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# Perilla frutescens - (L.)Britton.

Common Name	Shiso, Beefsteakplant, Spreading Beefsteak Plant
Family	Lamiaceae or Labiatae
Synonyms	P. ocimoides. L.
Known Hazards	There have been cases of toxicity, including dermatitis, pulmonary oedema, respiratory distress and even death following ingestion by cattle and horses[274].
Habitats	Hills and mountains of central and southern Japan[58]. Sunny and fertile situations in China[147].
Range	E. Asia - China, Japan, India.
Edibility Rating	***
Medicinal Rating	***
Care	<b>*</b> 3 ♦ 🌣

# **Summary**

Bloom Color: White. Main Bloom Time: Early summer, Late summer, Mid summer. Form: Upright or erect.

# **Physical Characteristics**



Perilla frutescens is a ANNUAL/PERENNIAL growing to 0.6 m (2ft) by 0.3 m (1ft in) at a fast rate.

It is hardy to zone (UK) 8 and is frost tender. It is in flower from Jul to August. The flowers are hermaphrodite (have both male and female organs)

USDA hardiness zone: 7-10

Suitable for: light (sandy) and medium (loamy) soils and prefers well-drained soil. Suitable pH: acid, neutral and basic (alkaline) soils. It cannot grow in the shade. It prefers moist soil.

### **Habitats**

Cultivated Beds:





http://commons.wikimedia.org/wiki/User:Llez

Infosec - IN861274 -Multiprise . €38,60

Legrand LEG50087 Rallonge ... €35,53

Legrand LEG50095 Rallonge 4 x 2P ... **€23,29** €5,92 / I

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#### **Edible Uses**

Edible Parts: Flowers; Leaves; Oil; Oil; Seed. Edible Uses: Colouring; Condiment; Oil; Oil.

Edible young leaves and seedlings - raw or cooked[46, 116, 178, 183]. The flavour is strange to western palates at first, some people detecting cinnamon, others coriander or citrus[206]. Seedlings are added to salads, older leaves are used as a garnish or flavouring[206]. Older leaves are also salted and used as a condiment for tofu and as a garnish for tempura[183]. Leaves from purple cultivars are used to colour preserved fruits[238]. The leaves can also be dried for later use[206]. The leaves contain about 3.1% protein, 0.8% fat, 4.1% carbohydrate, 1.1% ash[179]. Immature flower clusters are used as a garnish for soups and chilled tofu[183]. Older flower clusters are fried and eaten[183]. The seeds are preserved in salt or are used as a spice in pickles, tempura and miso[183, 206]. They are one of the ingredients in 'Shichimi' or 'seven spice' mixture[206]. The seed can also be eaten cooked[105, 178]. Seeds from purple-leafed forms of the plant are preferred for culinary use[238]. The seed contains about 21.5% protein, 43.4% fat, 11.3% carbohydrate, 4.4% ash[179]. An edible drying oil is obtained from the seed[46, 171, 183, 272]. It is rich in linolenic acid[57]. The plant yields an essential oil which is used as a food flavouring in candies and sauces[183].

#### Medicinal Uses

Plants For A Future can not take any responsibility for any adverse effects from the use of plants. Always seek advice from a professional before using a plant medicinally.

Antiasthmatic; Antibacterial; Antiote; Antipyretic; Antiseptic; Antispasmodic; Antitussive; Aromatic; Carminative; Diaphoretic; Emollient; Expectorant; Pectoral; Stomachic; Tonic.

The leaves, stems and seeds of shiso are often used in Oriental medicine. It is a pungent, aromatic, warming herb that is antibacterial, antidote, antipyretic, antispasmodic, antitussive, aromatic, carminative, diaphoretic, emollient, expectorant, pectoral, stomachic and tonic[116, 147, 174, 176, 218, 238]. The leaves are used in the treatment of colds, chest stuffiness, vomiting, abdominal pain etc[176]. The juice of the leaves is applied to cuts and wounds[272]. The seed is antiasthmatic, antitussive, emollient and expectorant[176]. It is used internally in the treatment of asthma, colds and chills, nausea, abdominal pain, food poisoning and allergic reactions (especially from seafood), bronchitis and constipation[218, 238]. The stems are a traditional Chinese remedy for morning sickness[238].]. This herb should be avoided by pregnant women[222].

#### **Other Uses**

Essential; Oil; Oil.

A drying oil obtained from the seed is used in making paints, varnishes, water proofing etc[46, 57, 105, 171, 238]. The plant yields 0.3 - 1.3% essential oil, which contains 20% citral[240]. It is used as a food flavouring and in dental products[238].



#### **Cultivation details**

Landscape Uses:Border, Container, Specimen. Prefers a light soil[1, 206]. Requires a rich well-drained moisture-retentive soil in full sun[200]. Plants require a well-drained soil but do not need particularly fertile soil[206]. Prefers an acid soil with a pH between 5.5 and 6[206]. The plant is not frost hardy and requires temperatures above 18°b if it is to grow well[206]. The plant requires short days in order to flower[206]. Shiso is often cultivated in the Orient as a food flavouring. There are some named varieties, those with purple leaves being preferred for seed production[183, 206, 238]. Shiso is also cultivated for the oil obtained from its seed[50, 171]. It is sometimes used in sub-tropical bedding schemes in Britain[1]. Special Features:Attractive foliage, Invasive, Naturalizing.

### **Propagation**

Surface-sow or only lightly cover the seed in mid spring in a greenhouse. The seed germinates best at 20°C, though it also succeeds at slightly lower temperatures [206]. Germination is usually quick, prick out the seedlings into trays or individual pots when they are large enough to handle and plant them out into their permanent positions in early summer [200, K]. Give the plants some protection such as a cloche until they are growing away well. The seed has a short viability and should be used when less than a year old [206].

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### **Expert comment**

## Author

(L.)Britton.

### **Botanical References**

58200

### Links / References

[K] Ken Fern Notes from observations, tasting etc at Plants For A Future and on field trips.

[1]F. Chittendon. RHS Dictionary of Plants plus Supplement. 1956

Comprehensive listing of species and how to grow them. Somewhat outdated, it has been replaces in 1992 by a new dictionary (see [200]).

[46] **Uphof. J. C. Th.** Dictionary of Economic Plants.

An excellent and very comprehensive guide but it only gives very short descriptions of the uses without any details of how to utilize the plants. Not for the casual reader.

[50]? Flora Europaea

An immense work in 6 volumes (including the index). The standard reference flora for europe, it is very terse though and with very little extra information. Not for the casual reader.

[57] Schery. R. W. Plants for Man.

Fairly readable but not very comprehensive. Deals with plants from around the world.

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[58]Ohwi. G. Flora of Japan. (English translation)

The standard work. Brilliant, but not for the casual reader.

[105] Tanaka. T. Tanaka's Cyclopaedia of Edible Plants of the World.

The most comprehensive guide to edible plants I've come across. Only the briefest entry for each species, though, and some of the entries are more than a little dubious. Not for the casual reader.

[116] Brooklyn Botanic Garden Oriental Herbs and Vegetables, Vol 39 No. 2.

A small booklet packed with information.

[147]? A Barefoot Doctors Manual.

A very readable herbal from China, combining some modern methods with traditional chinese methods.

[171]Hill. A. F. Economic Botany.

Not very comprehensive, but it is quite readable and goes into some a bit of detail about the plants it does cover.

[174] Kariyone. T. Atlas of Medicinal Plants.

A good Japanese herbal.

[176]Yeung. Him-Che. Handbook of Chinese Herbs and Formulas.

An excellent Chinese herbal giving information on over 500 species. Rather technical and probably best suited to the more accomplished user of herbs.

[178]Stuart. Rev. G. A. Chinese Materia Medica.

A translation of an ancient Chinese herbal. Fascinating.

[179]Reid, B. E. Famine Foods of the Chiu-Huang Pen-ts'ao.

A translation of an ancient Chinese book on edible wild foods. Fascinating

[183] Facciola. S. Cornucopia - A Source Book of Edible Plants.

Excellent. Contains a very wide range of conventional and unconventional food plants (including tropical) and where they can be obtained (mainly N. American nurseries but also research institutes and a lot of other nurseries from around the world.

[200] Huxley. A. The New RHS Dictionary of Gardening. 1992.

Excellent and very comprehensive, though it contains a number of silly mistakes. Readable yet also very detailed.

[206]Larkcom J. Oriental Vegetables

Well written and very informative

[218] Duke. J. A. and Ayensu. E. S. Medicinal Plants of China

Details of over 1,200 medicinal plants of China and brief details of their uses. Often includes an analysis, or at least a list of constituents. Heavy going if you are not into the subject.

[222] Foster. S. & Duke. J. A. A Field Guide to Medicinal Plants. Eastern and Central N. America.

A concise book dealing with almost 500 species. A line drawing of each plant is included plus colour photographs of about 100 species. Very good as a field guide, it only gives brief details about the plants medicinal properties.

[238]Bown. D. Encyclopaedia of Herbs and their Uses.

A very well presented and informative book on herbs from around the globe. Plenty in it for both the casual reader and the serious student. Just one main quibble is the silly way of having two separate entries for each plant.

[240] Chopra. R. N., Nayar. S. L. and Chopra. I. C. Glossary of Indian Medicinal Plants (Including the Supplement).

Very terse details of medicinal uses of plants with a wide range of references and details of research into the plants chemistry. Not for the casual reader.

[272] Manandhar. N. P. Plants and People of Nepal

Excellent book, covering over 1,500 species of useful plants from Nepal together with information on the geography and peoples of Nepal. Good descriptions of the plants with terse notes on their uses.

### Readers comment

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