PLANT FACT SHEET

Telfairia occidentalis Hook. f.

GENUS *Telfairia* **FAMILY** Cucurbitaceae

COMMON NAMES Fluted pumpkin, Fluted gourd

EDIBLE PARTS AND USES

Edible parts: Leaves, Seeds, Twigs, Shoots, Seeds - oil, Vegetable

The thick shoots of the female plant are chopped and used on soups.
The seeds are stripped of their coat then ground and used in soups.
The seeds are also boiled in their seed coats then shelled and eaten. The seeds yield a cooking oil.
The young shoots and leaves are used as a potherb. They are also added to soups and stews. They can also be dried and stored.
CAUTION: The roots are poisonous.

DESCRIPTION

A pumpkin family plant. It is a strong vine which loses its leaves during the year. Stems can be 10 m long. The leaves have 3-5 leaflets which look like claws. They are arranged like fingers on a hand. The stalk of the leaflets is about 2.5 cm long. The leaflets have teeth on the edge of the top part of them. They are often rough underneath. The vine has tendrils which are branched and with coiled tips which clasp objects. Plants are separately male and female. Male plants have tougher shoots and smaller leaves. The male flowers are on flower stalks 5-25 cm long. Female flowers occur singly and are on short stalks. Female flowers are in the axils of leaves. Male flowers are small, pink and in clusters. The fruit are pale green and covered with a white waxy layer that rubs off easily. Fruit are strongly ribbed at maturity. They can be 25 cm long and weigh 3-6 kg. The flesh is light yellow and fibrous. The seeds are flattened, round and 3.5 cm across. There are 30-70 seeds in each fruit.

HABITAT

It is a tropical plant. It occurs in forest zones in Africa. It can grow in shade or bright sunlight. It can survive moderate droughts. It can grow in arid places.

PRODUCTION

Cultivation

Plants are grown from seed. Seed can be sown directly or put in a nursery then transplanted. Seedlings appear within 12-15 days. The vines need a trellis to climb over. Male plants flower in 3 months while female plants take 4-5 months to flower. Seed can be stored for 3-4 months if kept dry and cool but the seeds must not be dried.

Harvesting and Seed Production

The first leaf harvest can occur 12 weeks after planting. Seed harvest takes 8-10 months. Shoots can be picked 10-15 times over 4-5 months.

NOTES

The leaves have anti-bacterial properties.

REFERENCES

Abbiw, D.K., 1990, Useful Plants of Ghana. West African uses of wild and cultivated plants. Intermediate Technology Publications and the Royal Botanic Gardens, Kew. p 40

Achigan-Dako, E, et al (Eds), 2009, Catalogue of Traditional Vegetables in Benin. International Foundation for Science.

Akoroda M.O., 1990, Ethnobotany of Telfairia occidentalis (Cucurbitaceae) among Igbos of Nigeria. Economic Botany. 44(1) pp 29-39

Burkill, H. M., 1985, The useful plants of west tropical Africa, Vol. 1. Kew.

Busson, 1965,

Dalziel, J. M., 1937, The Useful plants of west tropical Africa. Crown Agents for the Colonies London.

Dansi, A., et al, 2008, Traditional leafy vegetables and their use in the Benin Republic. Genet Resour Crop Evol (2008) 55:1239–1256

Dansi, A., et al, 2009, Traditional leafy vegetables in Benin: folk nomenclature, species under threat and domestication. Acta Bot. Gallica 156(2), 183-199

Epenhuijsen C.W. van., 1974, Growing Native vegetables in Nigeria. FAO Rome, p 95

Esquinas-Alcazar, et al, 1983, Genetic Resources of Cucurbitaceae. International Board of Plant Genetic Resources.

Eseyin, O. A., Sattar, M. A. and Rathore, H. A., 2014, A Review of the Pharmacological and Bio□ logical Activities of the Aerial Parts of Telfairia occidentalis Hook.f. (Cucurbitaceae), Tropical Journal of Pharmaceutical Research, 13 (10), pp. 1761-1767.

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 89

Grivetti, L. E., 1980, Agricultural development: present and potential role of edible wild plants. Part 2: Sub-Saharan Africa, Report to the Department of State Agency for International Development. p 32

Grubben, G. J. H. and Denton, O. A. (eds), 2004, Plant Resources of Tropical Africa 2. Vegetables. PROTA, Wageningen, Netherlands. p 522

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 644

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 48, 106

JSTOR Global Plants edible

Kamda, A. G. S., et al, 2014, Protective effect of edible Cucurbitaceae seed extract from Cameroon against oxidative stress. Environmental Engineering and Management Journal. Vol. 13, No. 7, 1721-1727

Kays, S. J., and Dias, J. C. S., 1995, Common Names of Commercially Cultivated Vegetables of the World in 15 languages. Economic Botany, Vol. 49, No. 2, pp. 115-152

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1774

Koukou, E., et al, 2022, Local knowledge of agricultural biodiversity and food uses in two agroecological zones of southern Benin. Ethnobotany Research and Applications 23:29 (2022) p 8

Ladeji, O., Okoye, Z.S.C. and Ojobi, T., 1995, Chemical evaluation of the nutritive value of leaf of fluted pumpkin (Telfairia occidentalis). Food Chemistry (53) pp. 353-354.

Lykke, A. M., & Padonou, E. A., 2019, Carbohydrates, proteins, fats and other essential components of food from native trees in West Africa. Heliyon 5 e01744

Martin, F.W., & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 31, 190

Noumedem, J. AK., 2013, In Vitro antibacterial and antibiotic-potentiation activities of four edible plants against multidrug-resistant gram-negative species. BMC Complementary and Alternative Medicine 13:190

Nyadanu, D., et al, 2015, Agro-biodiversity and challenges of on-farm conservation: the case of plant genetic resources of neglected and underutilized crop species in Ghana. Genet. Resourc. Crop Evol. 62(7):

Okigbo, B.N., Vegetables in Tropical Africa, in Opena, R.T. & Kyomo, M.L., 1990, Vegetable Research and development in SADCC countries. Asian Vegetable Research and development Centre. Taiwan. p 38

D. Oliver, Fl. trop. Afr. 2:524. 1871

Onuminya, T. O., et al, 2017, Comparative proximate and Phytochemical Analysis of leafy vegetables in Lagos State. Nig. J. Pure and Applied Sci. Vol. 30 Issue 3: p 3097f

Oomen, H.A.P.C., & Grubben, G.J.H., 1978, Tropical Leaf Vegetables in Human Nutrition, Communication 69, Department of Agricultural research, RTI Amsterdam, p 28, 97

Peters, C. R., O'Brien, E. M., and Drummond, R.B., 1992, Edible Wild plants of Sub-saharan Africa. Kew. p 103

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 16th April 2011]

Smith, F. I. and Eyzaquirre, P., 2007, African leafy vegetables: Their role in the World Health Organization's global Fruit and Vegetables Initiative. AJFAND, Vol. 7 No. 3

Terra, G.J.A., 1973, Tropical Vegetables. Communication 54e Royal Tropical Institute, Amsterdam, p 77

Tindall, H.D., 1983, Vegetables in the tropics. Macmillan p. 184

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)

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