PLANT FACT SHEET

Broussonetia papyrifera (L.) L'Herit ex Vent.

GENUS *Broussonetia* **FAMILY** Moraceae

COMMON NAMES Paper mulberry

EDIBLE PARTS AND USES

Edible parts: Fruit, Flowers, Leaves, Seeds

The young leaves are lightly cooked and eaten.
The fleshy part of the ripe compound fruit is sweet and edible. It is eaten raw. They are added to desserts and conserves.
The seeds are also edible.
(The bark is also used for making cloth.)
CAUTION: Eating a lot of fruit is reported to affect calcium absorption.

DESCRIPTION

A small deciduous tree. It grows up to about 8-15 metres tall. The stem is often surrounded by a ring of suckers. The bark is dark grey. It has very hairy branches and a milky sap. The leaf stalk is 2.3-8 cm long. Leaves are arranged in spirals. The leaves are large, heart shaped and sometimes with 3 lobes. Leaves can be 6-20 cm long by 5-9 cm wide. The leaves are rough on the upper side and woolly underneath. Male and female flowers are produced on separate plants. Male flowers are produced on stout hanging flower stalks up to 7 cm long. These have creamy anthers. Female flowers have slender purple stigmas and are produced in round heads which can be 2 cm across. It has a club shaped pulpy fruit, orange in colour. They are mulberry like and edible. Fruit do not occur on plants in the Pacific as only male trees occur. See Morus australis

HABITAT

A tropical plant. It is native to China and Japan. The trees are mostly planted. They are grown in many areas of PNG. They prefer a cool climate and do best on moist soils. They need good sunlight. In Yunnan in China it grows below 2000 m altitude. It suits hardiness zones 6-12. In Sichuan.

PRODUCTION

Cultivation

Trees can be grown from seeds or root suckers. Seeds are often not available. Young buds can be removed to give a straight unbranched tree. The seeds take 1-3 months to germinate at 15°C. Stem cuttings can be used.

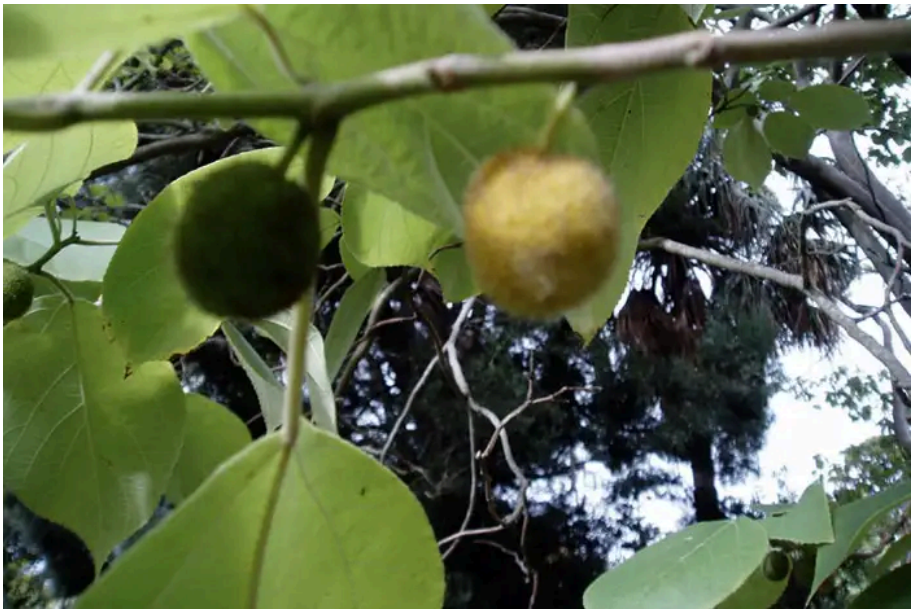
Harvesting and Seed Production

It is fast growing.

NOTES

Tapa cloth used by Polynesians is made from this plant. Paper is also made from it in China. There are 4-8 Broussonetia species. Chemical composition (leaves, dried): 17% calcium carbonate. It can become invasive.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

REFERENCES

Polynesian mulberry references Broussonetia papyrifera

Altschul, S.V.R., 1973, Drugs and Foods from Little-known Plants. Notes in Harvard University Herbaria. Harvard Univ. Press. Massachusetts. no. 678

Ambasta S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 87

Bajpai, O., et al, 2015, Tree species of the Himalayan Terai region of Uttar Pradesh, India: a checklist. Check List 11(4): 1718

Barwick, M., 2004, Tropical and Subtropical Trees. A Worldwide Encyclopedic Guide. Thames and Hudson p 61

Bhatt, D., Chandra Sekar, K. and Kumar, K., 2020, Tree Diversity of Indian Himalayan Region. G.B. Pant National Institute of Himalayan Environment, Almora, Uttarakhand, India. p 79

Bircher, A. G. & Bircher, W. H., 2000, Encyclopedia of Fruit Trees and Edible Flowering Plants in Egypt and the Subtropics. AUC Press. p 67

Brickell, C. (Ed.), 1999, The Royal Horticultural Society A-Z Encyclopedia of Garden Plants. Convent Garden Books. p 192

Brown, Flora of Southeastern Polynesia 3 Dicotyledons p 33

Cao, Y., et al, 2020, Ethnobotanical study on wild edible plants used by three trans-boundary ethnic groups in Jiangcheng County, Pu'er, Southwest China. Journal of Ethnobiology and Ethnomedicine (2020) 16:66

Clarke, W.C. & Thaman, R.R., 1993, Agroforestry in the Pacific Islands: Systems for sustainability. United Nations University Press. New York. p 225

Coombes, A.J., 2000, Trees. Dorling Kindersley Handbooks. p 218

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 260

Dobriyal, M. J. R. & Dobriyal, R., 2014, Non Wood Forest Produce an Option for Ethnic Food and Nutritional Security in India. Int. J. of Usuf. Mngt. 15(1):17-37

Elevitch, C.R.(ed.), 2006, Traditional Trees of the Pacific Islands: Their Culture, Environment and Use. Permanent Agriculture Resources, Holualoa, Hawaii. p 171

Etherington, K., & Imwold, D., (Eds), 2001, Botanica's Trees & Shrubs. The illustrated A-Z of over 8500 trees and shrubs. Random House, Australia. p 142

Flora of Pakistan. www.eFloras.org

Franklin, J., Keppel, G., & Whistler, W., 2008, The vegetation and flora of Lakeba, Nayau and Aiwa Islands, Central Lau Group, Fiji. Micronesica 40(1/2): 169–225, 2008

French, B.R., 1986, Food Plants of Papua New Guinea, A Compendium. Asia Pacific Science Foundation p 321

Gillaumin, R., 1954, Les Plantes utiles des Nouvelles-Hebrides (fin et complement) In: Journal d'agriculture tropicale et de botanique appliquee Vol. 1, No. 10-12 pp 453-460

Hani Medicine of Xishuangbanna, 1999, p 419

Hedrick, U.P.(ed), 1919, Sturtevant's Edible Plants of the World p 121 (138)

Hibbert, M., 2002, The Aussie Plant Finder 2002, Florilegium. p 47

Hide, R., et al, 1979, A checklist of some plants in the territory of the Sinasina Nimai (Simbai Province, Papua New Guinea), with notes on their uses. Department Anthropology, University of Aukland

Hwang, H., et al, 2013, A Study on the Flora of 15 Islands in the Western Sea of Jeollanamdo Province, Korea. Journal of Asia-Pacific Biodiversity Vol. 6, No. 2 281-310

Jin, Chen et al, 1999, Ethnobotanical studies on Wild Edible Fruits in Southern Yunnan: Folk Names: Nutritional Value and Uses. Economic Botany 53(1) pp 2-14

Ju, Y., et al, 2013, Eating from the wild: diversity of wild edible plants used by Tibetans in Shangri-la region, Yunnan, China, Journal of Ethnobiology and Ethno medicine 9:28

Kang, Y., et al, 2012, Wild food plants and wild edible fungi in two valleys on the Qinling Mountains (Shaanxi, central China) Journal of Ethnobiology and Ethnomedicine; 9:26

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1828

Krishen P., 2006, Trees of Delhi, A Field Guide. DK Books. p 104

Kuo, W. H. J., (Ed.) Taiwan's Ethnobotanical Database (1900-2000), http://tk.agron.ntu.edu.tw/ethnobot/DB1.htm

Liefting, A., et al, Samoan plant names. http://en.wikipedia.org

Little, E.L., 1980, National Audubon Society Field Guide to North American Trees. Alfred A. Knopf. p 429

Luo, B., et al, 2019, Wild edible plants collected by Hani from terraced rice paddy agroecosystem in Honghe Prefecture, Yunnan, China. Journal of Ethnobiology and Ethnomedicine 15:56

Lyle, S., 2006, Discovering fruit and nuts. Land Links. p 95

Makino,

Marinelli, J. (Ed), 2004, Plant. DK. p 446

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 205

Mot So Rau Dai an Duoc O Vietnam. Wild edible Vegetables. Ha Noi 1994, p 175

Mozhui, R., et al, 2011, Wild edible fruits used by the tribals of Dimapur district of Nagaland, India. Pleione 5(1): 56 - 64.

Neal, C.M., 1965, In Gardens of Hawaii, Bishop Museum Press. p

Parham, B. E. V., 1972, Plants of Samoa. New Zealand Department of Scientific and Industrial Research. Information Series. No. 85 p 134

Peekel, P.G., 1984, (Translation E.E.Henty), Flora of the Bismarck Archipelago for Naturalists, Division of Botany, Lae, PNG. p 131, 133

Full reference list (22 more) at https://www.echocommunity.org/en/resources/207018fd-96ca-4530-9285-1dea403006d0

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/207018fd-96ca-4530-9285-1dea403006d0