

Fig

Scientific name: *Ficus carica* L.
Family: Moraceae
Origin: Western Asia and the Mediterranean

Steeped in the history and ritual of ancient cultures, the fig has endured the test of time as one of the most universally enjoyed fruits. Fig remnants were found in archeological excavations dating back to 5000 BC. Cultivation of the fruit was reported first in ancient Rome, where 29 different types of fig were grown. Believed to be indigenous to Asia Minor, the fig spread beyond the Mediterranean region before recorded history. It reached as far north as England in the early 1500s, when it was already reported as being cultivated in China. Hiram Bingham first reported the fig in Hawai'i in 1825.

Members of the Moraceae family, figs are cousins to the *Artocarpus* species breadfruit and jackfruit.

Cultivars

There are about 1000 cultivars of fig, which are usually distinguished by their size, color of the fruit, and shape of the leaves. The National Clonal Germplasm Repository in Davis, California, has 140 fig accessions in its collection. In Hawai'i the most common types found are 'Brown Turkey' and 'White Kadota'; some 'Black Mission' figs are found at lower elevations.

Environment

Figs of various types can be cultivated from sea level to over 5000 feet, so the crop has potential to be grown in most of Hawai'i's microclimates. The plant is tolerant of most soils with good drainage. It tolerates drought and some soil salinity but not highly acidic soil.

Horticulture

The fig tree has numerous spreading branches and contains a significant amount of latex, which is an irritant

and may cause skin rash. In Hawai'i the tree grows rapidly and can achieve heights of 30 feet or more. The fruit of older trees is seldom harvested due to the height of the branches. These trees can be cut back to within a few feet above the soil.

In many regions where figs are grown the trees are pruned severely after harvest. In Hawai'i, branches can be cut back to the first node, and new growth will appear within a month after pruning. Pruning should be done after each harvest. The tree can be pruned as an espalier or kept very low to the ground. In Hawai'i's lower elevations, with irrigation, fruit forms continuously throughout the year, and pruning should be frequent, with the trees shaped to facilitate harvesting. Although not necessary, irrigation at lower elevations will increase production: a ½-gallon/hour emitter for 10 minutes a day in the early morning ensured constant production at a site at 430 feet elevation. At elevations above 900 feet, the tree usually produces one or two crops per year. At mid-elevations, 600-900 feet, it will produce two or more crops per year, while at lower elevations production is continuous.

Pests and diseases

In Hawai'i the most common problem is bird damage. Mylar tape, Christmas tinsel, and other reflective materials such as aluminum pie pans or used CDs are all effective in reducing damage. Protective fruit wrapping as the fig develops is also effective, but increased heat inside the wrappings can cause the fruit to ripen prematurely. Wrapping growing figs in newspaper was a common practice in Hawai'i during the early 1900s. Figs are a fruit fly host, with 'Brown Turkey' being less

susceptible than 'White Kadota'. Following the Hawai'i Area-Wide Fruit Fly Pest Management Program recommendations is advisable. The mango flower beetle (*Protaetia fusca*) may also feed on ripe figs. Plant disease pathogens that affect fig in Hawai'i are *Alternaria tenuis*, which appears as brown to black spots on the fruit, and *Aspergillus* sp. (black mold) and *Fusarium* sp. (soft rot), which occur especially as postharvest problems.

Food uses and nutrition

Figs are high in fiber, which is good for lowering blood pressure and controlling cholesterol. Being high in fiber,



'Brown Turkey'

they also give a feeling of fullness and are good for diets. Figs are a good source of potassium and vitamin B_6 .

Nutritional value per 100 g of edible portion*

	Fresh	Dried
Calories	. 51–80	. 274
Moisture	. 77.5–86.8 g	23.0 g
Protein	. 0.69–1.3 g	4.3 g
	. 0.14–0.30 g	
Carbohydrates	. 12.96–20.3 g	. 69.1 g
Fiber	. 0.89–2.2 g	. 5.6 g
	. 0.41– 0.85 g	
Calcium	. 28–78.2 mg	. 126 mg
Phosphorus	. 21–32.9 mg	. 77 mg
	. 0.6–4.09 mg	
	. 2.0–3 mg	
	. 188–194 mg	_
Magnesium	. 16 mg	_
Carotene	. 0.013–0.195 mg	. —
Vitamin A	. 20–270 I.U	. 80 I.U.
Thiamine	. 0.034–0.06 mg	0.10 mg
Riboflavin	. 0.039–0.079 mg	0.10 mg
Niacin	. 0.32–0.412 mg	0.7 mg
Ascorbic acid	. 2–17.6 mg	. 0 mg
Citric acid		-
Vitamin B ₆	0.11–0.18 mg	

*Values compiled from various sources

Recipe: Fig and feta gau gee and wontons *Ken Love*

Ingredients: 6 ripe 'Brown Turkey' figs

4 oz crumbled feta cheese 1 T finely chopped garlic Fresh ground pepper

1 package wonton wrappers

Wash and cut off stem end of figs. Put figs, cheese, and garlic into food processor or blender and pulse slowly. Texture should be slightly lumpy and not liquid. Season with a pinch of fresh ground pepper.

Spread about 1 teaspoon of the mixture onto a wonton and fold to desired shape. Dampen edges of the wonton so it sticks together. Deep-fry wontons until golden brown. Makes about 50 pieces. You can also add finely chopped fresh spinach and cooked rice or orzo pasta to the mixture if desired. You can also steam the wontons or form them into shumai.

Serve with sweet and sour dipping sauce or spicy chili sauce.

