PLANT FACT SHEET

Acanthosicyos horridus Welw. ex Benth. & Hook.f.

GENUS *Acanthosicyos* **FAMILY** Cucurbitaceae

COMMON NAMES Butterpips

EDIBLE PARTS AND USES

Edible parts: Seeds, fruit, Seeds - oil, Leaves, Vegetable

The fruit are eaten fresh or preserved. The fruits are buried to soften, then peeled and boiled and the pulp allowed to thicken and then dried in the sun. It is then eaten or added to porridge.
The seeds are eaten roasted or boiled. They are also stored for later use.
The seeds also yield an edible oil.
The pulp of the fruit is used to separate casein from milk after it is heated.

DESCRIPTION

A pumpkin family plant. It is a creeper or bush 1.3-1.6 m high. It has opposite thorns. It has a long woody taproot. The stem has grooves along it. It also has spines in pairs 2-3 cm long. The leaves are like small scales. The flowers are of single sexes and in the axils of the spines. The fruit has a rough skin. It has prickles. It is about 20 cm across. A single shrub can cover a large area.

HABITAT

It is a tropical plant. It grows on sand in the Namib desert. It can survive in a hot arid, desert climate. It grows in areas with an annual rainfall of 150 mm. It can survive during years without rainfall. It grows in areas with temperatures between 16°C and 21°C. It can grow in very poor soils. It can grow in salty soils. It grows between 25-150 m above sea level. It can grow in arid places.

PRODUCTION

Cultivation

Plants grow from seeds. Seeds germinate easily. It usually does not do well in cultivation. Wild plants are "owned" and harvested. The seeds are separated from the fruit pulp by rubbing in the sand.

Harvesting and Seed Production

Plants can live for very long periods. Fruits ripen seasonally. Fruit can be 900 g weight. 1,000 seeds weigh 300g. In Namibia fruit are harvested between November and May.

NOTES

There are 2 Acanthosicyos species. The seeds are very nutritious.

REFERENCES

Arnold, T.H., Wells, M.J. & Wehmeyer, A.S., Khoisan food plants: taxa with potential for future economic exploitation, in Wickens, G.E., Goodin, J.R., and Field, D.V.,(Eds.) 1985, Plants for Arid Lands. Unwin Hyman, London, p 73

Biocyclopedia Edible Plant Species

Bircher, A. G. & Bircher, W. H., 2000, Encyclopedia of Fruit Trees and Edible Flowering Plants in Egypt and the Subtropics. AUC Press. p 5

Cole, D. et al, 2014, Indigenous Plant Products in Namibia. Venture Publications Windhoek, Namibia. p 21

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 84

Feld, D., 2021, A Systematic Checklist of Food Plants, including Herbs and Spices, and with an Index. p 9

Fox, F. W. & Young, M. E. N., 1982, Food from the Veld. Delta Books. p 164

Gen. pl. 1:824. 1867

Grubben, G. J. H. and Denton, O. A. (eds), 2004, Plant Resources of Tropical Africa 2. Vegetables. PROTA, Wageningen, Netherlands. p 31

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 21

Heywood, V.H., Brummitt, R.K., Culham, A., and Seberg, O. 2007, Flowering Plant Families of the World. Royal Botanical Gardens, Kew. p 117

Huxley, A. ed. The new Royal Horticultural Society dictionary of gardening. 1992

INFOODS:FAO/INFOODS Databases

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 38, 118

Mannheimer, C. A. & Curtis. B.A. (eds), 2009, Le Roux and Muller's Field Guide to the Trees and Shrubs of Namibia. Windhoek: Macmillan Education Namibia. p 474

Menninger, E.A., 1977, Edible Nuts of the World. Horticultural Books. Florida p 104

Plowes, N. J. & Taylor, F. W., 1997, The Processing of Indigenous Fruits and other Wildfoods of Southern Africa. in Smartt, L. & Haq. (Eds) Domestication, Production and Utilization of New Crops. ICUC p 184

Royal Botanic Gardens, Kew (1999). Survey of Economic Plants for Arid and Semi-Arid Lands (SEPASAL) database. Published on the Internet; http://www.rbgkew.org.uk/ceb/sepasal/internet [Accessed 15th April 2011]

Ruiters-Welcome, A. K., 2019, Food plants of southern Africa. Ph.D. thesis. Univ. of Johannesburg p 47

Sandelowsky, B. H. 1990. Biology and utilization of the Cucurbitaceae. (Biol Cucurb) 349-355.

USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). [Online Database] National Germplasm Resources Laboratory, Beltsville, Maryland. Available: www.ars-grin.gov/cgi-bin/npgs/html/econ.pl (10 April 2000)

Usher, G., 1974, A Dictionary of Plants Used by Man. Constable. p 15

Van Damme, P et al, 1922, Plant Uses by the Topnaar of the Kuiseb Valley Namib Desert. Afrika Focus Vol. 8(3-4):223-252

van Wyk, Be, & Gericke, N., 2007, People's plants. A Guide to Useful Plants of Southern Africa. Briza. p 34

Wehmeyer, A. S, 1986, Edible Wild Plants of Southern Africa. Data on the Nutrient Contents of over 300 species

Wickens, G.E., 1995, Edible Nuts. FAO Non-wood forest products. FAO, Rome. p 119

Wiersema, J. H. & Leon, B., 2013, World Economic Plants. A Standard Reference CRC Press. 2nd Ed. p 8

Wikipedia

Wilkins-Ellert, M.H., 2004. Acanthosicyos horridus Welw. ex Hook.f. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 13 October 2009.

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

PROVIDED BY **Food Plants International**

French, B.R. & Maynard, A.R. Food Plants International Database. Food Plants International

LICENCE CC BY-NC-SA 3.0

ONLINE FACT SHEET https://www.echocommunity.org/en/resources/0c5a9115-0117-4be0-b403-e6b1851b23d9