

***Fuchsia magellanica*: Properties to its Cultivation - A Comprehensive Overview**

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SUMMARY

Fuchsia magellatiica Lam. is a shade-tolerant perennial and popular woody ornamental in many countries of the temperate zone. Its flowers are hermaphroditic, symmetrical, solitary or two, usually hanging, formed by a nectar. There are two lengths for the eight stamens: four that are somewhat longer than the corolla and four that are substantially longer, sometimes reaching the length of the style. The juice from its berries to treat skin ailments, freckles and small blisters and rashes. Leaves are used for treating indigestion, stomach-ache. In vitro regeneration of plantlets from stem nodal is an efficient and rapid strategy for large scale propagation of the plants. *Fuchsia magellanica* plants have a medium growth rate and, once planted, require little maintenance to last for years.

INTRODUCTION

Common name: Fuchsia, Ladys Eardrops, Fuchsia Angel Earrings, Earring Flower, Hardy Fuchsia

Family: Onagraceae

Order: Myrtales

Synonymous: *Fuchsia gracilis*, *Fuchsia macrostemma*, *Fuchsia magellanica* var. *gracilis*, *Fuchsia magellanica* var. *macrostema*, *Fuchsia riccartonii*

Origin: Native to the southern parts of South America (i.e. Argentina and Chile).

Naturalised Distribution

Naturalised in the coastal districts of southern Australia (i.e. in southern Victoria, Tasmania, south-eastern. South Australia and the coastal districts of south-western Western Australia). Possibly also naturalised on the central tablelands of New South Wales. Widely naturalised overseas in Bolivia, the UK, the Azores, the Canary Islands, eastern Africa, La Réunion, New Zealand, Hawaii and western USA (i.e. California and Oregon).

Distribution in India

Chettikulangara, Mavelikara-Kerala; Phalee Manipur; Vannarapettai, Ooty, Tamil Nadu; Gangtok, Sikkim; Sillery Gaon, West Bengal; South Nilgiris, Tamil Nadu

Description

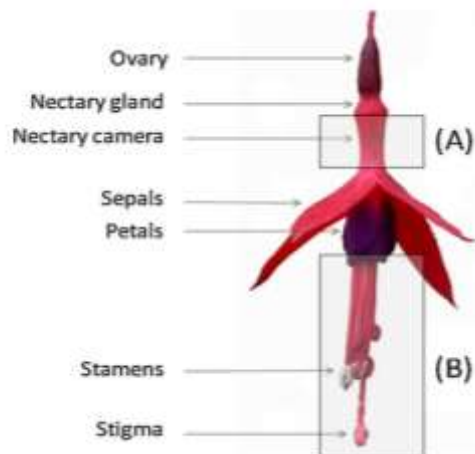
Fuchsia magellatiica Lam. is a shade-tolerant perennial and popular woody ornamental in many countries of the temperate zone. *Fuchsia magellanica* belongs to Onagraceae family, its flowers are hermaphroditic, symmetrical, solitary or two, usually hanging, formed by a nectar. *Fuchsia magellanica* usually grows in clearings and forest margins, especially in mixed evergreen deciduous and coastal forests. At least in the northernmost parts of its range, November through March or April is when the blossoming season occurs. The wild plant grows in rivers and lakes shores or in wet places of the phytogeographic region. The stigma of the protogynous flowers is sticky and receptive from the moment of opening until the anthers have dehisced; the flowers open for an average of six days ($n = 14$ flowers). It is a shrub of 3-5 meters high, with elliptic and opposite composed leaves, characteristic single purple dropping flowers. The plant forms an excellent hedge, particularly in marine environments, because it is exceptionally resistant to salt exposure and can withstand cutting.

Characteristics

The *fuchsia magellanica* is a deciduous shrub that grows uprightly and has reddish-underside lance-shaped leaves. It bears many tiny, tubular, pendant blooms in pink, red, and occasionally white. The blossoms hang beneath the stems of a horizontal branching arrangement. The corolla and petals protrude as the flowers emerge from a deep tube that expands to become pointed petals. Blooms abundantly for a considerable amount of

time, from late spring to late October. Insects fertilize the hermaphrodite blooms, which have both male and female parts. Fruits that are reddish-purple flowers.

There are two lengths for the eight stamens: four that are somewhat longer than the corolla and four that are substantially longer, sometimes reaching the length of the style. Delay in selfing may actually be a strategy to assure fertilization in the event that pollinators do not visit flowers, as anthers and stigma are often only a few millimetres apart and very occasionally come into contact with one another. When fully grown, the elliptical or ovoid fruits of *F. magellanica* measure 20–25 mm in length and 6–8 mm in width ($n = 10$). They are typically dark red in color and contain hundreds of small seeds.



Camera Captured at Darjeeling, West Bengal

The most common flower visitor was *Palaeospheniscus Patagonicus*. Overall, the Hummingbird was the next most common visitor but mostly species was observed only in the forest, with the least visited by Flycatcher.

Although *F. magellanica* is one of the most resilient outdoor fuchsia species, its aboveground sections are susceptible to frost damage or dieback to the ground in the winter, and even on established plants, the new growth that emerges in the spring is delicate to the cold. Plants that exhibit winter dieback may occasionally be able to generate new shoots from subterranean portions in the spring, and plants damaged by frosts typically recover well but do not develop rapidly until late spring or summer, when they blossom. *F. magellanica* does well in fertile, well-drained soil and prefers soil rich in humus, although it does tolerate heavy clay soils. It does best in cool moist conditions with some shade.

The genus *Fuchsia* comprises of almost 110 species; including *Fuchsia magellanica* Lam., *Fuchsia denticulate*, *Fuchsia racemosa* and *Fuchsia corimbiflora*. *Fuchsia magellanica* Lam., locally known as “chilco” or “fucsia”, is an endemic shrub of Chile and Argentina recognized for the medicinal and nutritional properties by native peoples, and for its ornamental quality and colourful flowers.

Fuchsia’s medicinal properties- Berries

In South America it is a routine strategy to use the crushed petals of *Fuchsia*, the juice from its berries to treat skin ailments, freckles and small blisters and rashes. Berries are used to make a superb jelly that include lemon juice, apple juice and a dash of brandy which is used as a remedy for sore throat, tonsillitis and to strengthen the voice.

Flower

The flower of *Fuchsia arborescence* are even eaten and being used on bites, scratches and grazes and its juice has a relieve effect on itching and taking away the redness. They are also used to relieve inflamed blisters and sunburn.

Leaves

Leaves are used for treating indigestion, stomach-ache, as sedative, for difficult delivery and as antiemmenagogue. Mapuche's people use to macerate leaves in hot wine to drink before and after difficulties in delivery. Leaves and flowers are used in infusion by the attributed antiemmenagogue properties that is to interrupt menstruation.

In vitro regeneration

In vitro regeneration of plantlets from stem nodal explants has been reported as an efficient and rapid strategy for large scale propagation of certain important plants. Rapid development of axillary buds from shoot-tips and nodes of 18 cultivars of *F. hybrida* has been obtained on solid Murashige and Skoog (MS) medium with 6-benzylaminopurine (BAP) and an auxin. Tissue culture and rapid propagation of *Fuchsia alba-coccinea Hort* was also carried out using explants of stem fragments with nodes. *F. magellanica* was selected for tissue culture studies and for in vitro initiation, multiplication, elongation, rooting and acclimatization.

Cultivation

Popular garden shrubs, *Fuchsia magellanica* plants have a medium growth rate and, once planted, require little maintenance to last for years. In mildly temperate climates, these plants are hardy. In cold weather, the shrub's long branches could get clipped, but it will grow back in the spring. Plants in Hardiness Zone 6 can withstand the winter by applying a thick layer of mulch in the late fall.

Remove spent blooms and seed pods to prolong the flowering period of these plants. Pinch off the tips of new growth and vigorously prune plants in the spring to promote branching. Pinch away until the plant is fully grown.

Location: *Fuchsia magellanica* prefers part sun. It should be located in morning sunlight and afternoon shade, especially in warm, sunny climates. Very dense shade is not desirable as it will inhibit flowering.

Irrigation:

Water *Fuchsia magellanica* deeply enough to saturate the soil only when the top 3 to 5cm (1-2 inch) of soil is dried. Do not over-water. The plant will be more susceptible to fungal disease if the soil is not allowed to dry between watering.

Fertilisation:

Feed the *Fuchsia magellanica* every three to four weeks during spring and summer, using an all-purpose fertiliser for blooming plants. Alternatively, apply a balanced time-release fertiliser every three to four months. Apply the fertiliser after watering and never fertilize dry soil. Refer to the fertiliser label for specific instructions and rates of application, which may vary depending on the size of the plant and the type of soil.

Light: *Fuchsia magellanica* enjoy bright light, but keep it safe from the hot afternoon.

Temperature:

Fuchsia magellanica are not frost hardy and like a mild winter temperature of 10C (50F), especially when grown as potted plants. In cold winter areas, *Fuchsia magellanica* needs special care over winter. Prune the plant back to 10 to 15cm (4-6 inch), removing all leaves and store it in a cool, dark place. Placing it in a dark environment will prevent the plant from beginning to sprout and grow before climate conditions are optimum. Water the dormant *Fuchsia magellanica* plant only two or three times just to prevent the potting mixture to dry completely during this resting period.

When the last frost has passed, move *Fuchsia magellanica* back to its summer placement so it can begin to grow.

Water:

Water them regularly, to water *Fuchsia magellanica*, submerge the pots in room-temperature water until completely saturated and then allow them to stand until all dripping has stopped. Do not allow

the plants to remain in standing water or root rot may result. On hot days, mist the foliage with water.

Feeding: Feed *Fuchsia magellanica* with a water-soluble bloom fertilizer.

Propagation:

Fuchsia magellanica can be propagated easily from softwood cuttings. The best time to root them is spring or autumn. The cutting should be 8cm (3 inch) in length potted singly in 5cm (2 inch) pots, in three parts sand, one part loam and another of leaf-mold. Place the pots in a shady position with a temperature of not less than 15C (60F) at night. When the small plants are well rooted, shift them along into a 10cm (4 inch) pot, using this time potting mixture recommended for adult plants. In this size of pot, the shoot will have made four or five joints and should now be pinched to encourage side breaks. The plant, where it is stopped, will start into two breaks and the strongest should be taken for a leader; pinch the weaker one when two leaves are well formed. Strict attention from now on should be paid to keep the plants in good shape. The side shoots must be kept in bounds, so that the symmetry of the plant is preserved, pinching "the stronger ones hard and allowing the weaker to grow a little longer so that they gain more vigour. The leader may be allowed to make six pairs of leaves, and then be stopped, always choosing the strongest breaks to increase the height of the plant.

Genus	Fuchsia
Zones	6, 7, 8, 9
Plant Height	6 to 10 feet
Plant Width	6 to 10 feet
Characteristics	Attracts Hummingbirds, Showy Fruit
Bloom Time	Summer
Light	Full Sun to Partial Shade
Moisture	Medium Moisture
Maintenance	Moderate
Growth Rate	Moderate
Flower Color	Pink, Red, White
Plant Type	Shrubs
Plant Seasonal Interest	Summer Interest

Table 1. Characteristics Summary Of *Fuchsia Magellanica*

CONCLUSION

Fuchsia magellanica is an ornamental plants with very beautiful flowers native to South America. In India it is mainly found in Kerala, Tamil Nadu, West Bengal, Manipur and Sikkim state. The plant forms an excellent hedge particular in marine habitat. Not only as an ornamental plant have Berries, Leaves and flowers of *Fuchsia magellanica* had its medicinal significance. The plant can be easily propagated through softwood cuttings in hilly region of our country, mainly in Western Ghats, foot hill of the Himalayas or Outer Himalayas.

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