PLANT FACT SHEET

Acca sellowiana (Berg.) Burret

GENUS *Acca* **FAMILY** Myrtaceae

COMMON NAMES Pineapple guava, Feijoa

EDIBLE PARTS AND USES

Edible parts: Fruit, Flowers, Vegetable

The fruit are used raw or cooked. They can be used for jellies and sauces.
The flower petals can be eaten raw.

DESCRIPTION

A small spreading tree. It can grow to 3-5 m tall and spread to 5 m wide. The bark is pale grey. The branches are swollen at the nodes. The stems are thin, flexible and with white felted shoots. The leaves are 5-8 cm long with shiny bluish green on the upper surface and silver grey underneath. They are thick and leathery. The flowers are 2-3 cm across and purple and white. They are borne in one or two pairs at the base of the current years growth. The fruit is oblong and dull green with several small seeds inside. Fruit are 2-9 cm long. They can be round or pear shaped. The flesh is creamy white. The petals of the flowers are edible. The fruit is edible. There are usually 20-40 small seeds inside the fruit.

HABITAT

It is a warm temperate and subtropical plant. It suits cool places and can tolerate temperatures below freezing when the plant is in its dormant stage. It needs good drainage but can grow on fairly poor soils. Feijoas prefer cool winters and moderate summers (26° to 32°C), and are generally adapted to areas where temperatures stay above -9°C. They need 50 hours of chilling for good flower production. Fruit taste better in cooler than warmer climate. Plants can tolerate seaside locations. It does best in warm and subtropical zones. They are not well suited to tropical regions. It suits hardiness zones 8-11. In Melbourne Botanical Gardens. In Hobart Botanical gardens. In Brisbane Botanical Gardens.

PRODUCTION

Cultivation

Trees can be grown from seed and transplanted. Seedling trees are not always true to type. Seed is extracted by squeezing fruit into water and letting it ferment for 4 days. Seeds are then strained out and dried. Seed can be stored dry for 12 months. Seeds germinate in 3 weeks. Grafting or cuttings can also be used with some difficulty. Young wood cuttings will root in 2 months with bottom heat and mist. Layering can also be used. Some kinds need to have cross pollination to produce fruit. It does not need any special pruning, although lateral branches can be removed to avoid overcrowding. A spacing of 2 metres is recommended.

Harvesting and Seed Production

Plants grow slowly. Trees start to fruit after 3-4 years. Fruit needs to be stored for a week or more after it falls from the tree, to become fully ripe. Birds and bees pollinate the flowers. Poor fruit bearing is normally the result of poor pollination. Fruit ripen in 4-7 months. Mature fruit can be stored in a refrigerator for about one week. Fruit can be stored at 3-5°C for 2-3 months. Dipping fruit in lemon juice after peeling stops the fruit turning brown.

NOTES

There are 6 Acca species. The fruit of this one has high levels of water soluble iodine. (1.6-4 mg/kg) They are also rich in folic acid. Fruit are high in folates 91µg/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

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 219 (As Feijoa sellowiana)

Arora, R. K., 2014, Diversity in Underutilized Plant Species - An Asia-Pacific Perspective. Bioversity International. p 70 (As Feijoa sellowiana)

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 216 (As Feijoa sellowiana)

Bodkin, F., 1991, Encyclopedia Botanica. Cornstalk publishing, p 470

Brack, P., et al, 2020, Frutas nativas do Rio Grande do Sul, Brasil: riqueza e potencial alimentício.
Native fruits of Rio Grande do Sul, Brazil: richness and potential as food. Rodriguésia 71: e03102018.

Brazil: Biodiversity for Food and Nutrition.
http://www.b4fn.org/countries/brazil/

Brickell, C. (Ed.), 1999, The Royal Horticultural Society A-Z Encyclopedia of Garden Plants. Convent Garden Books. p 63

Burkill, I.H., 1966, A Dictionary of the Economic Products of the Malay Peninsula. Ministry of Agriculture and Cooperatives, Kuala Lumpur, Malaysia. Vol 1 (A-H) p 1014 (As Feijoa sellowiana)

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 9

Cheifetz, A., (ed), 1999, 500 popular vegetables, herbs, fruits and nuts for Australian Gardeners. Random House p 191

Coronel, R.E., 1982, Fruit Collections in the Philippines. IBPGR Newsletter p 9 (As Feijoa sellowiana)

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 82

Etherington, K., & Imwold, D., (Eds), 2001, Botanica's Trees & Shrubs. The illustrated A-Z of over 8500 trees and shrubs. Random House, Australia. p 58

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 157 (As Feijoa sellowiana)

Flowerdew, B., 2000, Complete Fruit Book. Kyle Cathie Ltd., London. p 154

Fouqué, A., 1972, Espèces fruitières d'Amérique tropicale. Institut français de recherches fruitierès outre-mer (ifac)

French, B.R., 1986, Food Plants of Papua New Guinea, A Compendium. Asia Pacific Science Foundation p 296

Gouldstone, S., 1983, Growing your own Food-bearing Plants in Australia. Macmillan p 96 (As Feijoa sellowiana)

Grandtner, M. M. & Chevrette, J.,2013, Dictionary of Trees, Volume 2: South America: Nomenclature, Taxonomy and Ecology. Academic Press p 9

Hackett, C. & J. Carolane. 1982. Edible Horticultural Crops.

Hardwick, G., 2001, Economically Useful Plants for Northern Australia: Master Species List. Crusader eBooks. (As Feijoa sellowiana)

Hermandez Bermejo, J.E., and Leon, J. (Eds.), 1994, Neglected Crops. 1492 from a different perspective. FAO Plant Production and Protection Series No 26. FAO, Rome. p16, 233

Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 577 (As Feijoa sellowiana)

Hunter, D., et al, 2019, The potential of neglected and underutilized species for improving diets and nutrition. Planta (2019) 250:709-729

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 118

John, L., & Stevenson, V., 1979, The Complete Book of Fruit. Angus & Robertson p 131

Kew Plants of the World Online (As Feijoa)

Kinupp, V. F., 2007, Plantas alimenticias nao-convencionais da regiao metropolitana de Porto Alegre, RS, Brazil p 84

Kinupp, V. F. & Bergman, I., 2008, Protein and minerals of native species, potential vegetables and fruits. Cienc.Tecnol. Aliment. Vol. 28 No. 4 Campinas Oct/Dec.

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1772 (As Feijoa sellowiana)

Kunkel, G. Plants for human consumption

Llamas, K.A., 2003, Tropical Flowering Plants. Timber Press. p 282

Morton, Julia F., 1987, Fruits of Warm Climates. Creative Resources Systems, Inc. . p. 367 (As Feijoa sellowiana)

Lorenzi, H., 2002, Brazilian Trees. A Guide to the Identification and Cultivation of Brazilian Native Trees. Vol. 01 Nova Odessa, SP, Instituto Plantarum p 270

Lorenzi, H., Bacher, L., Lacerda, M. & Sartori, S., 2006, Brazilian Fruits & Cultivated Exotics. Sao Paulo, Instituto Plantarum de Estuados da Flora Ltda. p 176

Lyle, S., 2006, Discovering fruit and nuts. Land Links. p 202

Macmillan, H.F. (Revised Barlow, H.S., et al) 1991, Tropical Planting and Gardening. Sixth edition. Malayan Nature Society. Kuala Lumpur. p 314

Martin, F. W., et al, 1987, Perennial Edible Fruits of the Tropics. USDA Handbook 642 p 41

Martin, F.W., C.W. Campbell and R.M. Ruberté, 1987, Perennial edible fruits of the tropics - An inventory. United States Department of Agriculture, Agricultural Research Service, Agriculture Handbook No. 642. Washington, D.C., USA.

Mabberley, D. J., 1990, The plant-book: a portable dictionary of the higher plants. Cambridge University Press. NY.

Miguel, E., et al, 1989, A checklist of the cultivated plants of Cuba. Kulturpflanze 37. 1989, 211-357

Morley, B. & Everard, B., 1970, Wild Flowers of the World. Ebury press. Plate 179

Full reference list (20 more) at https://www.echocommunity.org/en/resources/d4d7fb81-23b0-47cc-ab4f-b264e5a2edbf

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/d4d7fb81-23b0-47cc-ab4f-b264e5a2edbf