PLANT FACT SHEET

Parkia speciosa Hassk.

GENUS *Parkia* **FAMILY** Fabaceae

COMMON NAMES Pete, Bitter bean tree

EDIBLE PARTS AND USES

Edible parts: Seeds, Leaves, Pods, Fruit

The seeds are used as flavouring stews. Dried seeds are peeled and fried in oil.
Young pods are eaten cooked as a vegetable. They are eaten with poultry, fish or stir-fried vegetable dishes.
Young seeds can be eaten pickled, raw or cooked. They are roasted, boiled or added to soups.
Young leaves are also eaten raw. They are packed in brine.
The receptacle around the flowers is cut into slices and eaten raw.

DESCRIPTION

A tree. It can grow 35-45 m high. It can spread 8-15 m wide. The trunk can be 1 m across. It can have buttresses. The leaves occur alternately along the stalk. The leaf and leaf stalk can be 21-40 cm long. There is a single gland on the leaf stalk about half way between the base and the first pair of leaflets. It is about 1-3 cm from the base. There are also small circular lands near the last leaflets. There are 11-20 or 25 pairs of leaflets. These are 5-10 cm long by 1-2 cm wide. The edges of nearby leaflets overlap. The tip of the leaflet is rounded and the base is expanded around the stem on one side. The flower stalks are 7-57 cm long and hang down on the tree. On the end of these are 4-10 flowers crowded together and then pods develop. Flowers contain both sexes. The pods are strap shaped and usually twisted. The pods are swollen over the seeds and constricted between the seeds. The pods are 20-40 cm long by 2-5 cm wide. There are about 18 seeds per pod. They lie across the width of the pod. They are up to 23 mm long. They have a strong smell. The seed coat is soft and green.

HABITAT

A tropical plant. It is native to SE Asia. They grow in lowland rainforest. It suits a humid climate. They are mostly between sea level and 900 m altitude. It suits hardiness zones 11-12.

PRODUCTION

Cultivation

Plants are grown from seeds.

Harvesting and Seed Production

Trees first flower when about 15 m high.

NOTES

Also as Mimosaceae. The seeds are high in folates. Fruit are high in folates 100µg/100.

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

Altschul, S.V.R., 1973, Drugs and Foods from Little-known Plants. Notes in Harvard University Herbaria. Harvard Univ. Press. Massachusetts. no. 1649

Argent, G et al, nd, Manual of the Larger and More important non Dipterocarp Trees of Central Kalimantan Indonesia. Volume 2 Forest Research Institute, Samarinda, Indonesia. p 365

Arora, R. K., 2014, Diversity in Underutilized Plant Species - An Asia-Pacific Perspective. Bioversity International. p 50, 107, 129

Barwick, M., 2004, Tropical and Subtropical Trees. A Worldwide Encyclopedic Guide. Thames and Hudson p 310

Burkill, I.H., 1966, A Dictionary of the Economic Products of the Malay Peninsula. Ministry of Agriculture and Cooperatives, Kuala Lumpur, Malaysia. Vol 2 (I-Z) p 1700

Chai, P. P. K. (Ed), et al, 2000, A checklist of Flora, Fauna, Food and Medicinal Plants. Lanjak Entimau Wildlife Sanctuary, Sarawak. Forestry Malaysia & ITTO. p 159

Chiang Mai University Vol. 4 , 1964, bio1080uu, Table 6 p 70

Chin, H. F., 1999, Malaysian Vegetables in Colour. Tropical Press. p 96

Ching, L. S. & Mohamed, S., 2001, Alpha-Tocopherol Content in 62 Edible Tropical Plants. J. Agric. Food Chem. 2001, 49, 3101−3105

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 987

Etherington, K., & Imwold, D., (Eds), 2001, Botanica's Trees & Shrubs. The illustrated A-Z of over 8500 trees and shrubs. Random House, Australia. p 511

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 153

Flora 25(Beibl. 2):55. 1842

Foo, J.T.S.(ed), 1996, A Guide to Common Vegetables. Singapore Science Foundation. p 88

Food Composition Tables for use in East Asia FAO http://www.fao.org/infoods/directory No. 635

Hanum, F. I., 1999, Plant Diversity and Conservation Value of Ayer Hitam Forest, Selangor, Peninsula Malaysia. Pertanika J. Trop. Agric. Sci. 22(2):73-83

Hariyadi, B., 2008, The Entwined Tree: Traditional Natural Resource Management of Serampas, Jambi, Indonesia. Ph. D thesis. Univ. or Hawaii. p 444

Hopkins, 1992, Flora Malesiana ser 1, 11(1) p 198

Jacquat, C., 1990, Plants from the Markets of Thailand. D.K. Book House p 41

Japanese International Research Centre for Agricultural Science www.jircas.affrc.go.jp/project/value_addition/Vegetables

Jiwajinda, S., et al, 2002, Suppressive Effects of Edible Thai Plants on Superoxide and Nitric Oxide Generation. Asian Pacific Journal of Cancer Prevention, Vol 3, 2002

Kew Plants of the World Online

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1829

Lembogi Biologi Nasional, 1980, Sayur-sayuran. Balai Pustaka, Jakarta. p 88

Macmillan, H.F. (Revised Barlow, H.S., et al) 1991, Tropical Planting and Gardening. Sixth edition. Malayan Nature Society. Kuala Lumpur. p 327

Maisuthisakul, P., 2012, Phenolic Constituents and Antioxidant Properties of some Thai Plants. Chp. 9 in Book Phytochemicals - A Global Perspective of Their Role in Nutrition and Health

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 200

Martin, F. W., et al, 1987, Perennial Edible Fruits of the Tropics. USDA Handbook 642 p 35

McMakin, P.D., 2000, Flowering Plants of Thailand. A Field Guide. White Lotus. p 53

Menninger, E.A., 1977, Edible Nuts of the World. Horticultural Books. Florida p 98

Nakahara, K. et al, 2002, Antimutagenicity of Some Edible Thai Plants, and a Bioactive Carbazole Alkaloid, Mahanine, Isolated from Micromelum minutum. Journal of Agricultural and Food Chemistry. 50: 4796-4892

Neilsen, 1992, Flora Malesiana ser 1 Vol 11(1) p 198

Ochse, J.J. et al, 1931, Vegetables of the Dutch East Indies. Asher reprint. p 404

Ong, H., et al, 2012, Traditional knowledge and usage of edible plants among the Semai community of Kampung Batu 16, Tapah, Perak, Malaysia. Scientific Research and Essays Vol. 7(4), pp. 441-445, 30 January, 2012

Owen, S., 1993, Indonesian Food and Cookery, INDIRA reprints. p 78

Pawera, L., et al, 2020, Wild Food Plants and Trends in Their Use: From Knowledge and Perceptions to Drivers of Change in West Sumatra, Indonesia, Foods. 2020, 9, 1240

PROSEA handbook Volume 13 Spices. p 279 and p 278 (As Parkia harbesonii)

Sakunpak, A. & Panichayupakaranant, P., 2012, Antibacterial activity of Thai edible plants against gastrointestinal pathogenic bacteria and isolation of a new broad spectrum antibacterial polyisoprenylated benzophenone, chamuangone. Food Chemistry 130 (2012) 826–831

Saw, L.G., LaFrankie, J. V. Kochummen, K. M., Yap S. K., 1991, Fruit Trees in a Malaysian Rain Forest. Economic Botany, Vol. 45, No. 1, pp. 120-136

Siong, K. H., 2003, Indigenous Fruits of Sarawak. ITTO & Sarawak Forest Department. p 78

Slik, F., www.asianplant.net

Solomon, C., 2001, Encyclopedia of Asian Food. New Holland. p 210, 271

Staples, G.W. and Herbst, D.R., 2005, A tropical Garden Flora. Bishop Museum Press, Honolulu, Hawaii. p 334

Full reference list (10 more) at https://www.echocommunity.org/en/resources/105e6b0d-12e4-4e09-83c9-06314db5893e

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/105e6b0d-12e4-4e09-83c9-06314db5893e