

Perilla

This article is about perilla as herb and spice. For the cultivated species more broadly, see *Perilla frutescens*. For the genus including wild species, see *Perilla* (genus). For other uses, see *Perilla* (disambiguation).

Perilla is the common name for a herb of the mint family, Lamiaceae. Though known to several cultures by different names, the disparate varieties are now classified under the single species *Perilla frutescens*.

The overall plant resembles the stinging nettle, though the leaves are somewhat rounder.

Culinary overview

Korean cuisine uses green leaves of the oilseed variety, which have a flavor different from *shiso*. It also uses the perilla seeds, known as "wild sesame", a source of perilla oil rich in ALA omega-3 fatty acids.

The flowers, fruits, and seeds of *shiso* are used as a condiment or spice in Japan.

Cultivation

In temperate climates, the plant is self-sowing, but the seeds are not viable after long storage, and germination rates are low after a year.

Perilla frutescens has been widely naturalized in parts of the United States and Canada, from Texas and Florida north to Connecticut and into Ontario, and west to Nebraska. It can be weedy or invasive in some of these regions.^[1]

The weedy types have often lost the characteristic *shiso* fragrance and are not suited for eating (cf. perilla ketone). Also, the red leaves are not ordinarily served raw.

China

Perilla is called *zisu* (simplified Chinese: 紫苏; traditional Chinese: 紫蘇; pinyin: *zǐsū*) in Chinese and is traditionally used in Chinese medicine, and has been shown to stimulate interferon activity^[2] and thus, the body's immune system. It is used to ease the symptoms of the common cold. It is fried in oil with garlic or ginger in the wok, and eaten as a dish with meals. The *sū* in its name (formed by addition of the herb radical to a homophone meaning "revive") was the namesake for Mount Gusu, the peak which gave Suzhou its name. The Manchurian festival of Food Extermination Day (绝粮日) calls for perilla to be eaten by bannermen.



Shiso leaves are sometimes called perilla leaves, but so are the similar looking but differently flavored "sesame leaves" of Korea (see below)

Japan

Main article: shiso

The Japanese name for the variety of perilla normally used in Japanese cuisine (*Perilla frutescens* var. *crispa*) is *shiso* (紫蘇Help:Installing Japanese character sets). This name is already commonplace in US mass media's coverage of Japanese restaurants and cuisine. The Japanese call the green type *aojiso* (青紫蘇Help:Installing Japanese character sets), or *ooba* ("big leaf"), and often eat the fresh leaves with sashimi (sliced raw fish) or cut them into thin strips in salads, spaghetti, and meat and fish dishes. It is also used as a savory herb in a variety of dishes, even as a pizza topping (initially it was used in place of basil). In the summer of 2009, Pepsi Japan released a new seasonal flavored beverage, Pepsi Shiso.^[3]



Perilla leaves also occur in red varieties, (*akajiso*), and the flower stalks are used as garnish as well

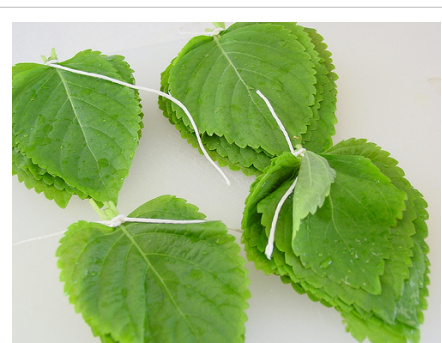
The purple form is called *akajiso* (赤紫蘇Help:Installing Japanese character sets, red *shiso*), and is used to dye *umeboshi* (pickled *ume*) red or combined with *ume* paste in sushi to make *umeshiso maki*. It can also be used to make a sweet, red juice to enjoy during summer.

An inflorescence of *shiso*, called *hojiso* (ear *shiso*), is typically used as garnish on a sashimi plate; the individual flowers can be stripped off the stem using the chopstick, adding its flavor to the soy sauce dip. The fruits of the *shiso* (*shiso-no-mi*), containing fine seed (mericarp) about 1mm or less in diameter (about the size of mustard seed), can be preserved in salt and used as a spice or condiment. Young leaves and flower buds are used for pickling in Japan and Taiwan.

The other type of edible perilla (*Perilla frutescens* var. *frutescens* or var. *japonica*) called *egoma* (荳胡麻Help:Installing Japanese character sets) is of limited culinary importance in Japan, though this is the variety commonly used in nearby Korea. The cultivar is known regionally as *jūnen* in the Tohoku (northeast) regions of Japan. The term means "ten years", supposedly because it adds this many years to one's life-span. A local preparation in Fukushima prefecture, called *shingorō*, consists of half-pounded unsweet rice patties, which are skewered, smeared with *miso* blended with roasted and ground *jūnen* seeds, and roasted over charcoal. The oil pressed from this plant was once used to fuel lamps in the Middle Ages. The warlord Saitō Dōsan, who started out in various occupations, was a peddler of this type of oil, rather than the more familiar rapeseed oil, according to a story by historical novelist Ryōtarō Shiba.

Korea

The plant's Korean name is *deulkkae* or *tŭlkkae* (들깨). The same word is also used when referring to its seed, which has many uses in Korean cuisine, just as the leaves (*ggaennip*, 깻잎) do. The literal translations of *deulkkae* ("wild sesame") and *ggaennip* ("sesame leaf") are in spite of perilla's not being closely related to sesame, and Korean cookbooks translated into English sometimes use these translations. Cans of pickled *ggaennip* can be found in Korean grocery stores all over the world, with some ground red pepper between every two leaves in the can. The leaves' essential oils provide their strong taste. Fresh leaves have an aroma reminiscent of apples and mint, and are eaten in salad dishes and with roasted meat. The flavor is distinct from Japanese



Korean perilla leaves used as a side dish

perilla, and the leaf appearance is different, as well – larger, rounder, flatter, with a less serrated edge, and often a violet coloring on the reverse side. Perilla oil (*deulgireum*, 들기름) is extracted from the seeds; the cake can be used as animal feed. Perilla oil has a rich taste and scent slightly resembling dark sesame oil (*chamgireum*, 참기름). Perilla seed can be cooked with meals, roasted, crushed to intensify its taste and/or mixed with sesame and salt.

Laos

The purple leaves, called *pak maengda* (ພາກມ່ອງດາ), are strong in fragrance, but not ruffled. Lao also used them for Lao rice vermicelli, *khao poon* (ຫາວປ່ອນ), which is very similar to the Vietnamese *bún*. They are used as part of the dish for their fragrance.

Vietnam

Main article: Vietnamese perilla

Vietnamese cuisine uses a variety similar to the Japanese *hojiso*, but with greenish bronze on the top face and purple on the opposite face. The leaves are smaller and have a much stronger fragrance than *hojiso*. In Vietnamese, it is called *tía tô*, derived from the characters (紫蘇) whose standard pronunciation in Vietnamese is *từ tô*. It is usually eaten as a garnish in rice vermicelli dishes called *bún* and a number of stews and simmered dishes.

South Asia

In Nepal, Kumaun and parts of India, it is called *silam* (सलिम) and Bhangira. Its seeds are roasted and ground with salt, chillies and tomatoes to make a savoury dip/side dish or chutney.

Chemistry

For further details, see Perilla (genus)#Chemistry or Perilla frutescens#Foliage

In terms of dietary compounds in the plant, the pronounced flavor and aroma of *shiso* derives from perillaldehyde, but this substance is lacking in the "wild sesame" and "sesame leaf" variety. Other aromatic essential oils present are limonene, caryophyllene, and farneseneWikipedia:Citation needed.

Perilla oil is a very rich source of the essential nutritional omega-3 fatty acid alpha-linolenic acid, and its use as an edible oil is more for its medicinal benefit than its flavor.

Many forms are rich in perilla ketone, which is a potent lung toxin to some livestock, though effects on humans remains to be studied.

The artificial sweetener perillartine can be synthesized from perillaldehyde, but it is used in Japan only for sweetening tobacco, despite being 2000 times sweeter than sucrose, owing to its bitterness and aftertaste, and insolubility in water.^[4]



Silam plant in Panchkhal, Nepal

Nutritional value

Perilla leaves are rich in dietary fiber, dietary minerals, such as calcium, iron and potassium, and vitamins A, C and riboflavin.^[5] Perilla leaf components are under preliminary research for potential anti-inflammatory properties, and may be used to preserve foods. Wikipedia:Citation needed Perilla seeds, known as "wild sesame", are a source of perilla oil rich in ALA omega-3 fatty acids.

Sources

References

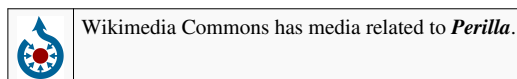
- [1] PLANTS Profile for *Perilla frutescens* (L.) Britton beefsteakplant | USDA Plants (<http://plants.usda.gov/java/profile?symbol=PEFR4#>)
- [2] <http://www.freepatentsonline.com/4419349.html>
- [3] <http://www.japanprobe.com/2009/05/27/pepsi-shiso/>
- [4] citing Kinghorn and Compadre, 2001.
- [5] , p.77

External links

- Duke, James A.; Peggy Duke (1978), "Tempest in the Teapot:Mints" (<http://books.google.co.jp/books?id=LrVLAQAIAAJ>) (snippet), *Revue trimestrielle des recherches sur les matières premières* (Swets & Zeitlinger B.V.) **16**: 77 ; repr. from: *Quart. J. Drug. Res.* 16 (1978), No. 2:71-95
- O'Brien-Nabors, Lyn (2011), *Alternative Sweeteners* (<http://books.google.co.jp/books?id=coDPwzFX7rAC&pg=PA235>) (preview), CRC Press, p. 235, ISBN 9781439846148
- Tucker, Arthur O.; DeBaggio, Thomas (2009), *The Encyclopedia of Herbs: a comprehensive reference to herbs of flavor and* (http://books.google.co.jp/books?id=7_KPgxEgIHAC&pg=PA389) (preview), Timber Press, p. 389, ISBN 978-0-88192-994-2
- Yu, He-Ci; Kosuna, Kenichi; Haga, Megumi (1997), *Perilla: the genus Perilla* (<http://books.google.co.jp/books?id=M5A71gsWUkC>) (preview), Medicinal and aromatic plants--industrial profiles **2**, CRC Press, ISBN 9057021714

Websites

- David Brenner (1995). "Perilla" (<http://www.hort.purdue.edu/newcrop/cropfactsheets/perilla.pdf>). *Purdue University NewCrop Fact Sheet*. Retrieved 2009-04-04.
- Gernot Katzer (September 19, 2006). "Perilla (*Perilla frutescens*) L. Britton" (http://gernot-katzers-spice-pages.com/engl/Peri_fru.html). *Spice Pages*. Retrieved 2012-12-02.
- "Perilla (Japanese, Vietnamese and Korean Shi-So, Zi Su, Beefsteak)" (<http://evergreenseeds.stores.yahoo.net/perjapshis.html>). Evergreen Seeds. Retrieved 2006-11-17. Commercial seed house with pictures of different perilla varieties



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