

Guava

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This article is about the fruit. For other uses, see [Guava \(disambiguation\)](#).

"Psidium" redirects here. For the thoroughbred racehorse, see [Psidium \(horse\)](#).



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Guava



Apple Guava (*Psidiumguajava*)

Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Rosids
Order:	Myrtales
Family:	Myrtaceae
Subfamily:	Myrtoideae

Tribe:	Myrteae
Genus:	<i>Psidium</i> L. ^[1]
Species	
About 100, see text	
Synonyms ^[2]	
<ul style="list-style-type: none"> • <i>Calyptropsidium</i> O.Berg • <i>Corynemyrtus</i> (Kiaersk.) Mattos • <i>Cuiavus</i> Trew • <i>Episzygium</i> Suess. &A.Ludw. • <i>Guajava</i> Mill. • <i>Guayaba</i> Noronha • <i>Mitropsidium</i> Burret 	

Guavas (singular **guava**, ^[3]/ˈɡuɑː.və/) are [plants](#) in the Myrtle [family](#) ([Myrtaceae](#)) [genus](#) ***Psidium***, which contains about 100 [species of tropical shrubs](#) and small [trees](#). They are native to [Mexico](#), [Central America](#), and northern [South America](#). Guavas are now cultivated and [naturalized](#) throughout the [tropics](#) and [subtropics](#) in [Africa](#), [South Asia](#), [Southeast Asia](#), the [Caribbean](#), subtropical regions of [North America](#), [Hawaii](#), [New Zealand](#), [Australia](#) and [Spain](#).

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Types[\[edit\]](#)



Apple Guava (*Psidium guajava*) flower

The most frequently eaten species, and the one often simply referred to as "the guava", is the Apple Guava (*Psidium guajava*).^[*citation needed*] Guavas are typical *Myrtoideae*, with tough dark *leaves* that are opposite, simple, elliptic to ovate and 5–15 centimetres (2.0–5.9 in) long. The *flowers* are white, with five *petals* and numerous *stamens*.

The genera *Accara* and *Feijoa* (= *Acca*, Pineapple Guava) were formerly included in *Psidium*.^[*citation needed*]

Common names[*edit*]

The term "guava" appears to derive from *Arawak* *guayabo* "guava tree", via the *Spanish* *guayaba*. It has been adapted in many European and Asian languages, having a similar form.

Another term for guavas is *pera*, derived from *pear*. It is common around the western *Indian Ocean* and probably derives from Spanish or Portuguese. In the *Indian subcontinent* and *Middle-East*, guava is also called *amrood*, possibly a variant of *armoot* meaning "pear" in Arabic and Turkish languages.

In *Egypt*, it is called *gawafa*.

Ecology[*edit*]

Psidium species are used as food plants by the *caterpillars* of some *Lepidoptera*, mainly *moths* like the Ello Sphinx (*Erinnyis ello*), *Eupseudosoma aberrans*, *E. involutum*, and *Hypercompe icasia*. *Mites* like *Pronematus pruni* and *Tydeus munsteri* are known to *parasitize* the Apple Guava (*P. guajava*) and perhaps other species. The *bacterium* *Erwinia psidii* causes rot diseases of the Apple Guava.

The fruit is not only relished by humans, but by many *mammals* and *birds* as well. The spread of introduced guavas owes much to this fact, since animals eat the fruit and disperse the seeds in their droppings.

In several tropical regions, including *Hawaii* and *Florida*, some species (namely Strawberry Guava, *P. littorale*, and to a lesser extent Apple Guava) have become *invasive species*. On the other hand, several species have become very rare due to *habitat destruction* and at least one (Jamaican Guava, *P. dumetorum*), is already *extinct*.

Guava wood is used for meat *smoking* in Hawaii and is used at *barbecue* competitions across the *United States*. In *Cuba* and *Mexico* the leaves are used in barbecues.

Fruit[*edit*]



Ripe apple guavas for sale in [Bangalore, India](#)

Guava fruit, usually 4 to 12 centimetres (1.6 to 4.7 in) long, are round or oval depending on the species. They have a pronounced and typical fragrance, similar to [lemon](#) rind but less sharp. The outer skin may be rough, often with a bitter taste, or soft and sweet. Varying between species, the skin can be any thickness, is usually green before maturity, but becomes yellow, maroon, or green when ripe. The pulp inside may be sweet or sour, and off-white ("white" guavas) to deep pink ("red" guavas). The seeds in the central pulp vary in number and hardness, depending on species.

Range[\[edit\]](#)

Guavas are cultivated in many tropical and subtropical countries. Several [species](#) are grown commercially; apple guava and its [cultivars](#) are those most commonly traded internationally.

Mature trees of most species are fairly cold-hardy and can survive temperatures slightly colder than 25 °F (−4 °C) for short periods of time, but younger plants will likely freeze to the ground.^[4] Guavas are grown in South Florida as far north as Sarasota, on the west coast, and Fort Pierce, on the east coast. However, they are a primary host of the Caribbean Fruit Fly and must be protected against infestation in areas of Florida where this pest is present.^[5]

Guavas are also of interest to home growers in temperate areas. They are one of the few tropical fruits that can grow to fruiting size in pots indoors. When grown from seed, guavas can bear fruit as soon as two years, or as long as eight years.

Culinary uses[\[edit\]](#)

In Mexico, the guava [aguafresca](#) beverage is popular. The entire fruit is a key ingredient in punch, and the juice is often used in culinary sauces (hot or cold), as well as artisan candies, dried snacks, fruit bars, desserts, or dipped in [Chamoy](#). *[Pulque de Guava](#)* is a popular blend of the native alcoholic beverage.

In many countries, guava is eaten raw, typically cut into quarters or eaten like an apple, whereas in other countries it's eaten with a pinch of salt and pepper, [cayenne powder](#) or [amix of spices \(masala\)](#). It is known as the winter [national fruit](#) of Pakistan. In the Philippines, ripe guava is used in cooking [sinigang](#). Guava is a popular snack in Taiwan, sold on many street corners and night markets during hot weather, accompanied by packets of dried plum powder mixed with sugar and salt for dipping. In east Asia, guava is commonly eaten with sweet and sour dried plum powder mixtures. Guava juice is popular in many countries. The fruit is also often prepared in fruit salads.

Because of its high level of [pectin](#), guavas are extensively used to make candies, [preserves](#), [jellies](#), [jams](#), and [marmalades](#) (such as Brazilian [goiabada](#) and Colombian and Venezuelan [bocadillo](#)), and also for juices and [aguasfrescas](#) or may be used in a marmalade jam on toast.

Red guavas can be used as the base of salted products such as sauces, substituting for [tomatoes](#), especially to minimize acidity. A drink may be made from an [infusion](#) of guava fruits and leaves which in Brazil is called chá-de-goiabeira, i.e. "tea" of guava tree leaves, considered medicinal.

Nutritional value^[edit]

Guavas, common	
Nutritional value per 100 g (3.5 oz)	
<u>Energy</u>	285 kJ (68 kcal)
<u>Carbohydrates</u>	14.32 g
<u>Sugars</u>	8.92 g
<u>Dietary fiber</u>	5.4 g
<u>Fat</u>	0.95 g
<u>Protein</u>	2.55 g
<u>Vitamins</u>	
<u>Vitamin A equiv.</u>	(4%)
<u>beta-carotene</u>	31 µg
	(3%)
	374 µg
<u>Thiamine (B1)</u>	(6%)
	0.067 mg
<u>Riboflavin (B2)</u>	(3%)
	0.04 mg
<u>Niacin (B3)</u>	(7%)

	1.084 mg
Pantothenic acid (B5)	(9%)
	0.451 mg
<u>Vitamin B6</u>	(8%)
	0.11 mg
<u>Folate (B9)</u>	(12%)
	49 µg
<u>Vitamin C</u>	(275%)
	228.3 mg
<u>Vitamin K</u>	(2%)
	2.2 µg
<u>Trace metals</u>	
<u>Calcium</u>	(2%)
	18 mg
<u>Iron</u>	(2%)
	0.26 mg
<u>Magnesium</u>	(6%)
	22 mg
<u>Manganese</u>	(7%)
	0.15 mg
<u>Phosphorus</u>	(6%)
	40 mg
<u>Potassium</u>	(9%)
	417 mg

Sodium	(0%) 2 mg
Zinc	(2%) 0.23 mg
Other constituents	
Lycopene	5204 µg
Link to USDA Database entry	
<ul style="list-style-type: none"> • Units • µg = micrograms • mg = milligrams • IU = International units 	
<p>Percentages are roughly approximated using US recommendations for adults.</p> <p>Source: USDA Nutrient Database</p>	

Guavas are rich in [dietary fiber](#) and [vitamin C](#), with moderate levels of [folic acid](#). Having a generally broad, low-calorie profile of [essential nutrients](#), a single common guava (*P. guajava*) fruit contains about four times the amount of vitamin C as an orange.^[6]

However, nutrient content varies across guava [cultivars](#). Although the [strawberry guava](#) (*P. littorale* var. *cattleianum*) has about 25% of the amount found in more common varieties, its total vitamin C content in one serving (90 mg) still provides 100% of the [Dietary Reference Intake](#).^[7]

Guavas contain both [carotenoids](#) and [polyphenols](#) like (+)-[galocatechin](#),^[8] [guaijaverin](#), [leucocyanidin](#) and [amritoside](#)^[9]—the major classes of [antioxidant pigments](#) – giving them relatively high potential [antioxidant](#) value among plant foods.^[10] As these pigments produce the fruit skin and flesh color, guavas that are red-orange have more pigment content as polyphenol, carotenoid and pro-vitamin A, [retinoid](#) sources than yellow-green ones.^[11]



Green apple guavas are less rich in pigment antioxidants



'Thai maroon' guavas, a red apple guava [cultivar](#),
rich in carotenoids and polyphenols

Potential medical uses[[edit](#)]



This section **needs more [medical references](#) for [verification](#) or relies too heavily on primary sources**. Please review the contents of the section and [add the appropriate references](#) if you can. Unsourced or poorly sourced material may be [removed](#). *(September 2012)*



Since the 1950s, guavas – particularly the [leaves](#) – have been the subject for diverse research on their constituents, [pharmacological](#) properties and history in [folk medicine](#).^[12] Most research, however, has been conducted on apple guava (*P. guajava*), with other species remaining unstudied. From preliminary medical research in laboratory models, [extracts](#) from apple guava leaves or bark are implicated in therapeutic mechanisms against [cancer](#), [bacterial](#) infections, [inflammation](#) and [pain](#).^{[13][14][15]} [Essential oils](#) from guava leaves display anti-cancer activity [in vitro](#).^[16]

Guava leaves are used in [folk medicine](#) as a remedy for [diarrhea](#)^[17] and, as well as the bark, for their supposed [antimicrobial](#) properties and as an [astringent](#). Guava leaves or bark are used in traditional treatments against [diabetes](#).^{[18][19][20]} In [Trinidad](#), a tea made from young leaves is used for diarrhea, [dysentery](#) and fever.^[21]

Selected species^[edit]



Yellow-fruited Cherry Guava, (sometimes called Lemon Guava) *Psidium littorale* var. *littorale*



Strawberry Guava, *Psidium littorale* var. *cattleianum*



Shedding bark of Guava tree

- *Psidium alexicaule*

Footnotes^[edit]

1. **Jump up**[^] "[Genus: *Psidium* L.](#)". *Germplasm Resources Information Network*. United States Department of Agriculture. 2009-01-27. Retrieved 2010-03-03.
2. **Jump up**[^] "[World Checklist of Selected Plant Families](#)".
3. **Jump up**[^] "[Cambridge Advanced Learner's Dictionary & Thesaurus](#)". [Cambridge University Press](#). Retrieved 20 August 2012.
4. **Jump up**[^] Julian W. Sauls (December 1998). "[HOME FRUIT PRODUCTION-GUAVA](#)". *Texas A&M Horticulture program*. Retrieved 2012-04-17.
5. **Jump up**[^] Boning, Charles R. (2006). *Florida's Best Fruiting Plants: Native and Exotic Trees, Shrubs, and Vines*. Sarasota, Florida: Pineapple Press, Inc. p. 99.[ISBN 1561643726](#).
6. **Jump up**[^] Nutritiondata.com. "[Nutrition facts for common guava](#)". Retrieved August 17, 2010.
7. **Jump up**[^] Nutritiondata.com. "[Nutrition facts for strawberry guava](#)". Retrieved August 17, 2010.
8. **Jump up**[^] Identification of (+)-galocatechin as a bio-antimutagenic compound in *Psidium guava* leaves. Tomoaki Matsuo, Norifumi Hanamura, Kayoko Shimoi, Yoshiyuki Nakamura and Isao Tomita, *Phytochemistry*, Volume 36, Issue 4, July 1994, Pages 1027-1029, [doi:10.1016/S0031-9422\(00\)90484-9](#)
9. **Jump up**[^] Polyphenols of the leaves of *psidium guava*—quercetin, guaijaverin, leucocyanidin and amritoside. T.R. Seshadri and Krishna Vasishtha, *Phytochemistry*, Volume 4, Issue 6, 1965, Pages 989-992, [doi:10.1016/S0031-9422\(00\)86281-0](#)
10. **Jump up**[^] Jiménez-Escrig *et al.* (2001), Hassimotto *et al.* (2005), Mahattanatawee *et al.* (2006)
11. **Jump up**[^] Wrolstad (2001)
12. **Jump up**[^] Gutiérrez *et al.* (2008)
13. **Jump up**[^] Ojewole (2006)
14. **Jump up**[^] Chen *et al.* (2007)
15. **Jump up**[^] MahfuzulHoque *et al.* (2007)
16. **Jump up**[^] Manosroi *et al.* (2006)
17. **Jump up**[^] Kaljee *et al.* (2004)
18. **Jump up**[^] Oh *et al.* (2005)
19. **Jump up**[^] Mukhtar *et al.* (2006)
20. **Jump up**[^] [\(free registration required\) Anti-Hyperglycemic and Anti-Hyperlipidemic Effects of Guava Leaf Extract](#), Medscape, from [Nutrition and Metabolism](#), Y Deguchi and K Miyazaki, 2010
21. **Jump up**[^] [Mendes 1986](#)), p. 65
22. [^] **Jump up** to:^{a b} "[GRIN Species Records of *Psidium*](#)". *Germplasm Resources Information Network*. United States Department of Agriculture. Retrieved 2011-02-05.

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External links^[edit]

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