PLANT FACT SHEET

Archidendron jiringa (Jack) I.C.Nielsen

GENUS *Archidendron* **FAMILY** Fabaceae

COMMON NAMES Jengkol, Jiringa

EDIBLE PARTS AND USES

Edible parts: Pods - flavouring, Shoots, Seeds, Spice, Leaves, Vegetable

The seeds are also eaten raw and as a side dish with hot curry. Sometimes the water is changed.
The seeds are boiled or roasted and eaten. They are used as a flavouring for food.
The young shoots and pods are also eaten.
A relish is made from thinly sliced nuts.
They are also boiled or fried and used as a vegetable.
It is also pounded flat, sun dried and deep fried.
Caution: Excessive consumption of seeds can affect the kidneys.

DESCRIPTION

A shrub or tree. It can grow to 21 m high. The trunk can be 60 cm across. The branches are round but with ridges down the stem from the leaf scars. The leaf stalk is 2-7 cm long. The leaves are compound with one pair of primary branches and 2 or 3 pairs of leaflets along these. The leaflets are oval and 5.5-20.5 cm long by 2.4-7 cm wide. The flower clusters have 4-7 flowers on one long stalk. They are cream to white with 5 flower parts and both sexes. The fruit is a pod which is dark brown and twisted into a wide spiral or circle. This is about 11 cm across. The pod is deeply lobed between the seeds. The pod is woody and 20-25 cm long by 5 cm across. It opens along the centre. The seeds are dark brown and 3-3.5 cm across. They are 1-1.5 cm thick.

HABITAT

A tropical plant. It grows in rainforest including re-growth. It can grow on sand or clay soils. It occurs from sea level up to 1,000 m altitude or sometimes 1600 m in Java.

PRODUCTION

Cultivation

The trees are grown from seed planted in the location where they are to grow. A spacing of 10-15 m is suitable.

Harvesting and Seed Production

It flowers and fruits throughout the year. It takes 40-50 days from flowering to mature fruit. A mature tree produces 1,000-4,000 seeds per year.

NOTES

The seeds can contain djenkol acid which is poisonous. There are 90 Archidendron species. Also as Mimosaceae.

PICTURES



Credit: Food Plants International (Bruce French)



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REFERENCES

Adansonia ser. 2, 19:32. 1979

Altschul, S.V.R., 1973, Drugs and Foods from Little-known Plants. Notes in Harvard University Herbaria. Harvard Univ. Press. Massachusetts. no. 1552 (As Zygia jiringa)

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 352

Arora, R. K., 2014, Diversity in Underutilized Plant Species - An Asia-Pacific Perspective. Bioversity International. p 100, 108

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 1792 (As Pithecellobium jiringa)

Chiang Mai University Vol. 4 , 1964, bio1080uu, Table 6 p 69

Coronel, R.E., 1982, Fruit Collections in the Philippines. IBPGR Newsletter p 8 (As Pithecellobium jiringa)

Food Composition Tables for use in East Asia FAO http://www.fao.org/infoods/directory No. 363 (As Pithecellobium jiringa)

Gardner, S., et al, 2000, A Field Guide to Forest Trees of Northern Thailand, Kobfai Publishing Project. p 162

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 506 (As Pithecellobium lobatum)

G. King, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 66(2):267. 1897 (As Pithecellobium jiringa)

Jacquat, C., 1990, Plants from the Markets of Thailand. D.K. Book House p 40

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

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1792 (As Pithecellobium jiringa)

Lembogi Biologi Nasional, 1980, Sayur-sayuran. Balai Pustaka, Jakarta. p 34 (As Pithecellobium jiringa)

Macmillan, H.F. (Revised Barlow, H.S., et al) 1991, Tropical Planting and Gardening. Sixth edition. Malayan Nature Society. Kuala Lumpur. p 322

Martin, F. W., et al, 1987, Perennial Edible Fruits of the Tropics. USDA Handbook 642 p 35 (As Pithecellobium lobatum)

Menninger, E.A., 1977, Edible Nuts of the World. Horticultural Books. Florida p 99 (As Pithecellobium jiringa)

Menninger, E.A., 1977, Edible Nuts of the World. Horticultural Books. Florida p 99 (As Pithecellobium lobatum)

Milow, P., et al, 2013, Malaysian species of plants with edible fruits or seeds and their evaluation. International Journal of Fruit Science. 14:1, 1-27 (Also as Pithecellobium jiringa Prain)

Murakami, A. et al, 2014, Screening for the In Vitro Anti-tumor-promoting Activities of Edible Plants from Malaysia. Bioscience, Biotechnology, and Biochemistry, 64:1, 9-16.

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

Nielsen, 1992, Mimosaceae. Flora Malesiana ser 1, 11(1) p 106

Ochse, J.J. et al, 1931, Vegetables of the Dutch East Indies. Asher reprint. p 425 (As Pithecolobium lobatum)

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

Ong, H.C. et al, 2012, Traditional knowledge and usage of edible plants among the Temuan villagers, Malaysia. Indian Journal of Traditional Knowledge. 11(1) pp 161-165

Pitojo, S., 1992, Jengkol. Budidaya dan pemanfaatannya. Pernerbit Kanisius. (As Pithecellobium jiringa)

PROSEA handbook Volume 13 Spices. p 274

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

Sangdad Publishing. Illustrated Book for Teaching Aid (Thai/English) Fruit Vegetables. Jiringa. p 66

Seidemann J., 2005, World Spice Plants. Economic Usage, Botany, Taxonomy. Springer. p 49

Shin, T., et al, 2018, Traditional knowledge of wild edible plants with special emphasis on medicinal uses in Southern Shan State, Myanmar. Journal of Ethnobiology and Ethnomedicine (2018) 14:48

Siemonsma, J. S. and Piluek, K. (Eds), 1994, Plant Resources of South-East Asia No. 8 Vegetables. Prosea Foundation, Bogor, Indonesia, p 89

Siong, K. H., 2003, Indigenous Fruits of Sarawak. ITTO & Sarawak Forest Department. p 80 (As Pithecellbium jiringa)

Slik, F., www.asianplant.net

Solomon, C., 2001, Encyclopedia of Asian Food. New Holland. p 247 (As Pithecellobium lobatum)

Sosef, M. S. M., Hong, L. T., & Prawirohatmodjo, S., (Eds.), 1998, Timber tree: Lesser-known timbers. Plant Resources of South-East Asia, 5(3), p 84

Sutjaritjai, N., et al, 2019, Traditional Uses of Leguminosae among the Karen in Thailand. Plants 2019, 8, 600 p 5

Suwardi, A. B., et al, 2020, Ethnobotany and conservation of indigenous edible fruit plants in South Aceh, Indonesia. Biodiversitas Vol. 21, No. 5, pp 1850-1860

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