Institute. p 16

Verh. Holl. Maatsch. Weetensch. Haarlem 20(2): 424, 426-427. 1782 (Fl. jap. 229. 1784)

WARBURG,

Wickens, G.E., 1995, Edible Nuts. FAO Non-wood forest products. FAO, Rome. p173

Wiersema, J. H. & Leon, B., 2013, World Economic Plants. A Standard Reference CRC Press. 2nd Ed. p 222

Wijayakusuma, H.M.H., et al, 1996, Tanaman Berkhasiat Obat Di Indonesia. Pustaka Kartini. p 104

World Checklist of Useful Plant Species 2020. Royal Botanic Gardens, Kew

YOSHIMURA,

YOSHIMURA & SAGAWA,

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