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.

Catha edulis (Vahl) Forssk. ex Endl.

GENUS *Catha* **FAMILY** Celastraceae

COMMON NAMES Arabian tea tree, Bushman's tea, Khat

EDIBLE PARTS AND USES

Edible parts: Leaves - tea, Fruit

The leaves are chewed as a stimulant. They can also be made into a tea. They are dried for tea.
Caution: There are cautions about the excessive chewing of leaves. It can cause impotence.

DESCRIPTION

A shrub or small evergreen tree. It grows to 7-18 m high and spreads 3 m across. Trees that are regularly harvested are smaller. The stem is erect. The bark is grey and smooth when young. It becomes dark brown and flaky at maturity. The branches hang downwards. The leaves are simple and opposite. The leaves are glossy green and oval. They are 5-11 cm long and the edges of the leaf have small teeth. Leaves are paler underneath. The leaf stalks are reddish and about 1 cm long. The flowers are very small and pale green to white and with 5 petals. They occur in small clusters in the axils of leaves. The clusters are up to 2 cm across. The fruit has 3 lobes. It is a woody capsule about 1 cm long. It is reddish brown when mature. It contains many small winged seeds.

HABITAT

A tropical plant. It does best on well drained soils. It prefers an open sunny position. It is drought and frost tender. In Uganda they grow from 1,400-2,200 m altitude. In Ethiopia it grows between 900-2,400 m above sea level. It needs a temperature above 10°C. It grows in areas with a rainfall between 800-1,800 mm per year. It suits hardiness zones 10-12. In XTBG Yunnan.

PRODUCTION

Cultivation

Plants can be grown from seed or by using cuttings. Suckers and root cuttings can be used. Seeds germinate within 2 weeks. (There are 60,000-80,000 seeds per kg.) Plants can be shaped or pruned.

Harvesting and Seed Production

The tree is fast growing. It suckers readily. The stimulant effect is less in cooler places.

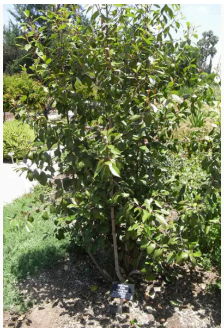
NOTES

There is only one Catha species. The leaves contain the alkaloids cathine, cathenine and cathidine. They affect the nervous system. The plant is banned in some countries.

PICTURES



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 111

Bekele-Tesemma A., Birnie, A., & Tengnas, B., 1993, Useful Trees and Shrubs for Ethiopia. Regional Soil Conservation Unit. Technical Handbook No 5. p 142

Ben-Shabat, S., et al, 2014, Farming Amphetamines: Khat (Catha edulis Forsk.) a Traditional Plant with Mild Stimulating Psychoactive and Medicinal Properties, in Z. Yaniv, N. Dudai (eds.), Medicinal and Aromatic Plants of the Middle-East, Springer

Bodkin, F., 1991, Encyclopedia Botanica. Cornstalk publishing, p 228

Brouk, B., 1975, Plants Consumed by Man. Academic Press, London. p 350

Brown, D., 2002, The Royal Horticultural Society encyclopedia of Herbs and their uses. DK Books. p 158

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 342

Dale, I. R. and Greenway, P. J., 1961, Kenya Trees and Shrubs. Nairobi. p 134

Ench. bot. 575. 1841

Etherington, K., & Imwold, D., (Eds), 2001, Botanica's Trees & Shrubs. The illustrated A-Z of over 8500 trees and shrubs. Random House, Australia. p 191

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 75

Fowler, D. G., 2007, Zambian Plants: Their Vernacular Names and Uses. Kew. p 17

Fox, F. W. & Young, M. E. N., 1982, Food from the Veld. Delta Books. p 149

Goode, P., 1989, Edible Plants of Uganda. FAO p 30

Gouldstone, S., 1983, Growing your own Food-bearing Plants in Australia. Macmillan p 163

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 176

Heywood, V.H., Brummitt, R.K., Culham, A., and Seberg, O. 2007, Flowering Plant Families of the World. Royal Botanical Gardens, Kew. p 94

Hibbert, M., 2002, The Aussie Plant Finder 2002, Florilegium. p 62

Katende, A.B., Birnie, A & Tengnas B., 1995, Useful Trees and Shrubs for Uganda. Identification, Propagation and Management for Agricultural and Pastoral Communities. Technical handbook No 10. Regional Soil Conservation Unit, Nairobi, Kenya. p 166

Kidane, L. & Kejela, A.,2021, Food security and environment conservation through sustainable use of wild and semi-wild edible plants: a case study in Berek Natural Forest, Oromia special zone, Ethiopia. Agric & Food Secur (2021) 10:29

Liengme, C. A., 1981, Plants used by the Tsonga people of Gazankulu. Bothalia 13, 3 & 4: 501-518

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

Lord, E.E., & Willis, J.H., 1999, Shrubs and Trees for Australian gardens. Lothian. p 212

Lovett, J. C. et al, Field Guide to the Moist Forest Trees of Tanzania. p 35

Magwede, K., van Wyk, B.-E., & van Wyk, A. E., 2019, An inventory of Vhavenda useful plants. South African Journal of Botany 122 (2019) 57–89

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 106

Maundu, P. et al, 1999, Traditional Food Plants of Kenya. National Museum of Kenya. 288p

Mbuya, L.P., Msanga, H.P., Ruffo, C.K., Birnie, A & Tengnas, B., 1994, Useful Trees and Shrubs for Tanzania. Regional Soil Conservation Unit. Technical Handbook No 6. p 172

Molla, A., Ethiopian Plant Names. http://www.ethiopic.com/aplants.htm

Mutie, F. M., et al, 2023, Important Medicinal and Food Taxa (Orders and Families) in Kenya, Based on Three Quantitative Approaches. Plants 2023, 12, 1145

Ojelel, S., et al, 2019, Wild edible plants used by communities in and around selected forest reserves of Teso-Karamoja region, Uganda. Journal of Ethnobiology and Ethnomedicine (2019) 15:3

Palgrave, K.C., 1996, Trees of Southern Africa. Struik Publishers. p 505

Palmer, E and Pitman, N., 1972, Trees of Southern Africa. Vol. 2. A.A. Balkema, Cape Town p 1300

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 187

Purseglove, J.W., 1968, Tropical Crops Dicotyledons, Longmans. p 630

Recher, P, 2001, Fruit Spirit Botanical Gardens Plant Index. www.nrg.com.au/~recher/ seedlist.html p 5

Ruiters-Welcome, A. K., 2019, Food plants of southern Africa. Ph.D. thesis. Univ. of Johannesburg p 42

Schmidt, E., Lotter, M., & McCleland, W., 2007, Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media p 332

Swaziland's Flora Database http://www.sntc.org.sz/flora

Tredgold, M.H., 1986, Food Plants of Zimbabwe. Mambo Press. p 94

van Wyk, B, van Wyk, P, and van Wyk B., 2000, Photographic guide to Trees of Southern Africa. Briza. p 82

Venter, F & J., 2009, Making the most of Indigenous Trees. Briza. p 96

Vickery, M.L. and Vickery, B., 1979, Plant Products of Tropical Africa, Macmillan. p 90

Welcome, A. K. & Van Wyk, B.-E., 2019, An inventory and analysis of the food plants of southern Africa. South African Journal of Botany 122 (2019) 136–179

White, F., Dowsett-Lemaire, F. and Chapman, J. D., 2001, Evergreen Forest Flora of Malawi. Kew. p 185

Wiersema, J. H. & Leon, B., 2013, World Economic Plants. A Standard Reference CRC Press. 2nd Ed. p 153

Full reference list (3 more) at https://www.echocommunity.org/en/resources/cf92fbb3-7475-49de-9da1-582a1c1aa864

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/cf92fbb3-7475-49de-9da1-582a1c1aa864