PLANT FACT SHEET

Citrus reticulata Blanco

GENUS *Citrus* **FAMILY** Rutaceae

COMMON NAMES Mandarin

EDIBLE PARTS AND USES

Edible parts: Fruit, Herb, Flavouring, Spice, Flowers

The fruit are eaten fresh and raw. They are also used for juice, preserved in syrup, added to salads or used in sweets, cakes, and drinks.
The peel is dried and is used as a condiment. The oil from the peel is used to flavour ice cream, chewing gum, and baked goods.
The flower petals are eaten.

DESCRIPTION

A small evergreen tree up to 4-8 m tall. It spreads to 2 m across. The stem is erect, branching and thorny. The leaves are dark green, and long and narrow in shape. They are 3-4 cm long. There is only a narrow wing on the leaf stalk. It has a few or no spines. The flowers are white and star shaped. They are 2.5-4 cm across and have a scent. Fruit are almost round and the skin peels off easily. The fruit are 4-8 cm long. The flesh is red, juicy and sweet.

HABITAT

A subtropical plant. The hardiest of the citrus. It grows from sea level up to 2300 m altitude in the tropics. They do best between 800 m and 1200 m altitude. A well drained soil is needed. They also prefer a drier climate. It is drought and frost resistant. They need a temperature above 3-5 °C. It suits hardiness zones 9-11.

PRODUCTION

Cultivation

Often trees are grown from seed. Some breed true from seed. Seedling trees take a long time to start producing fruit. Budded trees are best. A spacing of about 8 m between trees is suitable. From one seed, several seedlings can grow. Using seedlings of seeds with 3 or more shoots helps produce trees true to type. Cuttings or layering can also be used.

Harvesting and Seed Production

Seedling trees take 4-6 years to fruit. Grafted trees fruit after 2-4 years. Fruit tend to be produced seasonally. The season is often from April to August in the Southern Hemisphere.

NOTES

There are 20 Citrus species. Several hybrids have been formed.

PICTURES



Credit: Food Plants International (Bruce French)



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Credit: Food Plants International (Bruce French)

REFERENCES

AAK, 1994, Jeruk, Penerbit Kanisius, Jogyakarta. p 191

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 42

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 129

Anderson, E. F., 1993, Plants and people of the Golden Triangle. Dioscorides Press. p 206

Andrare, G. M. M., et al, 2023, Plantas Alimenticias Nao Convencionais (PANC) Nos Levantamentos Etnobotanicos do Brazil. Novos Cadernos NAEA v. 25 No. 2 p 220

Arora, R. K., 2014, Diversity in Underutilized Plant Species - An Asia-Pacific Perspective. Bioversity International. p 64 (Also as Citrus tankan)

Ashton, M. S., et al 1997, A Field Guide to the Common Trees and Shrubs of Sri Lanka. WHT Publications Ltd. pdf p 346

Barwick, M., 2004, Tropical and Subtropical Trees. A Worldwide Encyclopedic Guide. Thames and Hudson p 118

Bekele-Tesemma A., Birnie, A., & Tengnas, B., 1993, Useful Trees and Shrubs for Ethiopia. Regional Soil Conservation Unit. Technical Handbook No 5. p 154

Bennett, B. C., 1990, Useful Plants of Amazonian Ecuador. US Agency for International Development. Fifth Progress Report. New York Botanical Gardens. p 39

Bernholt, H. et al, 2009, Plant species richness and diversity in urban and peri-urban gardens of Niamey, Niger. Agroforestry Systems 77:159-179

Bianchini, F., Corbetta, F., and Pistoia, M., 1975, Fruits of the Earth. Cassell. p 184

Blench, R., 2004, Fruits and Arboriculture in the Indo-Pacific Region. Indo-Pacific Prehistory Association Bulletin 24. (Taipei Papers Volume 2) p 36

Bodkin, F., 1991, Encyclopedia Botanica. Cornstalk publishing, p 262

Borgohain, D., 2017, Ethno-botanical study of wild edible fruits consumed by the people of Lakhimpur district of Assam, India. Annals of Plant Sciences 6.11 pp 1728-1735

Bremness, L., 1994, Herbs. Collins Eyewitness Handbooks. Harper Collins. p 47

Brickell, C. (Ed.), 1999, The Royal Horticultural Society A-Z Encyclopedia of Garden Plants. Convent Garden Books. p 272

Brouk, B., 1975, Plants Consumed by Man. Academic Press, London. p 183

Brown, D., 2002, The Royal Horticultural Society encyclopedia of Herbs and their uses. DK Books. p 173

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 14

Cameron, J.W. & Soost, R.K., 1979, Citrus, in Simmonds, N.W., (ed), Crop Plant Evolution. Longmans. London. p 261

Cheifetz, A., (ed), 1999, 500 popular vegetables, herbs, fruits and nuts for Australian Gardeners. Random House p 182

Clarke, W.C. & Thaman, R.R., 1993, Agroforestry in the Pacific Islands: Systems for sustainability. United Nations University Press. New York. p 231

Cobley, L.S. (rev. Steele, W.M.) 2nd Ed., 1976, An Introduction to the Botany of Tropical Crops. Longmans. p 167

Coronel, R.E., 1982, Fruit Collections in the Philippines. IBPGR Newsletter p 6

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 384

D'Ambrosio, U., & Puri, R. K., 2016, Foodways in transition: food plants, diet and local perceptions of change in a Costa Rican Ngäbe community. Journal of Ethnobiology and Ethnomedicine (2016) 12:3 p 27

Das, T. & Das, A. K., 2005, Inventorying plant biodiversity in homegardens: A case study in Barak Valley, Assam, North East India. CURRENT SCIENCE, VOL. 89, NO. 1, 10 JULY 2005

Elevitch, C.R.(ed.), 2006, Traditional Trees of the Pacific Islands: Their Culture, Environment and Use. Permanent Agriculture Resources, Holualoa, Hawaii. p 245

Etherington, K., & Imwold, D., (Eds), 2001, Botanica's Trees & Shrubs. The illustrated A-Z of over 8500 trees and shrubs. Random House, Australia. p 215

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 218

Fl. Filip. 610. 1837

Flora of Pakistan. www.eFloras.org

Food Composition Tables for use in East Asia FAO http://www.fao.org/infoods/directory No. 944 (As Citrus tankan)

French, B.R., 1986, Food Plants of Papua New Guinea, A Compendium. Asia Pacific Science Foundation p 230

French, B.R., 2010, Food Plants of Solomon Islands. A Compendium. Food Plants International Inc. p 230

Giraldi, M. & Hanazaki, N., 2014, Use of Cultivated and Harvested Edible Plants by Caiçaras—What Can Ethnobotany Add to Food Security Discussions? Human Ecology Review, Volume 20, Number 2, 2014

Goode, P., 1989, Edible Plants of Uganda. FAO p 27

Hearne, D.A., & Rance, S.J., 1975, Trees for Darwin and Northern Australia. AGPS, Canberra p 47

Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 496

http://palaeoworks.anu.edu.au/Nuno_PhD/04.pdf re Timor

Icon. pl. formos. 8:26. 1919 (As Citrus tankan)

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 129

John, L., & Stevenson, V., 1979, The Complete Book of Fruit. Angus & Robertson p 275

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